



INTERNATIONAL
ACADEMY
OF PERINATAL
MEDICINE
(IAPM)

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The International Academy of Perinatal Medicine (IAPM) was created in 2005, with the agreement of the Presidents of three scientific societies: the World Association of Perinatal Medicine (WAPM), the European Association of Perinatal Medicine (EAPM) and the International Society «The Fetus as a Patient» (ISFAP). On the 25th of May 2005 took place the foundational ceremony in Barcelona (Spain) with venue at the Royal Academy of Medicine of Catalonia.

The objective of the Academy is to create a place for the study, reflection, dialogue and promotion of Perinatal Medicine, especially on those issues related to bioethics, the appropriate application of the technological advances and the sociologic and humanistic dimensions of the field.

Furthermore, the Academy endeavours to constitute a friendship-based bond among the three scientific Societies that have sponsored its foundation.

In the same act of the foundation, the members of the Board of the Academy were elected. Prof. Erich Saling (Germany) was elected as President, and Professors Asim Kurjak (Croatia), Aris Antsaklis (Greece), Frank Chervenak (USA) and H. Nishida (Japan) as Vice-Presidents. José M. Carrera (Spain) acts as Secretary General and Birgit Arabin (The Netherlands) acts as Treasurer.

In accordance with its Constitution, the IAPM has 30 regular fellows coming from 20 different countries.

INTERNATIONAL ACADEMY
OF PERINATAL MEDICINE
(IAPM)



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(IAPM)

History, Organization and Activities



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INDEX

WORD OF EDITORS	7
PRESIDENTIAL MESSAGE by Prof. Asim Kurjak, President of IAPM	9
PREFACE TO THE FIRST EDITION by Prof. Erich Saling, Life-long President of IAPM ...	13
FOREWORD TO THE FIRST EDITION by Prof. José M. Carrera, Life-long Secretary General of IAPM	16
INTRODUCTION Foundations of IAPM	19
CHAPTER 1 The History of Perinatal Medicine	55
CHAPTER 2 The fathers of Perinatal Medicine: the academic medals	79
CHAPTER 3 Identity and mission of International Academy of Perinatal Medicine (IAPM)	113
CHAPTER 4 History of International Academy of Perinatal Medicine (IAPM): the foundation.	127
CHAPTER 5 Constitution of IAPM and By-Laws	159
CHAPTER 6 Basic Organization of the IAPM.	169
CHAPTER 7 The International Council: Regular Fellows of IAPM.	175
CHAPTER 8 Honorary Fellows, Associate Fellows of IAPM and Young Scientists Unit.	239
CHAPTER 9 Activities of IAPM	313
CHAPTER 10 Statements of IAPM.	423

WORD OF EDITORS

From 2015, under a new leadership IAPM continued its activities in accordance with the principle that the academia should have a presence in the life of society to fulfill its mission as the association of learned people who had significant intellectual, scientific and social achievements in globalized world. Not being a part of everyday pragmatic politics, IAPM as a group of strong individualities continued to be visible in the scientific community and the world of perinatal medicine by providing expert advice and expressing competent opinions and reactions to events of global importance. As it is well known the aim of IAPM is to offer to its members, scientists of the world, professionals working in different disciplines and in perinatal medicine in particular possibility for study, reflection and promotion of perinatal medicine in this turbulent world. As human beings are continuously changing biologically by the evolution, all aspects of changes are becoming inevitable making our contemporary world very complicated and dangerous place to live in. Perinatal medicine is not an ectopic part of existing medical science, and medical science is deeply involved with other sciences, meeting them at the edge of interdisciplinary problems like ethics, education, climate changes, technology, informatics, philosophy, history, economics, and many others. The important aim of perinatologists is to find out their place within the scientific community in finding the answers to the challenges to which the world is facing with in order to make it a better place for the future generations of the humanity. It seems that we are well understanding our discipline trying to find the ways for further progress, but without putting it in the context of overall development and encyclopedic knowledge it would not be possible to save the world. Therefore cooperation and putting heads of many learned people from different disciplines together would make possible to find and offer the solutions for the problems of modern societies.

Although somewhat old fashioned, our IAPM is dedicated to basic scientific principles of respect for the integrity of knowledge, collegiality, honesty, objectivity, and openness, but it is questionable is it enough to fulfill its mission and expectations of the scientific community and general public. We are sure that the answer to this intriguing question will be found out by our actual leadership which is actively participating in many activities tackling various important issues of perinatal medicine, ethics, religion and science, arts and philosophy. But at the end, it would not be possible to finish without mentioning the Covid-19 pandemic lasting for one year and changing the lives of the humanity. The Covid-19 pandemic is one of the most dangerous challenges this world has faced in our lifetime. Defeating this pandemic is impossible without united and coordinated international attempts shaped by all intellectual capacity the world has. IAPM should find its place in combating this terrible problem, and finding the ways how to carry on with the activities in the new circumstances.

In the past ten years IAPM organized yearly meetings in Japan, Greece, France, Turkey, Argentina, Spain, Albania, Sudan, Romania and Russia. The places where the meetings have

been organized are so different reflecting the principle of IAPM to be active in developed and developing countries and to cover the issues in the scope of the general interest within perinatal medicine. Only by cooperation between developed and developing world the Academy will fulfill its most important mission to become visible by recognizing the most important problems of perinatal medicine in developed and developing countries. That is why our 35 Regular Fellows are from 23 countries, 54 Associate Fellows from 29 countries and seven members of the Young Scientist Section are from seven different countries.

There is a saying, everybody wants to change the world but nobody is ready to change themselves for general. Perhaps it is time for us to reflect on ourselves and ask, what have we done to make the world a better place for the future of our children? We as the members of IAPM should continue to work together with others to promote the idea that today's men and women are able to find mutual support, understanding and encouragement in diversity, because we are aware that "The earth is what we all have in common", as Wendell Berry once said.

In front of you is the second edition of the book about IAPM. First edition was brilliantly prepared by the team coordinated by Jose M. Carrera and it covered Academy's foundation in 2005, second annual meeting held in Barcelona in 2006, and the third one in Budapest in 2007. In the second edition we present history of annual meetings in the period 2008-today and significant changes which happened in membership. IAPM is growing every day but in this book we illustrate present situation with membership.

There are many people to whom we are grateful for great help in particular all members of academy but publication of the book is the best gift to them. We are sure that the book will have special place in your personal libraries proving in documented way global activities of each member of academy.

Milan Stanojević
Jadranka Cerovec
Vjeko Vacek

PRESIDENTIAL MESSAGE

By **Asim Kurjak**,
*President of the International Academy
of Perinatal Medicine (IAPM)*



FIRST 15 YEARS OF THE INTERNATIONAL ACADEMY OF PERINATAL MEDICINE - WHICH LESSONS WE HAVE LEARNED AND WHAT ARE FUTURE CHALLENGES

Any academy in the world is society of people of significant intellectual achievements (learned people). They are institutions of intellectual authority who are trying to advise decision makers, to produce views on different issues of science and to advise decision makers on issues related to science.

Academies can and should have a presence in the life of society, without becoming part of politics, but providing expert advice when requested and express competent opinions and reactions to events of global importance.

The IAPM was founded in 2004 on the initiative of presidents of four scientific societies: the World Association of Perinatal Medicine (WAPM), the European Association of Perinatal Medicine (EAPM), the International Society “The Fetus as a Patient” (ISFAP) and Ian Donald.

The IAPM members have met in various capital cities all over the world, held scientific panels, and published declarations on current topics of perinatal research and patient care from a global point of view.

The aim of the IAPM is to provide a place for study, reflection, dialog, and for the promotion of perinatal medicine, especially in aspects such as bioethics, the appropriate use of technological advances, and the sociological and humanistic dimensions of the field.

The IAPM should be responsible for research, education, standards. It has the potential of being a leading influence in the world of perinatal medicine.

A permanent advantage of the Academy is the continuous availability of its leading and acting experts. This is a compensatory potential compared with societies where relatively frequent change of leading experts is common after only short intervals, in particular within their boards. Therefore it is a good solution to have both; namely different societies with their specific character, and above them a kind of super-ordinated intellectual common home.

Human beings change continuously as the results of biological and cultural evolutions. Human beings do change the world they live in, indeed so much that it has been suggested

that the current geological epoch be named Anthropocene epoch. Since knowledge now increases exponentially with a doubling time of 5-10 years, education cannot be time limited, but it has to be *life-long*. The Millennium Development Goals state that by the year 2015 everybody should be educated. Perinatal education is not ectopic part of global education, contrary it is its integral part. Indeed, contemporary education is *education of a person that is changing and for the world that rapidly changes*.

FUTURE CHALLENGES

The importance of perinatal medicine is growing rapidly and is making great and varied scientific progress. More and more evidence now indicates that prenatal life is a major determinant of adult health and disease. So for instance the increasing realization that two modern epidemics – obesity and diabetes – as well as premature death from cardiovascular disease, may have their origins in environmental factors experienced during intrauterine life have given our discipline a much greater importance than anyone ever dreamed possible. Therefore, I believe that patients, families, colleagues and governments are ready to recognize that a major revolution is now taking place. The prevention of diseases as well as the promotion of health should begin in utero.

But, there is something else. One of the most disappointing field in Perinatal Medicine is lack of significant success in preventing preterm labor. Indeed, the advances in care of preterm neonates in the last decades has improved survival dramatically in developed and in developing countries, so that the definition of viability has been reframed.

Unfortunately, the success of neonatal medicine in treating the consequences of preterm birth has not been matched by the prevention of spontaneous or indicated preterm birth. The essential problem has been an incomplete understanding of the mechanisms of disease responsible for spontaneous preterm labor with intact or ruptured membranes or maternal and fetal disorders which result in indicated preterm delivery (e.g. preeclampsia and intrauterine growth restriction).

The taxonomy of obstetrical disorders responsible for preterm birth is in an early phase in which pathology is recognized by symptoms and signs rather the underlying mechanism of disease leading to these clinical manifestations. The time has come to use the tools of “discovery science” to indentify such mechanisms, as well as to find early biomarkers of risk and interventions aimed the prevention of preterm birth.

I do not need to remind you that a unique feature of pregnancy is the co-existence of two hosts in intimate contact with different genomes and environments. Moreover, while cooperation of the hosts should be expected, the biological interests of fetus and mother may not always coincide. Environmental exposures may have different effects on a mature host than in a developing organism.

The identification of known (in other disciplines) and unknown mechanisms of diseases responsible for preterm birth represent the major challenge of perinatal medicine. Our discipline must commit itself to the use of the tools of “discovery science” and computational biology to meet this urgent need. This needs to be followed by rigorous translational science and ethically designed clinical trials.

Governments should encourage multidisciplinary approach in delivering care to pregnant mother and the newborn including at least obstetrical and neonatal care. This approach should be aimed to reduce perinatal and maternal mortality by up to 50% in the next ten

years. It is also desirable to reduce prematurity rate between 32 and 36 weeks of gestation in developing countries by 50% within the next ten years.

Unfortunately, recent results published by UN are showing minimal achievements in reduction of prematurity and perinatal and maternal mortality. Every year, an estimated 15 million babies are born preterm, and this number is rising. Preterm birth complications are the leading cause of death among children under 5 years of age, responsible for nearly 1 million deaths in 2013. Three-quarters of them could be saved with current, cost-effective interventions. Across 184 countries, the rate of preterm birth ranges from low 5% to high 18% of babies born. According to the Millennium Developmental Goals maternal mortality, neonatal mortality and mortality of the children up to 5 years of age should be decreased on annual basis from 1990 to 2012 for 4.2% and it reached only 2.6% for maternal, 2.0% for neonatal and 3.4% for child mortality. These data are discouraging and disappointing, meaning that much more should be done to improve world perinatal health.

An important question is the type of cooperation of IAPM and other learned societies. Of course, the main cooperation will be with WAPM and its sister societies Fetus as a Patient and Ian Donald School. Close cooperation will soon start with the World Academy of Human Reproduction whose president is our distinguished colleague Joseph Schenker and several of us are regular fellows. We should organize a panel of the experts from both academies on hot topics of mutual interest. First one will be panel on single embryo transfer and its possible role in reducing multiple pregnancies and their leading role in preterm labor. Both academies do have world experts in this important field and I do welcome anyone of you who for many years have intensively been studying prevention of preterm labor. Joseph Schenker and his team will propose representative of World Academy of Human Reproduction.

IAPM has remarkable past and I sincerely believe brilliant future.

Extraordinary progress has been made in perinatal care during the last half century, something for which we can all rejoice and be proud. But there is still much to do. As with the Platonic Academy and the majority of those that followed during the Classical Era, one of the core objectives of the IAPM is to create a mechanism to promote dialog, generate rational, free and unbiased thinking, and also produce ideas and agreements for the improvement of the future of human reproduction.

Over the course of the last 60 years, Obstetrics, which had remained virtually unchanged for centuries, has progressively emerged from the past to become a scientific discipline, and „Perinatal Medicine“ has been born. It has evolved from the cultivation of an art to a science.

There is no good and bad work in science. Without scientific method, there is no science, and, without science, there is no real progress. Without sufficient knowledge it is not possible to conduct any serious research, and it is even less possible to adequately interpret the work of others.

IAPM is the only scientific body within the world of perinatologists. It is therefore justifiable to believe that its international scientific visibility should be adequate. Most of the Academy members are leaders of international perinatal societies and should arrange that IAPM is actively included in their congresses and symposia. For example, the name and logo of IAPM should be printed either as co-organizer or sponsor. It could be recommendable that organizer would have one session with speakers from the members of Academy.

There is urgent need for improvements in Academy's website and we will try to elect 2-3 younger members who will permanently take care of its content. We are living in era of evidence based medicine and let me remind you that even Galileo Galilei used to say

„measure what is measurable and make measurable what is not so“. Scientific productivity of an individual region institutions or learned society is nowadays measurable parameter. That analysis of scientific productivity of our members should be reviewed from time to time. This will be used as orientation without mentioning the names but in future election of new candidates this would be solid basis for correct and honest election. It is fortunate that present and elective presidents of WAPM are fellows of Academy and might and should help that IAPM receive modest annual financial support because, as I already said, it is only scientific body close to WAPM. We will also form money-rising committee, and everyone of you is welcome to join this new body. Committee should look for modest donation from other sources. During our annual IAPM meeting local host as a rule organize **SCIENTIFIC MEETINGS**. We should offer series of annual meetings under the title Recent advances in perinatal medicine. That can bring some necessary money for regular activity of IAPM.

It is urgent to rejuvenate Academy with members younger than 50 years of age. My strong belief is that this is the best method to dynamize IAPM. It would be good to introduce Academy Prize, apart from presidential award Golden Amnioscope. This should be given to the best paper of young scientist delivered at the World perinatal congress. And this should include diploma and a modest financial remuneration.

Finally, distinguished members of Academy, some recent developments are, whether we like it or not, causing a decreased rating of perinatal concept. There are some information that our colleagues neonatologists are not very happy with their involvement in the perinatal societies. The concept of maternal-fetal, not perinatal medicine, is used even by some of our leading members. If I were a neonatologist, I would really be irritated by the fact that it does eliminate neonatologists.

Another problem in cooperation with the FIGO is the fact that FIGO does not recognize neonatologists as its potential members. It is a little bit sad that even our leading members, acting in the past or even now, did not influence decision of FIGO to sign contract for education only with Society of maternal-fetal medicine, not World Association of Perinatal Medicine. If we continue in this direction, not including neonatologists in all of our communication and cooperation, we might enter unpredictable future of our favorite field introduced by our teacher and friend Erich Saling and beautiful field of perinatal medicine where at least two professions – obstetricians and neonatologists – take care about expectant mothers and their unborn and newborn children.

Members of Academy, we should help to promote the idea that today's men and women are able to find mutual support, understanding and encouragement in diversity as the best way to grow as people in a more equitable and supportive society, where no one is excluded.

I believe it is best to conclude quoting the president of scientifically strongest country, USA, President Barak Obama, who once said “Under my administration the days of science taking back seat to ideology are over. Our progress as a nation - and our values as a nation- are rooted in free and open inquire. To undermine scientific integrity is to undermine our democracy. It is contrary to our way of life.“

We represent the best the world has to offer in perinatal medicine. Let us work together to make the World of perinatal medicine a better place.

Based on Editorial: **Asim Kurjak**: First 10 years of the International Academy of Perinatal Medicine – which lessons we have learned and what are future challenges.
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PREFACE TO THE FIRST EDITION

By **Erich Saling***,
*Life-long President of the International
Academy of Perinatal Medicine (IAPM)*



The generation alive today is privileged to live in a remarkable age. Not only has interstellar space been spectacularly opened up to human exploration but, through a continuing medical and technological development of no less importance, «intrauterine space», the world in which we spend our prenatal life from conception to birth, has become increasingly accessible to science.

As little as about 60 years ago, the fetal heart sounds could be auscultated only with the aid of a primitive stethoscope. There was no other access to the unborn child for routinely applicable medicine.

Then a new great field —Prenatal Medicine— if we include the first week of life —the interdisciplinary Perinatal Medicine— has come into being on a scale that is entirely comparable to the progress made in aerospace science.

The importance of intrauterine medicine is growing rapidly and is making great and varied scientific progress. More and more evidence now indicates that prenatal life is a major determinant of adult health and disease. So for instance the increasing realization that two modern epidemics —obesity and diabetes— as well as premature death from cardiovascular disease, may have their origins in environmental factors experienced during intrauterine life have given our discipline a much greater importance than anyone ever dreamed possible. Therefore, I believe that patients, families, colleagues and governments are ready to recognize that a major revolution is now taking place. The prevention of diseases as well as the promotion of health should begin in utero.

A great number of national and international societies of Perinatal Medicine had been founded. In so far there was a logical need to establish also a more superordinated institution, the International Academy of Perinatal Medicine.

An advantage of the Academy is the continuous availability of its leading and active experts. This is a compensatory potential compared with societies where relatively frequent change of leading experts is common after only short intervals, in particular within their boards. Therefore it is a good solution to have both: different societies with their specific character, and above them a kind of superordinated intellectual common home.

It was a very special event when the three leading International Societies in our field agreed and recommended the foundation of the International Academy of Perinatal Medicine, in 2005 in Barcelona. The Societies and their, at that time, acting presidents were:

- the oldest, the *European Association of Perinatal Medicine* under the presidency of Prof. Aris Antsaklis, Athens
- the Society *The Fetus as a Patient* under the presidency of Prof. Frank Chervenak, New York
- the youngest, the *World Association of Perinatal Medicine* under the presidency of Prof. Asim Kurjak, Zagreb.

The real architect who prepared the constitution in a masterly way and who organized the impressive ceremonial foundation was our Secretary General Prof. José María Carrera, Barcelona. We are also very thankful to him that he took over the preparation of the first edition of this book about the history of our Academy. We respect him and appreciate his tireless and valuable activities.

During the last 10 years, the Academy has been strongly influenced by the activities of our current president, Prof. Asim Kurjak from Zagreb, Croatia. He took very active part in writing important documents and declarations, always having brilliant ideas and thoughts how the Academy should respond to challenging issues in perinatal medicine as well as in the contemporary world. Kurjak and his team play an important role in the investigation of fetal neurology and particularly in the issue of cerebral palsy. In 2015, Kurjak was elected the President of IAPM. He continued the former successful activities of IAPM, adding some new ideas.

The IAPM meeting in 2016 in Khartoum, Sudan had the very important message that the IAPM recognizes the problems of perinatal medicine in developing countries and that inequality of the world should be tackled and changed. This was one of the reasons why Kurjak initiated the establishment of the African Perinatal Society. By thinking about the future of IAPM, Kurjak introduced a Young Scientist Section of IAPM in Bucharest in 2018. It was his idea to pick up the most promising youngsters from the world of perinatal science and associated branches as the base for future members of IAPM.

The current 2nd edition of this book lies in the hands of a leading neonatologist, namely Prof. Milan Stanojevic, who is also from Zagreb. Noteworthy are his surprising creativity, humanism, and a huge desire for development. His goal has always been to help children and their families to be healthy and happy. Being for 20 years the national coordinator for education at the UNICEF Office for Croatia, Stanojevic successfully promoted the project “Baby Friendly Hospital Initiative”. He actively participated in several scientific research projects in high risk infants, fetal hypoxia, fetal and neonatal neurology. In the WAPM, he was secretary general and vice president, and since 2015 Stanojevic is its president. In 2008 he became associate fellow of the IAPM, and since 2014 he is regular fellow.

What is the vision of our Academy? Most continents are represented by the Fellows. They have been elected to fellowship because of their outstanding scientific contributions and also because of their dedication to serve as leaders of their communities. We hope that the collective talent and energy of our Fellows will be used to ensure that our two patients — mother and fetus— are given all the benefits that they deserve, which we now have every chance to achieve more than ever before.

The IAPM currently consists of 35 Regular Fellows from 23 countries, 54 Associate Fellows from 29 countries and 7 members of the Young Scientist Section from 7 different countries.

We have held scientific panels and published declarations on current topics of perinatal research and patient care from a global point of view. The aim of the IAPM is to provide a place for study, reflection, dialog, and for the promotion of perinatal medicine, especially in aspects such as bioethics, the appropriate use of technological advances, and the sociological and humanistic dimensions of the field. The IAPM should be responsible for research, education, standards. It has the potential of being a leading influence in the world of perinatal medicine.

In the past ten years IAPM organized yearly meetings in Japan, Greece, France, Turkey, Argentina, Spain, Albania, Sudan, Romania and Russia. The places where the meetings have been organized are so different reflecting the principle of IAPM to be active in developed and developing countries and to cover the issues in the scope of the general interest within perinatal medicine.

I wish our Academy success in achieving all its ambitious aims.

*) with the assistance of his co-worker Jürgen Lühje, MD

FOREWORD TO THE FIRST EDITION

By José M. Carrera,
*Life-Long Secretary General of the International
Academy of Perinatal Medicine (IAPM)*



This book was written to inform the scientific community, and in particular perinatologists from across the globe, about the history, identity, goals, organization and activities of the International Academy of Perinatal Medicine (IAPM). However, at the same time, it is intended as a tribute to all the men and women who, over the centuries and brick-by-brick, have built up the complex structure of Perinatal Medicine with their efforts and ideas. As Heraclitus of Ephesus said, «There is nothing permanent except change». It is therefore important to preserve the memory of those who, almost anonymously, have supported and maintained the foundations of this structure since its creation.

The foundation of the IAPM was undoubtedly not just an historic event, but also a formidable demonstration of coherence, generosity, opportunity and friendship. The decision of three large world scientific societies to combine their efforts, in order to create a common forum for academic debate, was an act that does credit to those who made it possible: the Presidents of the three organisations (Asim Kurjak, Aris Antsaklis and Frank Chervenak), and the father of modern perinatal medicine, Prof. Erich Saling, who accepted the presidency of the new institution. These men clearly demonstrated their remarkable foresight, their open and innovative spirit, their love for perinatal medicine and their capacity to quickly reach agreements. In this sense, this book is a detailed and reliable chronicle of the IAPM's foundation and subsequent operations.

Never in mankind's history have we commanded so much knowledge about the reproductive process. The current information about maternal and infant medicine is quite simply overwhelming. New trends, however, particularly with new technology, cause frequent scientific, ethical and social conflicts. Therefore reflection, impartial analysis of problems, calm dialogue and measured thought on these issues have never been more necessary. Hence the need for the Academy. As with the Platonic Academy and the majority of those that followed during the Classical Era, one of the core objectives of the IAPM is to create a mechanism to promote dialogue, generate rational, free and unbiased thinking, and also produce ideas and agreements for the improvement of the

future of human reproduction. In the pages that follow, the mission and objectives laid down by the Academy's founders are explained in detail. The improvement of the precarious situation of maternal and infant health in developing countries forms an inherent part of these goals.

Finally, this book seeks to pay tribute to the friendship fostered between all of the Academy's members, and to provide a faithful and fond reminder of the days that we have spent together in trying to improve the future of mothers and their children. I will feel especially happy if this goal is achieved.

As coordinator of this book, I would like to give thanks to all of those who have helped me to complete it, in particular to Erich, Asim and Frank who, in a certain sense, have become part of my family.

introduction

**FOUNDATIONS
OF IAPM**

MODERN REQUIREMENTS OF PROFESSIONAL ETHICS IN PERINATAL MEDICINE FOR DECISION MAKING WITH PREGNANT PATIENT AND PARENTS: THE ESSENTIAL ROLE OF ETHICAL PRINCIPLES AND PROFESSIONAL VIRTUES

Frank A. Chervenak and Laurence B. McCullough

INTRODUCTION

Perinatal physicians provide clinical management for pregnant, fetal, and neonatal patients.¹ This clinical management should be evidence-based, appealing to the best available evidence about outcomes. This clinical management should also be ethically based. Ethical principles and professional virtues play an essential role in decision making about the provision of evidence-based, ethically based perinatal clinical care. This chapter provides a succinct, clinically applicable account of this essential role and its implications for decision making, especially the limited role of shared decision making.

ETHICAL REASONING USING ETHICAL PRINCIPLES AND PROFESSIONAL VIRTUES

Ethical reasoning about perinatal ethics appeals to ethical principles and professional virtues to guide perinatal clinical practice.¹ Ethical reasoning requires completion of two tasks. The first is to achieve clarity about the meaning of ethical principles and professional virtues. The second is to identify the clinical implications of principles and virtues for perinatal practice. We turn now to completing these two tasks.

First Task: Achieving Clarity

Precision of thought and speech is essential to the clinical application of biomedical science in perinatology. So too, is precision of thought and speech essential to the clinical application of professional ethics in perinatal medicine. Achieving precision of thought and speech prevents professional ethics in perinatal medicine becoming a matter of mere personal opinion.

Achieving Clarity about Ethical Principles. Ethical principles create *prima facie* ethical obligations to patients. *Prima facie* means that an ethical obligation should guide clinical judgment and practice unless ethical reasoning shows that there is another ethical obligation that should take precedence.

The ethical principle of beneficence appears in the Hippocratic Corpus, in a text called *Epidemics*, which enjoins physicians “to help or at least to do no harm.”¹ The famous Oath of Hippocrates enjoins physicians to use treatment to benefit the sick and keep them from harm and injustice.² The basis for these admonitions is not explained in these texts. The first text to use the word “beneficence” is Thomas Percival’s (1740-1804) professional ethics

in medicine, in the first book with the title of *Medical Ethics*, published in 1803.³ Percival called for physicians to base clinical practice on observational and experimental science, using the methods for doing so championed by Francis Bacon (1561-1626) and on the ethical obligation to use the results to improve clinical outcomes.⁴ In *Medical Ethics* he uses the word “beneficence” to name the basis of this ethical obligation.

Percival provides a beneficence-based account of the concept of being a patient.⁵ A human being becomes a patient when that individual is presented to a physician and there exist forms of clinical management that are reliably predicted, on the basis of scientific evidence, to result in net clinical benefit for that individual. Such treatment is known in professional ethics in medicine as medically reasonable.¹

An early form of the ethical principle of respect for autonomy occurs in the work of Percival’s near-contemporary, John Gregory (1724-1773). In his professional ethics in medicine Gregory claimed that each patient has the right to speak where his life or health is concerned.⁴ Gregory said that this right creates an ethical obligation to listen to the patient’s preferences. This early version of the ethical principle of respect for autonomy led to the development of the modern principle of respect for autonomy in the twentieth century. This ethical principle creates the *prima facie* ethical obligation of the perinatal physician to empower the pregnant patient to make decisions based on clinically relevant information about her condition (pregnancy is a condition, not a disease) or the diagnosis of the fetus, the medically reasonable alternatives for the management of these conditions or diagnoses along with their clinical benefits and risks, and to make decisions voluntarily, or free from controlling influences.

Achieving Clarity about Professional Virtues. Virtues are traits or habits of character that create *prima facie* ethical obligations.¹ Professional integrity creates the *prima facie* ethical obligation to practice perinatal medicine to standards of intellectual and moral excellence. Intellectual excellence is achieved when adherence to evidence-based reasoning (i.e., basing clinical judgment and practice on the best available evidence rather than personal experience) becomes habitual. Moral excellence is achieved when the commitment to protect and promote the patient’s health-related interests becomes the perinatologist’s primary concern and motivation and the perinatologist keeps self-interest systematically secondary. Humility is a correlate of professional integrity and is achieved by recognizing the limits of perinatal science and its clinical application and pressing these limits only through professionally responsible clinical innovation and research.¹ Compassion is the habit of identifying when a patient is experiencing or is at risk of experiencing pain, distress, or suffering and providing clinical management to relieve or prevent pain, distress, and suffering. Self-effacement is the habit of identifying clinically irrelevant differences between a perinatologist and a patient that could become a source of bias and preventing such bias from occurring. Self-sacrifice is the habit of the perinatologist taking reasonable risks to self-interest.¹

Second Task: Identifying the Clinical Implications of Principles and Virtues for Perinatal Practice

Ethical principles and professional virtues shape the ethical concepts of the pregnant woman, the fetus, and the neonate as patients. Professional ethics in perinatology appeals to both professional ethics in obstetrics and professional ethics in pediatrics.¹

Professional Ethics in Obstetrics. The pregnant woman becomes a patient when she is presented to an obstetrician or other healthcare professional and there exist forms of

clinical management that, in evidence-based clinical judgment, are predicted to result in net clinical benefit and are therefore medically reasonable. In obstetrics pregnancy is not a disease but a condition with the potential for maternal or fetal complications for which medically reasonable forms of clinical management exist. As is the case for all patients, the perinatologist has the *prima facie* beneficence-based ethical obligation to protect and promote the health and life of the pregnant patient. The perinatologist also has the *prima facie* autonomy-based ethical obligation to empower the pregnant woman to make informed and voluntary decisions about the clinical management of her pregnancy. It is a mistake in professional ethics in perinatology to classify autonomy-based ethical obligations to the pregnant woman as absolute, i.e., as always overruling the perinatologist's other ethical obligations, including ethical obligations to the fetal patient.

The discourse of the fetus as a patient has been in the obstetric literature for last fifty years.¹ In this literature, there is reference to the fetus as a "personality" and as a patient. However, the ethical concept of the fetus as a patient was first clarified by the two authors in 1985.⁵ The previable fetus becomes a patient when the pregnant woman confers this moral status on it. She is free to do so on the basis of her own values and beliefs and her physicians should respect her decision, including the decision to terminate her pregnancy consistent with applicable law. She is also free to withhold this status. The viable fetus becomes a patient when a pregnant woman is presented to a healthcare professional.

When the fetus is a patient, the perinatologist has three *prima facie* ethical obligations: beneficence-based and autonomy-based *prima facie* ethical obligations to the pregnant patient and beneficence-based *prima facie* ethical obligations to the fetal patient. None takes automatic priority over the others in professional ethics in perinatology. That is, none of the three ethical obligations is absolute (without limits). Most often, these three ethical obligations work in concert for the clinical benefit of pregnant and fetal patients. When clinical circumstances or the decisions of the pregnant patient create conflicts among these ethical obligations, the perinatologist should respond with an evidence-based, well-reasoned judgment about which of the ethical obligations should take priority and make a recommendation about clinical management on this basis.¹

The ethical concept of the fetus as a patient should guide decision making about the clinical management of the pregnant patient. When there is a reliable evidence base that a form of clinical management is reliably predicted to result in net clinical benefit for both the pregnant and fetal patients, e.g., cesarean delivery for well-documented, intrapartum complete placenta previa, the perinatologist should recommend this medically reasonable management to the pregnant patient. Making clinically and ethically justified recommendations empowers the pregnant patient to make informed decisions. This has an important implication: shared decision making, understood as offering but not recommending clinical management, should not be considered a universal model of decision making in obstetrics.

Before viability, as explained above, the fetus becomes a patient as a function of the decision of the pregnant woman to confer this moral status on her fetus. She is free to confer, withhold, or, having conferred, withdraw the moral status on being a patient from the previable fetus. This has the important clinical implication that counseling about disposition of pregnancy after the diagnosis of a fetal anomaly before viability should be strictly non-directive: there is an autonomy-based ethical obligation to offer both

termination of pregnancy and continuation of pregnancy and to make no recommendation about either.¹ The professional virtues of self-sacrifice and self-effacement create the ethical obligation not to allow one's religious, personal beliefs, or past clinical experience to influence the counseling process. The professional virtue of humility creates the ethical obligation to respect the pregnant woman's decision, because she, not the perinatologist, is in the best position to make decisions based on her values and beliefs.

Professional Ethics in Pediatrics. When an infant is born in the presence of a healthcare professional, that infant has been presented to a healthcare professional and therefore becomes a patient. Professional ethics in pediatrics is based on the best interests of the child standard, a beneficence-based concept.¹ The pediatrician has the *prima facie* ethical obligation to identify, recommend, and provide clinical management that is reliably predicted to result in net clinical benefit for the neonatal patient. Parents have the *prima facie* beneficence-based ethical obligation to authorize such clinical management. This is known as parental permission rather than parental informed consent and is a unique feature of professional ethics in pediatrics.¹

Neonatal resuscitation immediately post-partum is a medical emergency. A medical emergency exists when a patient has a life-threatening or serious health-threatening condition for which intervention must be initiated immediately either to prevent death or serious, far-reaching, and irreversible loss of health. As a result there is no time for the informed permission process. The ethical principle of beneficence and the professional virtue of integrity should guide clinical judgment and decision making about neonatal resuscitation. When neonatal resuscitation is reliably predicted to result in net clinical benefit it should be initiated immediately. It is well understood in pediatric ethics that a resuscitation should be ended on beneficence-based grounds, i.e., when it is reliably predicted that resuscitation will not result in restoration of spontaneous circulation.¹ The professional virtue of humility requires that the neonatal team recognize these limits and avoid over-treatment. Neonatal critical care should be initiated when it is reliably predicted to result in net clinical benefit and should be ended when it is reliably predicted that net clinical benefit will no longer result.¹ The professional virtue of humility requires that the neonatal team recognize these limits and avoid over-treatment. The professional virtue of compassion requires that parents be engaged by the neonatal team in the parental permission process during the time that the neonatal patient is receiving critical care management. Conversations about setting limits on treatment can be stressful for neonatologists. The professional virtue of self-sacrifice should be invoked to prevent this understandable self-interest from biasing the neonatologist's clinical judgment and counseling of the parents. The professional virtue of self-effacement requires that the parental permission process not be biased by clinically irrelevant social and other differences between the parents and neonatal team, including parent's nationality, immigration status, income, first language, or religion.

When there is an evidence base for a reliable prediction of net clinical benefit for the neonatal patient from a form of clinical management, the perinatologist should recommend this medically reasonable clinical management. Based on the ethical concept of parental permission, the parents have a beneficence-based ethical obligation to accept the recommendation. This has an important clinical implication: shared decision making, understood as offering but not recommending clinical management, is not a universal model of decision making about neonatal patients.

CONCLUSION

Professional ethics in perinatology combines professional ethics in obstetrics and professional ethics in pediatrics. The ethical concept of the fetus as a patient governs thinking like an obstetrician. The ethical concept of parental permission governs thinking like a pediatrician. Successfully implementing professional ethics in perinatology creates a solid foundation for the professional ethics of cooperation that is an essential requirement for team care in modern perinatology.

There are three requirements of professional ethics in perinatology for decision making with pregnant patients and parents. First, obstetricians should think like obstetricians about the clinical management of pregnancy but think like pediatricians about the clinical management of the neonate. Second, pediatricians should think like obstetricians about the clinical management of pregnancy but think like pediatricians about the clinical management of the neonate. Third, shared decision making is not a universal model of decision making in the professional ethics of perinatology.

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GLOBAL EDUCATION IN PERINATAL MEDICINE: WILL THE BUREAUCRACY OR SMARTOCRACY PREVAIL?

Asim Kurjak

INTRODUCTION

Human beings change continuously as the results of biological and cultural evolutions. Human beings do change the world they live in, indeed so much that it has been suggested that the current geological epoch be named Anthropocene epoch¹. Since knowledge now increases exponentially with a doubling time of 5-10 years, education cannot be time limited, it has to be *life-long*. The Millennium Development Goals state that by the year 2015 everybody should be educated². Perinatal education is not ectopic part of global education, contrary it is its integral part. Indeed, contemporary education is *education of a person that is changing and for the world that rapidly changes*.

GLOBALIZATION AND PERINATAL HEALTH

Globalization has a complex influence on perinatal health. The bonds that link perinatologists together transcend geographic, political, religious, and lingual differences, resulting in a globalization that optimizes perinatal care^{3, 4, 5}. However, more than ever we need to develop education and training for physicians who would provide the care and research in perinatal medicine. The USA developed its own system. The American College of Obstetrics and Gynecology is responsible for the education and practice standard. In UK, the Royal College of Obstetricians and Gynecologists has the unique position of providing education, developing standards, and determining how many specialists and sub-specialists are trained. In other countries, there are various levels of development and planning. The European Board and College of Obstetrics and Gynecology for instance are working on the accreditation of European hospitals not only for obstetrics and gynecology standards of care but also for setting the training and teaching rules or the subspecialties such as maternal fetal and perinatal medicine, reproductive medicine, gynecological oncology, and urogynecology. There is, therefore, enormous need for the advanced medical education and health care delivery systems to serve as models for developed and developing countries. To this end, World Association of Perinatal Medicine and International Academy of Perinatal Medicine serve as leading organization and could become a major perinatal force for the further improvement of perinatal care throughout developing world. World congresses of perinatal medicine in developing countries are excellent example how all of these ideas can be put into practice³.

GLOBAL REQUIREMENTS OF EDUCATION

The Triangle of Knowledge in modern society is composed of education, research and patients⁶. A country aspiring to a good longtime standing in international arena should perform

well in all three corners of this triangle. Governments, universities and firms together spend around \$1.4 trillion a year on R&D, more than ever before. World trends in knowledge and new ideas creation demonstrate that EU has overtaken US in idea creation but is still lagging behind in patents and applied ideas. Asian countries are closing the gap rapidly and the world knowledge scene is witnessing an extremely competitive and interdependent race⁷.

An overview⁷ of published articles in 2009 shows that EU is still a world leader in scientific articles published with 31 % of total production followed by USA 26.5%; China 9.4%; Japan 6.3% and South Korea 2.8%. In the last decade Iran and China had fastest growth of 25 % and 16 % respectively – although from a low base, followed by Turkey and South Korea with 10%. EU had a growth of 1.4% while of USA of 1%. When it comes to citations, in 2010, USA was the leader with 36.4 %, EU was on a second place with 32.8% and China was on third place with 6% followed by Japan 5.7%. This citation indicator, together with a well known fact that EU has been following USA in number of patents for years, clearly demonstrate that transfer speed, into patents and operational and economic value, of EU articles is still lagging behind USA effectiveness⁶.

OBSTACLES TO GLOBAL EDUCATION: THE ROLE OF BUREAUCRACY AND SMARTOCRACY

There are many obstacles present, some of them being typical for EU – **BUREAUCRACY** and untimely action. International universities represent new update to globalization. Universities should think global. They should use €400 million per year EU will make available to European universities to strengthen their collaboration with partners worldwide from January 2014. Every year 45% of the 4 million international students come to study in Europe. EC estimates are that by 2030 there will be altogether about 400 million higher education students and by 2020 there will be 7 million mobile students.

The Europe 2020 strategy is about delivering growth that is: (i) smart, through more effective investments in education, research and innovation; (ii) sustainable, thanks to a decisive move towards a low-carbon economy; and (iii) inclusive, with a strong emphasis on job creation and poverty reduction. The strategy is focused on five ambitious goals in the areas of employment, innovation, education, poverty reduction and climate/energy. Unlike the past the Europe 2020 strategy has a strong and effective system of economic governance that has been set up to coordinate policy actions between the EU and national levels to ensure that the Europe 2020 strategy delivers.

Therefore, we have to go humbly back to the basics at individual and society level and remember that creativity is based on playing with things and ideas. Society with time resistant and rigid education systems, red tape, oceans of paper rules, often helps us to grow out of creativity instead to grow into creativity. This sensitive bird called creativity should not be kept in cage but seduced from distance with patience and nice songs. Only then, happy inventor can tape her voice and sell it to the market, for other people to enjoy, business to make profit and state to prosper. Only then, **SMARTOCRACY** prevails⁶.

THE IMPORTANCE OF LEARNING AND UNLEARNING

How much of what we formally learn is ever useful in real life? Some studies show that it's only between 8 and 12 percent⁸. The existing educational system is not very useful as far

as the quality of its outcome is concerned. Education is slow in moving from bureaucracy towards entrepreneurship and creativity. Separation between learning and working should be abandoned. Learning is important, but so is unlearning; teachers must be able to teach the rational stuff in a cool and inspirational way. The students should be trained for attitude, not just knowledge and skills; education must reestablish the lost connection between art and science, wisdom and practicality. Education should go lower on theory, and higher on applicability. If we want to create a better educational system, changing culture is by far more important than changing curricula.

WHAT MAKES EDUCATION SUCCESSFUL AND APPLICABLE?

Metaphorically speaking, education systems must reembrace the real transdisciplinarity, the notion that **EVERYTHING IS BOTH ART AND SCIENCE, WISDOM AND PRAGMA**. Education and training aimed at producing insensitive and professional “*fach-idiot*s” must give way to multidisciplinary concepts aimed at producing a good, competent person with empathy and social responsibility. Finally, there is a tendency in education to be too much “scientific”, which most often means a lack of applicability. To paraphrase Albert Einstein, **THERE IS NOTHING MORE PRACTICAL THAN GOOD THEORY**. Too many obsolete and old fashioned theories are still central parts of curricula. The educational systems of the future will be more successful if they manage to go low on (irrelevant) theory, and high on useful practice.

We enjoy seeing things clearly. We like our (educational) world to be structured, organized, rational and predictable. The reality, however, seems to be quite different. More often than not, our clear images fail us and we end up being confused. Creativity is defined as ability to solve complex problems in an original way. Also it is an ability to produce ideas. Conversely, innovation can be described as applied creativity or successful implementation of ideas. What do we do wrong in problem solving and education? We serve solutions, approaches and concepts to students to memorize, and not to challenge and reinvent. Creativity means freedom and lack of creativity equals to lack of freedom.

Instead of learning by studying, we must go back to the traditional idea of learning by doing, experiencing, creating. We keep talking about life-long learning, but in practice the concept is far from being fully operational. First of all, a separation between learning and working is not natural. The “students” of the future should work and study throughout their lifetime, and not, as it is now often the case, spend decades “studying”, and then, after earning a diploma, move into the practical world and spend the rest of their life “working”.

EUROPEAN UNION FRAMEWORK "EDUCATION AND TRAINING 2020"

EU has come up with a new framework called “Education and Training 2020” (ET 2020)⁹. The document points out four strategic objectives:

1. **Making lifelong learning and mobility a reality** – progress is needed in the implementation of lifelong learning strategies;
2. **Improving the quality and efficiency of education and training** – all levels of education and training need to be made more attractive and efficient;
3. **Promoting equity, social cohesion and active citizenship** – education and training

should enable all citizens to acquire and develop skills and competencies needed for their employability and foster further learning;

4. **Enhancing creativity and innovation, including entrepreneurship, at all levels of education and training** – the acquisition of transversal competences by all citizens should be promoted and the functioning of the knowledge triangle (education-research-innovation) should be ensured.

It is puzzling however what kind of education system gave us Plato, Aristotle, Archimedes, Socrates?¹⁰. Their teaching make the base of our civilization. Many of us wondered how this had happened, when they didn't have schools, black boards, computers, notebooks...

WHY USA MODEL OF EDUCATION IS SUCCESSFUL?

Why is the model of education better in the USA then in rest of the world, especially Europe? The USA has never had clear model of education, exclusively oriented to technical knowledge and economic growth. Can this model be appropriate for the globalization age, which is necessarily being developed? Can people with pure "technical knowledge", without humanistic education be "the citizens of the world"? Is Samuel Huntington right when he write about "clash of civilization" - in other words is today's education system the base of this clash of civilization? It seems that the world lies, not only on nuclear bomb, but on "education bomb" as well.

The fact that the USA has never had education system which is clearly oriented to one specific profession made US education system superior over education systems in the rest of the world, especially Europe. The USA had and still has the model of free skills built-in education systems: instead of specializing for one particular field, students are required to take different humanities' courses. In addition to it, students are put in the position to examine facts and make research.

IMPORTANCE OF INDIVIDUAL KNOWLEDGE

In order to understand this approach, a reader has to learn two starting points¹⁰. First, knowledge is individual - it is spread in head of individuals. There is no such thing as the collective knowledge! This is emphasizing the role of individual in education system, i.e. the need of education system to focus on an individual. Secondly, how can we understand knowledge from the perspective of individual and individual competences? In my opinion, knowledge is everything we have taken from other people. Knowledge is not something that comes out of us; we are taking it from other people. We adopted our knowledge about relativity theory from Einstein; Pythagoras's theorem is taken from Pythagoras; knowledge about class struggle is taken from Marx; our knowledge about lightning rods comes from Benjamin Franklin. Thomas Man said "all I know is not mine, but it is mine"!

CONCLUSION

Education encompasses teaching and learning of knowledge, acquiring skills and values as well as mental, moral and aesthetic development of human beings. Right to education is one of the basic human rights as declared by the United Nations (UN) Universal Declaration of Human Rights.

Education has to focus primarily on how to research, how to ask questions, to stimulate participants to propose new, out-of-the-box ideas, often sounding crazy. Education has to stimulate paradigmatic changes, to think the unthinkable. Most important is that education is intellectually stimulating, fun, and a pleasure¹.

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MATERNAL MORTALITY: TRAGEDY FOR DEVELOPING COUNTRIES AND SHAME FOR DEVELOPED WORLD

Asim Kurjak, Milan Stanojević, Cihat Sen, Frank Chervenak

INTRODUCTION

In the well organized document The Millennium Development Goals Report 2005, United Nations office from New York presented in detail most of the hot topics in the field of reduction of high rate of maternal mortality¹.

The Millennium Development Goals (MDG), which range from halving extreme poverty to putting all children into primary school and stemming the spread of infectious diseases such as HIV/AIDS, all by 2015, have become globally accepted benchmarks of broader progress, embraced by donors, developing countries, civil society and major development institutions alike¹.

It was hoped that these goals can be met by 2015— but only if all involved break with business as usual and dramatically accelerate and scale up action now¹.

In a very analytic foreword former secretary general of United Nations Kofi Annan sent number of valuable messages¹:

The adoption of the MDG, drawn from the United Nations Millennium Declaration, was a seminal event in the history of the United Nations. It constituted an unprecedented promise by world leaders to address, as a single package, peace, security, development, human rights and fundamental freedoms¹.

“We will not enjoy development without security, we will not enjoy security without development, and we will not enjoy either without respect for human rights. Unless all these causes are advanced, none will succeed.”

The eight MDG form a blueprint agreed by all the world’s countries and all the world’s leading development institutions — a set of simple but powerful objectives that every man and woman in the street, from New York to Nairobi to New Delhi, can easily support and understand¹.

Since their adoption, the Goals have galvanized unprecedented efforts to meet the needs of the world’s poorest¹.

Why are the MDG so different? There are four reasons¹.

First, the MDG are people-centred, time-bound and measurable.

Second, they are based on a global partnership, stressing the responsibilities of developing countries for getting their own house in order, and of developed countries for supporting those efforts.

Third, they have unprecedented political support, embraced at the highest levels by developed and developing countries, civil society and major development institutions alike.

Fourth, they are achievable.

This progress report is the most comprehensive accounting to date on how far we have come, and how far we have to go, in each of the world’s regions¹. It reflects a collaborative

effort among a large number of agencies and organizations within and outside the United Nations system. All have provided the most up-to-date data possible in their areas of responsibility, helping thereby to achieve clarity and consistency in the report¹.

Above all, the report shows us how much progress has been made in some areas, and how large an effort is needed to meet the MDG in others¹. If current trends persist, there is a risk that many of the poorest countries will not be able to meet many of them¹. Considering how far we have come, such a failure would mark a tragically missed opportunity¹. This report shows that we *have* the means at hand to ensure that nearly every country can make good on the promises of the Goals¹. Our challenge is to deploy those means¹.

“Let us be clear about the costs of missing this opportunity: millions of lives that could have been saved will be lost; many freedoms that could have been secured will be denied; and we shall inhabit a more dangerous and unstable world.”

SHORT DESCRIPTION OF THE EIGHT MILLENNIUM DEVELOPMENT GOALS

Goal 1. Eradicate extreme poverty & hunger

It is sad fact that for more than 1 billion people who subsist on less than \$1 a day (Figure 1)¹. More than 800 million people have too little to eat to meet their daily energy needs (1). For young children, the lack of food can be perilous since it retards their physical and

Proportion of people living on less than \$1 a day, 1990 and 2001 (Percentage)

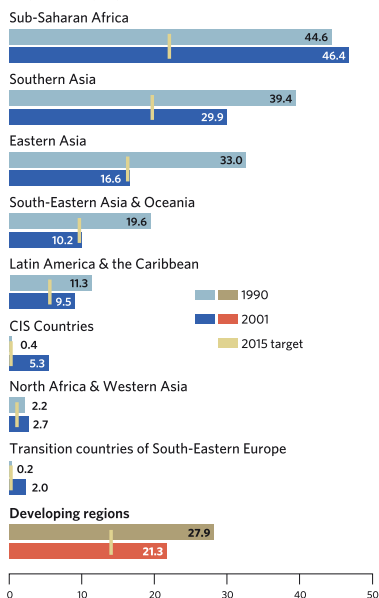


Figure 1. Proportion of people living on less than \$1 a day in 1990 and 2001 in different regions of the world¹

Proportion of children under age five who are underweight, 1990 and 2003 (Percentage)

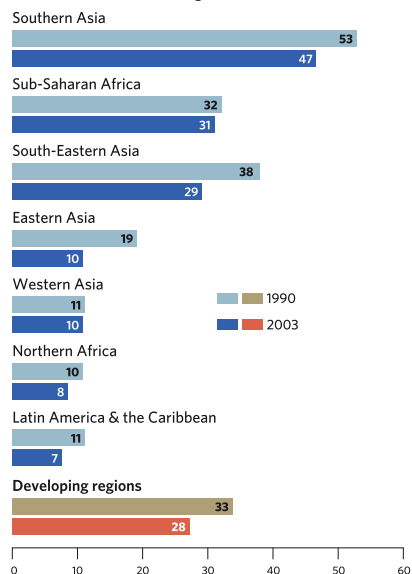


Figure 2. Proportion of children under age five from different regions of the world who are underweight in the year 1990 and 2003¹

mental development and threatens their very survival¹. More than a quarter of children under age 5 in developing countries are malnourished (Figure 2)¹.

There were 815 million hungry people in the developing world in 2002 — 9 million less than in 1990. Yet in the worst-affected regions — sub-Saharan Africa and Southern Asia — the number of hungry people has increased by tens of millions. Growing populations and poor agricultural productivity have been the main reasons for food shortages in these regions¹.



Figure 3. Village in sub-Saharan Africa where the poverty and hunger are common¹



Figure 4. Usual African maternity

Most of the world's hungry live in rural areas and depend on the consumption and sale of natural products for both their income and their food (Figure 3)¹.

Efforts to eradicate poverty and hunger are frequently set back by conflict and natural disasters. Hunger and poverty (Figures 4 and 5), in turn, can provide fertile ground for conflict, especially when combined with factors such as inequality, and make being prepared to cope with disasters more difficult¹.



Figure 5. Members of the family at usual African maternity

Goal 2 Achieve universal primary education

Education gives people choices regarding the kind of lives they wish to lead. It enables them to express themselves with confidence in their personal relationships, in the community and at work¹. The loss of potential does not affect children alone. Education, especially for girls, has social and economic benefits for society as a whole. Educated women have more economic opportunities and engage more fully in public life¹. As mothers, they tend to have fewer and healthier children who are more likely to attend school¹. All of these benefits are key to breaking the cycle of poverty (Figure 6)¹.



Figure 6. Conditions at school in Africa¹

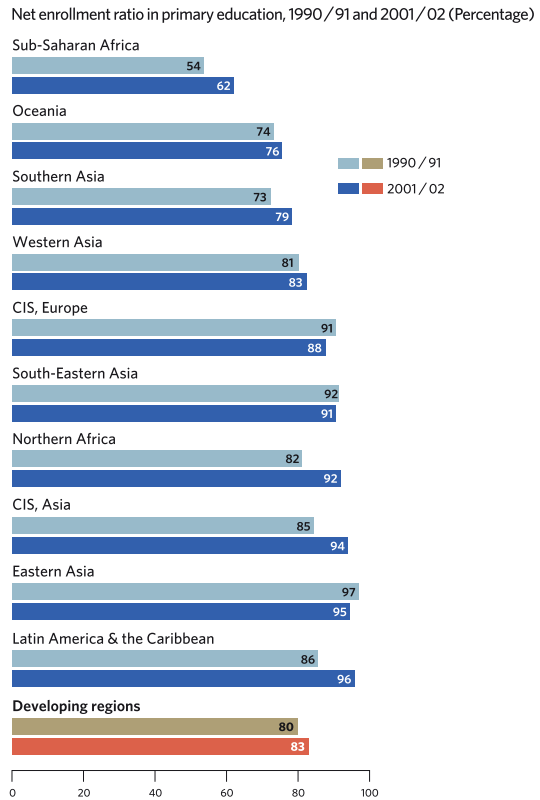


Figure 7. Net enrollment ratio in primary education, 1990/91 and 2001/02 in different regions of the world (percentage)¹

Of the 115 million children out of school in developing countries in 2001, some had dropped out, others had never been enrolled at all (Figure 7)¹. In Mali, for instance, almost none of the 61 per cent of children out of school have ever attended school consistently¹. In most developing regions, girls are less likely than boys to stay in school¹.

In all developing regions, except Latin America and the Caribbean and Eastern and South-Eastern Asia, girls are less likely than boys to remain in school¹. The gap between girls and boys is greatest in the 22 countries where fewer than 60 per cent of children complete their primary education¹.

Goal 3. Promote gender equality and empower women

Gender equality is a human right and at the heart of achieving the MDG¹. It is a prerequisite to overcoming hunger, poverty and disease¹. This means equality at all levels of education and in all areas of work, equal control over resources and equal representation in public and political life¹. Achieving parity in education — in primary school and beyond — is critical if women are to engage fully in society and the global economy¹. But in too many countries, girls are left behind (Figure 8)¹. Figure 9 is showing adolescent girl taking care of her child in developing country¹.

Girls' primary school enrolment ratios in relation to boys', 1990/91 and 2001/02 (Girls per 100 boys)

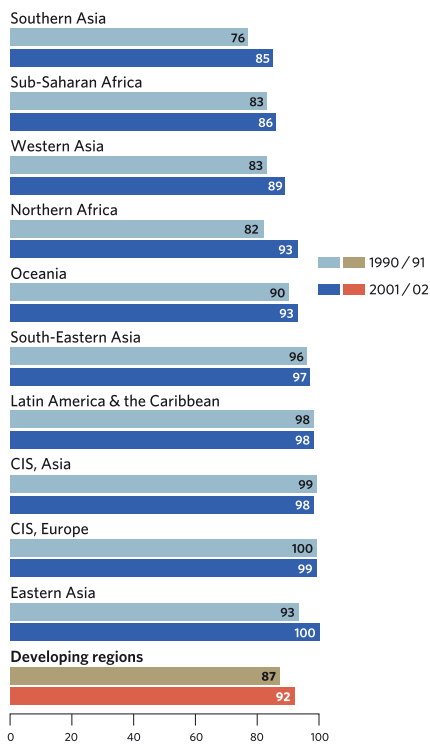


Figure 8. Girl's primary school enrollment ratio in relation to boys' in 1990/91 and 2001/02 (Girls per 100 boys) in different regions of the world¹

Figure 9. Adolescent girl taking care of her child in developing country¹



Goal 4. Reduce child mortality

The death of a child is a tragic loss. Yet, every year, almost 11 million children die — that is, 30,000 children a day — before their fifth birthday¹. Under-five mortality rate has slow down from 1990 and 2003, and probably targets set by MDG for 2015 will not be met, as shown in the Figure 10¹.

Education, especially for girls and mothers, saves children's lives. Raising incomes can help, but little will be achieved unless services reach those who need them most (Figure 11)¹.

Under-five mortality rate per 1,000 live births, 1990 and 2003

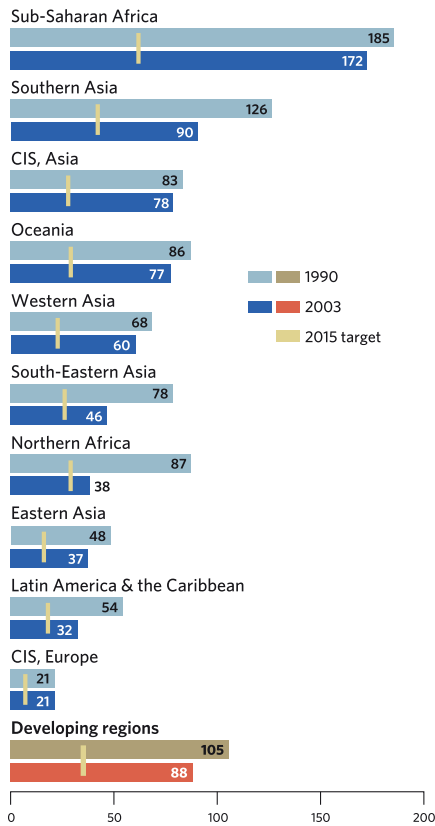


Figure 11. Children whose needs in developing countries should be addressed¹

Figure 10. Under-five mortality rate per 1,000 births in 1990 and 2003 in the regions of the world with targets set by MDG for 2015¹

Goal 5. Improve maternal health

Giving birth should be a time of joy. But for more than half a million women each year, pregnancy and childbirth end in death (Figure 12)¹. Twenty times as many women suffer serious injuries or disabilities, which, if untreated, can cause lifelong pain and humiliation¹. A mother's death can be particularly devastating to the children left behind, who are more apt to fall into poverty and to become the objects of exploitation¹. Countries with already low levels of maternal mortality have made further progress¹. But this is not enough. Reductions in the worst-affected countries will require additional resources to ensure that the majority of births are attended by doctors, nurses or midwives who are able to prevent, detect and manage obstetric complications (Figure 13)¹. When problems do arise, women must be able to reach a fully equipped medical facility in time. Universal access to reproductive health care, including family planning, is the starting point for maternal health¹. Figure 14 shows how fertility rates have been decreasing in the world in the last fifty years and with projections to the year 2030. It is particularly important for addressing the needs of the 1.3 billion young people about to begin their reproductive lives. Currently, 200 million women have an unmet need for safe and effective contraceptive services¹.

Maternal mortality ratios per 100,000 live births, 2000

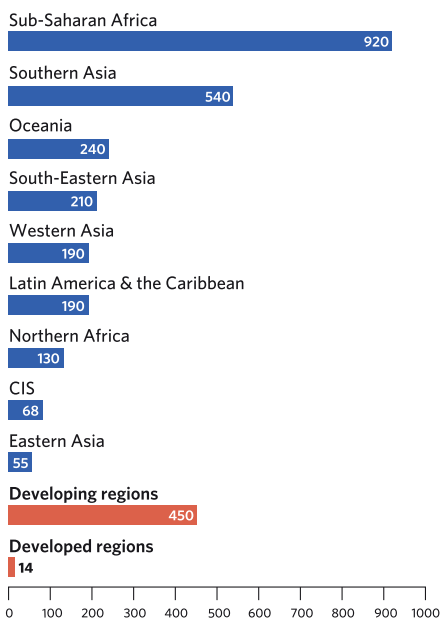


Figure 12. Maternal mortality ratio per 100,000 live births in the year 2000¹

Proportion of deliveries attended by skilled health care personnel, 1990 and 2003 (Percentage)

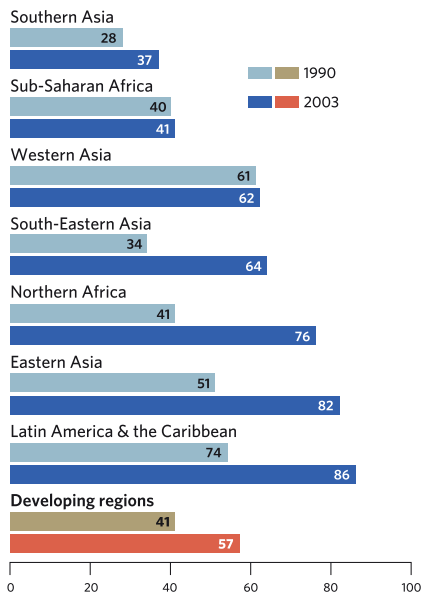


Figure 13. Proportion of deliveries attended by skilled health care personnel in 1990 and 2003 (Percentage)¹

In 2000, the average risk of dying during pregnancy or childbirth in the developing world was 450 per 100,000 live births. In countries where women tend to have many children, they face this risk many times¹. Thus, the chances of dying during pregnancy or childbirth over a lifetime are as high as 1 in 16 in sub-Saharan Africa, compared with 1 in 3,800 in the developed world¹. This lifetime risk could be substantially reduced if women had the family planning services they desire¹. Once a woman is pregnant, it is essential that she has good medical care and access to emergency obstetric-care facilities in case of unexpected complications¹.

Success is possible, even in poorer countries.

Although it is one of the poorest countries in the world, Bangladesh was able to substantially reduce maternal mortality by focusing on skilled birth attendants, access to emergency obstetric care and expanded family planning programmes¹. In Egypt, maternal mortality was cut in half in only 8 years¹. This extraordinary accomplishment was the result of a comprehensive programme to boost the quality of medical care, especially the management of obstetric complications, and to ensure skilled attendants at births¹. Attention was also focused on mobilizing community support for women during pregnancy and childbirth and addressing reproductive health needs, including family planning¹. Impressive results have been achieved in India¹.

Advances were made in most developing regions between 1990 and 2003 in providing medically skilled attendants at birth (Figure 13)¹. Major improvements were achieved in South-Eastern Asia, Northern Africa and Eastern Asia, but there was no change in sub-

Saharan Africa, where maternal mortality is highest¹. Though progress continues in Southern Asia, it has the lowest level of professional care at birth in the world¹. In every region, the presence of skilled birth attendants is lower in rural than in urban areas¹. Professional care at birth is one of several factors that can lower maternal mortality, along with access to emergency obstetric care¹. To be effective, emergency facilities, however, must be stocked with essential drugs, equipment and supplies¹.

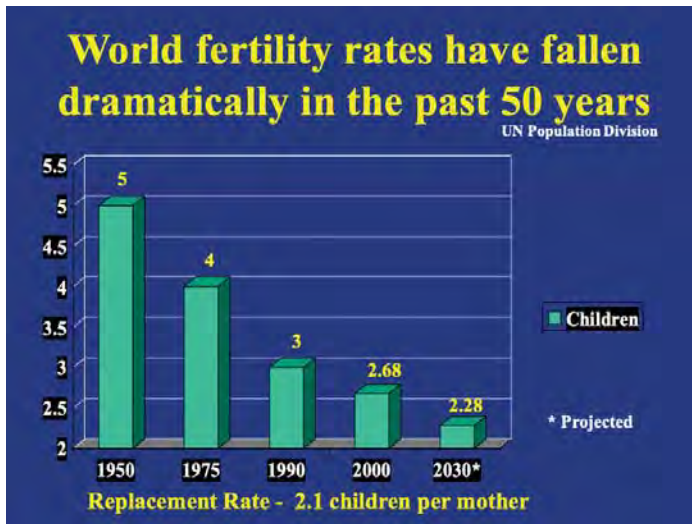


Figure 14. World fertility rates from 1950 to 2000, with the projections to 2030

Goal 6. Combat HIV/AIDS, malaria & other diseases

In the 25 years since it was first reported, AIDS has become the leading cause of premature death in sub-Saharan Africa and the fourth largest killer worldwide (Figure 15)¹. More than 20 million people have died around the world since the epidemic began¹. And by the end of 2004, an estimated 39 million people were living with HIV¹. In addition to the incalculable human suffering that AIDS has wrought, the epidemic has reversed decades of devel-

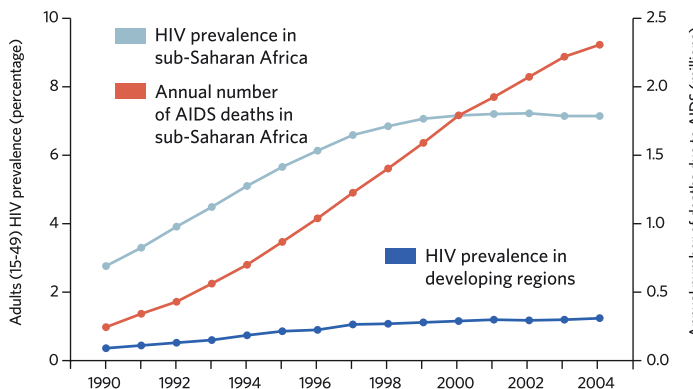


Figure 15. HIV prevalence in adults aged 15-49 in sub-Saharan Africa and all developing regions (Percentage) and number of AIDS deaths in sub-Saharan Africa (Millions), 1990-2004¹

opment progress in the worst-affected countries¹. Almost no country has escaped its wrath. But there are countries that are fighting back — and winning¹. Thailand and Uganda have shown that infection rates can be reversed with vision and leadership¹. They provide an example to other countries caught in the grip of AIDS¹.

A protection from malaria can be achieved by simple net use (Figure 16)¹.

Goal 7. Ensure environmental sustainability

Environmental sustainability means using natural resources wisely and protecting the complex ecosystems on which our survival depends¹. But sustainability will not be achieved with current patterns of resource consumption and use (Figure 17)¹. Land is becoming degraded at an alarming rate¹. Plant and animal species are being lost in record numbers¹. The climate is changing, bringing with it threats of rising sea levels and worsening droughts and floods¹. Fisheries and other marine resources are being overexploited¹. The rural poor are most immediately affected because their day-to-day subsistence and livelihoods more often depend on the natural resources around them¹. Though the exodus to urban areas has reduced pressure on rural lands, it has increased the number of people living in unsafe and overcrowded urban slums¹. In both urban and rural areas, billions of people lack safe drinking water and basic sanitation¹.

Goal 8. Develop a global partnership for development

At the heart of the MDG is the understanding that fighting poverty (Figure 18) is a collective undertaking and that all countries have a stake in the results¹. Primary responsibility to achieve the Goals rests with developing countries, but inter-



Figure 16. In countries where malaria is the problem, protection from mosquitos by net¹

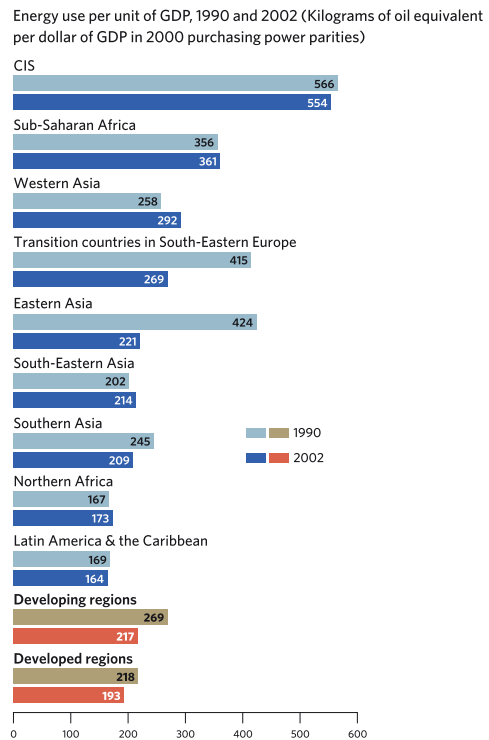


Figure 17. Energy use per unit of gross national product (GDP), 1990 and 2002¹

national support is critical, especially for the poorest countries and for countries handicapped by geographical isolation¹. Moreover, in an interdependent world economy, open avenues for trade, international financial stability and the spread of technology are needed to enable developing countries to seize opportunities for accelerated and sustained development¹. The United Nations Millennium Declaration embodies an agreement that developing countries will work to maintain sound economies, to ensure their own development and to address human and social needs¹. Developed countries, in turn, agree to support poorer countries through aid, trade and debt relief. A meaningful partnership between rich and poor must also address developing countries' need for technology, medicines and jobs for their populations, particularly for the growing ranks of young people¹.



Figure 18. Poor living conditions near modern airport in developing country¹

INSTEAD OF CONCLUSION

The MDG were derived from the United Nations Millennium Declaration, adopted by 189 nations in 2000¹. Most of the goals and targets were set to be achieved by the year 2015 on the basis of the global situation during the 1990s¹. It was during that decade that a number of global conferences had taken place and the main objectives of the development agenda had been defined¹.

To this end, activities will need to focus on the training of national statistical staff, while at the same time ensuring that trained statisticians remain in national statistical offices¹. Basic data collection programmes must also be developed to ensure a continuous flow of social and economic statistics and increased collatoration and knowledge-sharing must be promoted across countries within regions¹.

Described UN Report is finishing with the important messages:

Today's is the first generation with the resources and technology to make the right to

development a reality for everyone and to free the entire human race from want. There is a shared vision of development.

The MDG, which range from halving extreme poverty to putting all children into primary school and stemming the spread of infectious diseases such as HIV/AIDS, all by 2015, have become globally accepted benchmarks of broader progress, embraced by donors, developing countries, civil society and major development institutions alike¹.

These goals can be met by 2015— but only if all involved break with business as usual and dramatically accelerate and scale up action now¹.

WORK IN PROGRESS

World Association of Perinatal Medicine, International Academy of Perinatal Medicine, Fetus as a Patient and Ian Donald School as a four sister non-profit societies are planning a long-term activities involving maximally perinatologists all over the World. We all are non-profit societies and naturally do not have money to build new hospitals somewhere in developing world. However it has to be said that humanitarian agency Matres Mundi already builded up hospital in Addis Ababa and School of Perinatal Medicine. We will very strongly support these new institutions. Indeed, our greatest power are human resources and excellent teachers we have within our societies. Detailed plan has been made for year 2020. We will mention most important events:

International symposium in Khartoum (Sudan), February 27, 2020, where we will discuss problem of proper education of future teachers in the action of reducing maternal mortality. Apart from six internationally recognized speakers we will have even more from surrounding countries and Sudan.

To Sudan and Nigeria Donald School will send 10 copies of Textbook of Perinatal Medicine as a gift. Our members will be in future encouraged to donate used books to our colleagues in countries in need. Special issue of Yellow Journal is just finished and includes 11 chapters from the known authors from developing countries and will be distributed to future teachers and other colleagues in Sudan.

In continuation of the meetings we are planning to have several appropriate presentations at the well-established meeting in Sardinia in June 2020. Most significant event will be 10 World Congress of Perinatal Medicine in developing countries to be held in Sarajevo and Tuzla, Bosnia and Herzegovina, October 1 to 4 this year. It is planned to invite many ministries from developing countries and ambassadors represented in Bosnia and Herzegovina. Some public sessions are planed where citizens will be invited to be informed of this tragic episode.

Special issue of Yellow Journal will publish selected articles on reduction of maternal mortality.

Those are activities planned for 2020, but we have many ideas for the period after 2020 and most sincerely do invite all of you to contribute with your own even modest papers. It is hoped that this global activities will at least inform properly public and institutions about tragedy in developing countries for which we in developed world should feel ashamed.

WHAT HAS BEEN LEARNED FROM THE MILLENNIUM DEVELOPMENT GOAL REPORT 2015?

Ten years after the first extensive Millennium Development Goals (MDG) Report from 2005¹,

a new Report has been published in 2015, the year which was designated as the final year for reaching the MDG achievements².

Goal 1. Eradicate extreme poverty and hunger

As it is shown in the Figure 19, global poverty has reached the MDG target of 50 per cent reduction (from 36 per cent in 1990 to 15 per cent in 2011) of people living on less than \$1.25 a day in the past twenty years, which happened in 2011, five years ahead of the 2015 deadline².

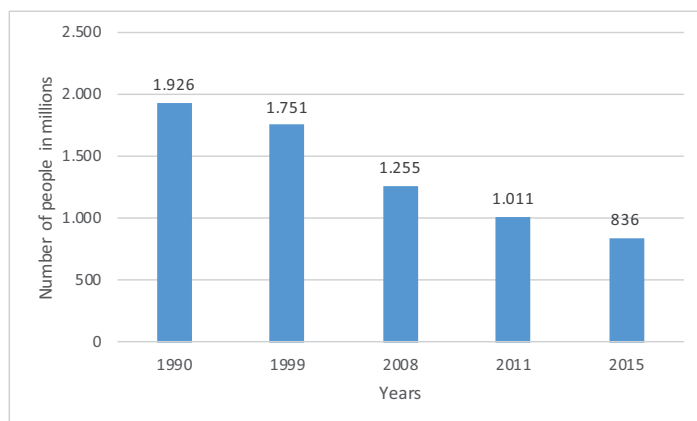


Figure 19. Number of people living on less than \$1.25 a day worldwide, 1990-2015 (millions) (modified according to²)

The most populous countries India and China played a key role in the impressive reduction of poverty in the regions of Southern Asia from 52 per cent (1990) to 17 per cent (2015) and for the same years in Eastern Asia the decline was from 61 per cent to 4 per cent². The poverty is still high in sub-Saharan Africa where reduction rate in the period of twenty years was only 28 per cent (from 57 per cent in 1990 to 41 per cent in 2015), and it is expected to increase in Western Asia between 2011 and 2015 (from 2 per cent to 3 per cent)². Women are faced with greater risk to live in poverty².

Hunger is still a problem in developing region where the percentages of undernourished people dropped from 23 per cent in 1990 to 13 per cent in developing world². In some regions (sub-Saharan Africa, Central Africa, Western Asia) the situation of undernourished people and hunger are worsening instead of improving². Conflicts have forced almost 60 million people from their homes². The eradication of poverty and hunger are the most important goals of development agenda in the post-2015 period².

Goal 2. Achieve universal primary education

In developing regions per cent of children enrolled to primary school increased from 83 per cent in the year 2000 to the estimate of 91 per cent in the year 2015². The number of children enrolled in primary school more than doubled in sub-Saharan Africa (from 67 million in the year 1990, to 149 million in the year 2012), while the number out-of-school children of primary school age worldwide has decreased from 100 million in the

year 2000 to 57 million in the year 2015 (2). The literacy rate of youth between 15 and 24 years globally increased from 83 per cent in the year 1990 to 91 per cent in the year 2015². Considerable progress has been made in expanding primary education enrolment particularly since the adoption of the MDGs in 2000¹.

Enormous progress has been achieved in the universal primary education in the past fifteen years, however despite a good results, special attention will be needed in the post 2015-period, because the education (especially women) has the core place in the achievement of prosperity in the families and the societies².

Goal 3. Promote gender equality and empower women

There are several sectors which are important for the gender equality: education, participation in labor force, paid work outside of agriculture, and political engagement². Gender parity in the primary education has been achieved in about two thirds of the countries in developing regions in the period of two decades². Labor force comprises of three quarters of working-age men and half of working-age women. In 2015 women make 41 per cent of paid workers outside agriculture which is increase compared to 35 per cent in the year 1990². Only 20 per cent of women are recently members of the parliament, which is increase from the 10 per cent twenty years ago². The fundamental causes of inequality between men and women should be rectified in the next period. Gender equality perspectives should be integrated fully into all goals of the post-2015 development agenda².

Goal 4. Reduce child mortality

Still 6 million children under-five die in 2015 due to preventable causes, which is much less than in 1990 when the number of deaths was 12.7 million². It has been estimated that death rate of under-five children decreased from 90 to 43 per 1,000 between 1990 and 2015, which is more than 50 per cent in all regions except Oceania². Regardless of such improvements, it will take another ten years to meet the global MDG target. About 16,000 children under five continue to die every day in 2015, and most of them in the first day of life, the first week of life and the first month of life². In sub-Saharan Africa under-five mortality rate has decreased from 179 to 86 deaths per 1,000 live births which is 3 million under-five children a year which is half of the global under-five deaths in the world². The problem is that in this region the population of under-five children is expected to rise in the next decades, which means that the mortality in absolute numbers will also increase².

In the period from 1990 to 2015 worldwide neonatal mortality decreased from 33 to 19 deaths per 1,000 live births, which was much slower decline than for children aged 1-59 months, which is the reason why in the after-2015 period every region in the world will have more neonatal deaths within the total under-five children deaths². Of around 6 million under-five children who die in one year, one million die in the first day of life, another one million in the first week and 0.8 million will die after the first week of life, which is 2.8 million neonates who die in the first 4 weeks of life (Figure 20)². Most of neonates die (35 per cent) because of complications of preterm birth, additional 24 per cent because of the complications during birth and delivery, and sepsis is cause of death for 15 per cent of neonates (Figure 21)². Many neonatal deaths are avoidable with simple and cost effective interventions around the time of birth, which are frequently missed by many newborns and the mothers².

Although in sub-Saharan Africa under-five mortality rate is still high in 2015 (86 per 1,000 livebirths) the rate of decline is in the period 2005 to 2013 (4.2 per cent per year) five

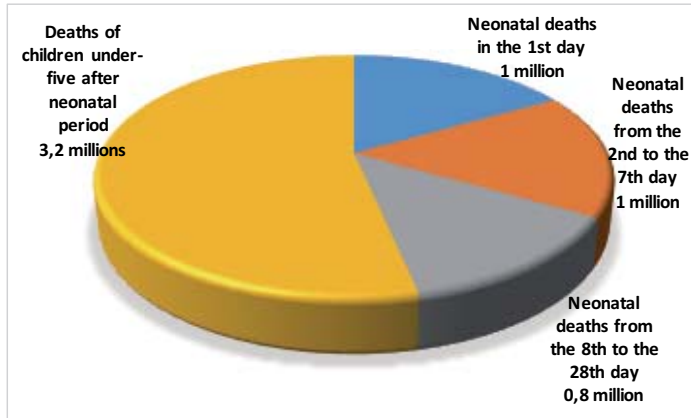


Figure 20. Neonatal deaths as a share in 6 million under-five children deaths in the year 2015²

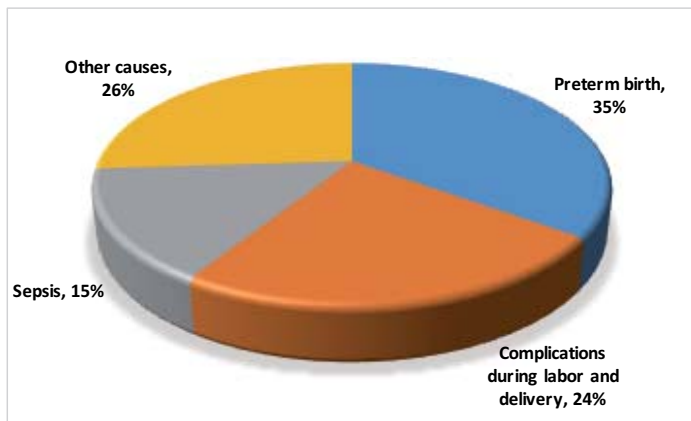


Figure 21. Causes of neonatal deaths in 2015²

times faster than it was in the period 1990-1995 (0.8 per cent per year)². Interestingly, since 1995 in high income countries the annual reduction rate of under-five mortality was not accelerating, while it has accelerated in lower income countries. Supporting decrease of under-five mortality should target the children from poorest households and from rural areas, and supporting women's education should be a part of this empowerment².

There is still a long way to go in terms of decreasing under-five mortality rate with particular emphasis on the decrement of neonatal mortality in all the world and especially in developing and poor countries. With millions of women and children still at risk of dying of preventable causes, maternal, newborn and child survival must remain at the heart of the post-2015 global development agenda².

Goal 5. Improve maternal health

Maternal mortality dropped for 45 per cent from the year 1990 till the year 2013 (from 380 maternal deaths to 210 per 100,000 live born, as shown in the Figure 22)². The regions with highest maternal mortality experienced high decrease of maternal mortality for 64 per cent

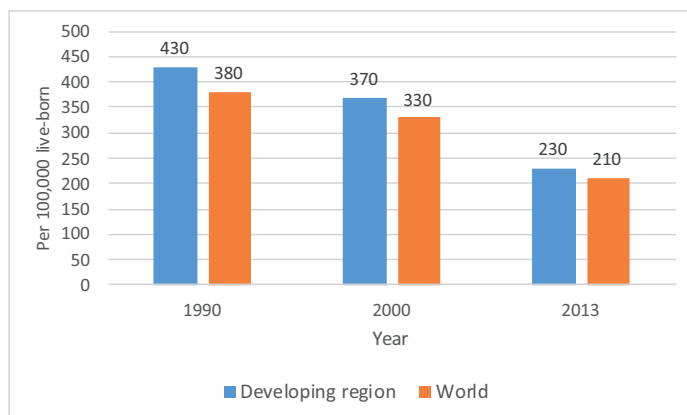


Figure 22. Changes of maternal mortality rate (maternal deaths per 100,000 live-born) from 1990 to 2013 in developing countries and in the world²

(from 530 to 190 per 100,000 live-born) in Southern Asia, and 49 per cent in sub-Saharan Africa (from 990 to 510 per 100,000 live-born)². This relative improvement is tremendous if we compare it with only 37 per cent of decrease (from 26 to 16 per 100,000 live-born) in developed countries, but if the rates are compared, that the data from developing world are terrifying and distressing. In 2013 still there were 800 women dying every day which gives 289,000 women's deaths every year².

Maternal deaths are concentrated in sub-Saharan Africa and Southern Asia, which together accounted for 86 per cent of such deaths globally in 2013².

Most of maternal deaths are preventable, and based on data from the years 2003 to 2009, obstetric bleeding was the cause of death in 27 per cent of the mothers in developing and 16 per cent in developed regions of the world². Among other causes of maternal deaths the most important are infections, high blood pressure during pregnancy and unsafe abortion and complications from delivery². Only 51 per cent of countries globally (in sub-Saharan Africa only 20 per cent) had some data on maternal deaths, which is worrying².

To prevent maternal deaths, the key measures are prenatal care (according to WHO, at least four antenatal care visits in pregnancy) and support during labor and delivery by skilled birth attendants (medical doctor, nurse or midwife) (Figure 23)². The progress in antenatal care has been very slow in the last 25 years in developing countries². The difference between 1990 data and 2014 are just 17 per cent increase in 2014 from 35 per cent to 52 per cent of women receiving antenatal care². Very slow progress has been noted in sub-Saharan Africa from 47 to 49 per cent of women in the same period, while in Southern Asia only 36 per cent of women received four or more antenatal visits around the year 2014². Assist of the skilled birth attendant in the last 25 years has been very modest, meaning that access to care was far from being universal². The raise was only 22 per cent from 1990 (59 per cent) to around 2014 (71 per cent) globally². Disparities between the regions in developed countries are even more profound from 100 per cent in Eastern Asia, 96 per cent in Caucasus and Central Asia to only 52 per cent in sub-Saharan Africa and Southern Asia².

Another important indicators of maternal health are birth rate of adolescent mothers and use of contraceptives. The birth rate of the mothers aged 15 to 19 years has decreased from 59 per 1,000 girls in 1990 to 51 births per 1,000 girls in 2015². The highest birth

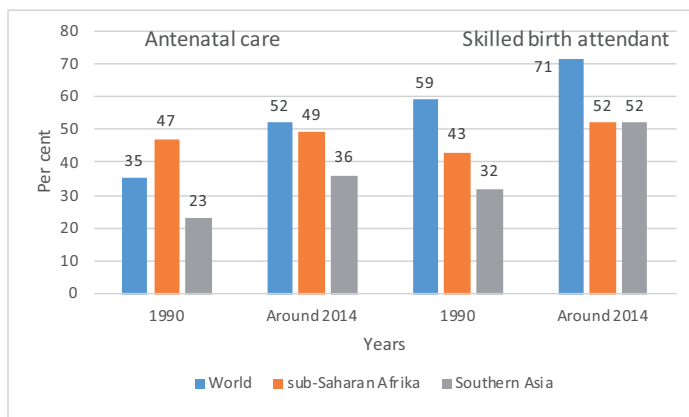


Figure 23. Disparities between some WHO regions in antenatal visits and coverage by skilled birth attendant in the year 1990 and around the year 2014²

rate of adolescent mother has been noted in sub-Saharan Africa which was in 2015 116 births per 1,000 girls (used to be 123 per 1,000 births in 1990)². Use of contraceptives is important because it prevents number of unintended pregnancies and unsafe abortions². In married women or women in stable union in reproductive age (15 to 49 years of age) using contraception increased from 55 per cent in 1990 to 64 per cent in 2015². Although in sub-Saharan Africa the use of contraception more than doubled in the period from 1990 to 2015 (from 13 to 28 per cent), it is still low².

What can be concluded from the data presented before is that huge inequalities in world are related to maternal deaths, and access of health care related to sexual and reproductive health are far from being satisfactory, although it is claimed nowadays that reproductive health should be treated as a human right². Women in many developing countries still do not have access to a services of acceptable quality. Another problem is unavailability of the data related to health issues and in particular to maternal and infant health, which is preventing policy makers to define priorities in order to improve maternal and child health².

Goal 6. Combat HIV/AIDS, malaria and other diseases

Although new HIV infection decreased from 3.5 million to 2.1 million which is 40 per cent in the period of 14 years (between 2000 and 2013), it is estimated that 35 million people in the world still live with the HIV infection². It is estimated that 0.8 per cent of people from the age group between 15 and 49 years of age had HIV infection in the year 2013². About 1.5 million new HIV infections appeared in sub-Saharan Africa in 2013, with half of them occurring just in three countries: Nigeria, South Africa and Uganda. In 2013 about 1.5 million people died of AIDS related illness, which is 35 per cent decline compared to 2.4 million deaths recorded in 2005². AIDS remained the number one killer in sub-Saharan Africa, and AIDS related deaths are not decreasing in adolescents aged 10 to 19 years. In sub-Saharan Africa still less than 40 per cent of youth aged 15 to 24 years had comprehensive correct knowledge of HIV in 2014².

In 2014, out of 13.6 million people receiving antireoviral therapy (ART) in the world, 12.1 million are in developing countries. Tremendous increase of 20 per cent happened between the years 2012 and 2013².

Malaria is still one of the most important health issues in developing countries in the world, regardless of the fact that 6.2 million deaths have been prevented between the years 2000 and 2015². In the same period it is estimated that the incidence of malaria decreased by 37 per cent and global mortality rate by 58 per cent². The estimated reduction rate of as high as 69 per cent in children the under-five in sub-Saharan Africa, contributed significantly in the reduction of under-five child mortality by two thirds, which was the target of MDG 4².

It is estimated that there have been 9 million of new cases of tuberculosis in 2013 globally². When transposing this to the relative number, than it is on average 1.5 per cent a year in all regions since the year 2000. Tuberculosis mortality decreased by 45 per cent between 1990 and 2013, with 1.1 million deaths caused by TBC of HIV negative people in the year 2013².

Although much has been achieved in combating HIV, malaria and TBC in the world in the period from 1990 to 2015, the situation is still not satisfactory and in post-2015 era, robust efforts should be made to enable sustainable development².

Goal 7. Ensure environmental sustainability

Global emission of carbon dioxide has accelerated in the 20 year period from 10 per cent between 1990 and 2000 to 38 per cent from 2000 to 2012². Although the average emission of carbon dioxide per person per year in developed regions was 10 metric tons, and only 3 tons in developing regions, the growth from 10 to 38 percent was driven mainly by developing regions².

Ozone-depleting substances have been virtually eliminated, and the ozone layer is expected to recover by the middle of this century².

Prevention of the loss of biodiversity, maintain food security and water supplies, strengthen climate resilience and improve human health and well-being. In 2015, 91 per cent of the global population uses an improved drinking water source, compared to 76 per cent in 1990².

Since 1990, 2.1 billion people have gained access to improved sanitation, and the proportion of people practicing open defecation globally has fallen almost by half².

The proportion of urban population living in slums in the developing regions fell from 39.4 per cent to 29.7 per cent between 2000 and 2014².

In the post-2015 period efforts should be made to ensure environmental sustainability which is the most important for continuing socioeconomic development, poverty eradication and decreasing of inequalities².

Goal 8. Develop a global partnership for development

Net official development assistance (ODA) from member countries of the Development Assistance Committee (DAC) of the Organization for Economic Co-operation and Development (OECD) increased by 66 per cent between 2000 and 2014. In 2014 ODA decreased by 0.5 per cent in real terms and it reached 0.29 per cent of DAC gross national income (GNI) in the same year, while the UN's target is 0.7 per cent of the GNI, exceeded by Denmark, Luxembourg, Norway, Sweden and the United Kingdom².

Preliminary data for 2014 show that bilateral ODA to sub-Saharan Africa decreased by 5 per cent (2 per cent if debt relief is excluded) in real terms from the previous year, reaching \$25 billion at constant 2013 prices².

In the post-2015 period ODA remains critically important for developing countries in order to implement Sustainable Development Goals (SDGs). Most of the SDGs carry forward the matters not solved by the MDGs (2). In contrast to the MDGs, SDGs have been brought together within one framework as universal whole, with the interactions among them, which are brought into focus in the 2030 Agenda². The 2030 Agenda defined 17 SDGs and 169 targets, with 232 indicators in the global framework³.

CONCLUSION

The first quadrennial Sustainable Development Goal Report from 2019, has been entitled “The Future is Now. Science for Achieving Sustainable Development.”³. In his Foreword of the document, António Guterres, UN Secretary General, pointed out³:

“Science is our great ally in the efforts to achieve the Goals. The Global Sustainable Development Report 2019, prepared by an independent group of scientists, presents an objective assessment of where we are falling short and what needs to be done. The Report highlights central entry points to leverage interlinkages and accelerate progress across all 17 Sustainable Development Goals.

This Report reminds us that the future is determined by what we do now and the window of opportunity is closing fast. I encourage all actors to translate the insights from this analysis into collective action.”

UN Under-Secretary-General for Economic and Social Affairs, Liu Zhenmin in the Preface of the same document stressed³:

“The Report makes clear that we are at risk of irreversibly degrading the natural systems that sustain us and further points out where we are off track in “leaving no one behind”. More ambitious, more transformative and more integrated responses are urgently needed.”

Former Norway Prime Minister, Gro Harlem Brundtland in the Prologue to the Report rightly so wrote³:

“We need courage to confront the vested political, business and economic interests that seek to maintain the current unequal order, and we need to grasp the opportunity that the move to a low carbon economy offers in order to rectify current inequalities.

We need to promote agreement, inclusivity and consensus to achieve policies that work for the common good, rather than narrow self-interest, across both the public and the private sectors.

And we need to inspire hope across all sections of society, especially among young people, letting them know that their voices will be heard, their experiences will be acknowledged and their ideas will be anchored in the policymaking process. The data and the proposals in the present report are critical elements in society’s armoury in the fight against climate change, poverty and injustice.”

Many of the SDGs carry forward the unfinished business of the MDGs, while several others can be traced back to objectives already agreed to in different United Nations forums^{2,3}. In the pursuit of the MDGs, the global community achieved many successes, but also fell short in several ways as it learned important lessons about the opportunity of co-benefits, and the inevitability of trade-offs and tough choices³. As it was shown, most of MDGs were not met, which was disappointing and distressing for the whole community, and for the community of perinatologists it was worrying that Goals 4 and 5 were far behind the proclaimed targets. One of the reasons was that global prominent societies of fetomaternal specialists and

neonatologists were not consulted or engaged to solve the problems of maternal and child mortality. In the regions like India, where Federation of Obstetrics and Gynecology of India was engaged, substantial progress in decreasing maternal and infant mortality has been achieved⁴. Besides that MDGs were not brought together within one framework, which is not the case with SDGs³. The emphasis on interactions between SDGs was influenced by the growing scientific understanding of the Earth as a closely linked human-environment system.

The four levers of change – governance, economy and finance, individual and collective action, and science and technology – should be coherently deployed and combined to bring about transformational change³. All actors should strive for coordinated efforts and prioritize policy coherence and consistency across sectors³. Every country and region should design and rapidly implement integrated pathways to sustainable development that correspond to their specific needs and priorities, and contribute also to the necessary global transformation³.

As far as our learned societies are concerned we already made strong start. It is proper to finish this overview with strong message of American president Roosevelt at the time of horrible American economical crisis: “Gentlemen, begin best you can, but begin!”

We did so.

And to quote another big person Winston Churchill: “This is not the end. It is not even the beginning of the end. This is the end of the beginning.”

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JOURNAL OF PERINATAL MEDICINE – THE OFFICIAL JOURNAL OF THE INTERNATIONAL ASSOCIATION OF PERINATAL MEDICINE (IAPM): HISTORY AND VISION

Joachim W. Dudenhausen and Amos Grünebaum

INTRODUCTION

In the 1950's Erich Saling, Roberto Caldeyro-Barcia, Edward Hon, and Stanley James were the pioneers of perinatal, prenatal and neonatal research. In the late 1960s they and other researchers founded several national and international scientific societies. These four pioneers (Fig. 1) agreed to found the Journal of Perinatal Medicine (JPM). Thus, Erich Saling as the Editor-in-Chief^{1,2}, and Joachim W. Dudenhausen³ and Konrad Wagner as editorial secretaries founded the JPM with support of the publishing house De Gruyter, Berlin/Germany, which is one of the oldest scientific publishers worldwide. De Gruyter was founded in 1918 through merger of different publishing houses, some of which were founded as early as in the 18th century with a portfolio including theology, philosophy, history, law, physics, biology, and medicine.

The JPM's aim was the promotion of international collaboration in perinatal, prenatal and neonatal research, thus giving the worldwide academic community a scientific platform to publish and discuss their research papers⁴. The first issue of the Journal was published in January 1973 (Fig. 2), becoming the first scientific journal in the field of perinatal medicine. In its early years (1973 - 1976) four issues were published annually, from 1977 to 2015 the Journal published six issues per year, and further increased the number of issues to eight in 2016 and nine issues in 2017. Each issue contains original articles, review articles, short communications and letters to the editor. Over the years, JPM has grown significantly, which is reflected by the increasing number of annual submissions and readers as well as the increased impact within the scientific community.

In 1983 Joachim W. Dudenhausen took over the Editor-in-Chief position from Erich Saling. As Founding Editor, Erich Saling continues to be an important member of the editorial board. In 2014, the editorial office changed the cover of JPM (Fig. 3).

CHRONOLOGIC HIGHLIGHTS

In addition to the regular issues prominent topics are covered by special issues, for instance on the occasion of the Journals's 25th or 40th anniversary or the issue „Fetus as a Patient“, which contained the proceedings of a conference of the same name held in 1990 in Detroit/USA. In close editorial and publishing cooperation between members of the International Society Fetus as a Patient (ISFAP) and JPM led to JPM becoming the official journal of ISFAP at 2014.

Proceedings and abstracts of international congresses are published on a regular basis in JPM and since 2001 the Journal has published the abstracts of the World Association of Perinatal Medicine (WAPM) meetings occurring every two years.

In addition, JPM has long maintained close relationships with academic societies in the field of perinatal medicine. Connections to the New York Perinatal Society exist since 1980 and were intensified by Bruce Young. The best and most interesting papers of the society's annual meeting are published in JPM.

From 1991 until 1996 JPM was the official journal of the European Association of Perinatal Medicine (EAPM), and published the newsletters of the EAPM and congress books (the abstracts and lectures) of the European Congresses of Perinatal Medicine (ECPM). In September 1996 the EAPM General Assembly decided to end this cooperation because a new journal in the field was founded, with the founding editor Gian Carlo Di Renzo⁵. This new journal became the official journal of EAPM.

Since 1992, JPM has been the official journal of the WAPM. The cooperation between JPM and WAPM started during the presidency of Asim Kurjak, who served as JPMS's Coordinating Editor for the WAPM from 2001 to 2013. In 2014, until today, Frank Chervenak took over this task.

In 2014 the International Academy of Perinatal Medicine (IAPM) began a close cooperation with JPM. And it became the official journal of the IAPM, resulting in a change of the structure of Academy's Papers and for Academy's Declarations, which are published regularly in JPM.

IAPM is an independent, non-profit institution, created in 2005, with 30 permanent fellows from all over the world. It owes its existence to the preparatory work done by the WAPM, the International Society of the Fetus as a Patient, and the EAPM. Its purpose is to serve as an international forum for the assessment and discussion of worldwide perinatal medicine. Erich Salang served as the 1st President of the Board of Directors. Asim Kurjak is presently the JPM's Coordinating Editor for the IAPM.

In 2014, the editors of over 50 journals publishing in the field of women's health met to support the standardized collection of outcomes - a core outcomes set- of all trials in a specific clinical area, the Core outcomes in women's health initiative (CROWN)⁶. As a member of CROWN JPM supports clinical researchers to use standardized collection of outcomes of trials of the speciality.

In 2012, readers' interest and clinically significant relevance of case reports inspired the editors and the publisher of JPM to set up an new journal called Case Reports in Perinatal Medicine (CRPM) (Fig. 4). Case reports have a high educational value and can influence in making a diagnosis and in treating similar patients. The aim of CRPM is to collect cases with uncommon diagnosis and innovative therapeutic methods.

The editors of JPM have always attached great importance to the quality of its publication. Prior to accepting an academic paper for publication in JPM, they consider its value for elucidating the physiology and pathophysiology regarding pregnancy and the newborn and its potential to promote the possible change and improvement of practice in perinatal care of the mother and child. The editors aspire to publish clinical and translational research, but all this would not be possible without the invaluable and inspiring contribution of many scientists. The editors and the editorial staff try to manage a journal with evidence-based, clinically relevant papers, scientific and editorial independence and integrity.

The Impact Factor (IF, Fig. 5) is still an important indicator to show the reputation of a journal. In addition to the IF there are other aims which the JPM and its editors thrive for. This includes highlighting a diverse and international body of scientific work related to perinatal medicine from all parts of the world.

FUTURE OF JPM

In addition to original research and review articles, JPM also publishes guidelines and expert opinions. Although the internet has dramatically changed the way we access information on scientific research, the demand for printed versions of articles remains high for our readers. In addition of e-publishing, which allows quick ahead-of-print publication, print will remain one way we supply information to our readers for the next years.

Plagiarism detection tools are commonly used by academic journals to protect themselves and the academic community from plagiarized publications. Since January 2011, all manuscripts submitted to JPM undergo a similarity check (plagiarism check) using iThenticate which compares a manuscript to their proprietary CrossRef database, which contains a large number (tens of millions and counting) of documents from scientific conferences, journals, and books. iThenticate generates a Similarity Index. The score is used as a measure of how much a manuscript is similar to previously published text. By using this tool, we aim to eliminate manuscripts with a high similarity index. Submitted papers with a similarity index higher than 50% (without references), are usually rejected.

CONCLUSION

We are grateful for our authors, readers, editors, and the Managing Editors for their help and support. We thank our Associate Editors Neonatology (Eduardo Bancalari and Anne Greenough) and the Associate Editors Obstetrics (Thorsten Braun, Vincenzo D'Addario, Mehmet Genc, Amos Grünebaum, Robert Romero, Ivica Zalud) for their intensive cooperation. The members of the Editorial Board are representing the perinatal research worldwide and from the different research areas in the field. We are thankful for their invested time. Without their help with reviews and in decision making the JPM wouldn't have the scientific value it has.

The development and the vision of the future of JPM are being discussed in regular meetings of the editors, associate editors and the editorial board members at WCPM, meetings of the IAPM and past special meetings in Madrid or Berlin. We thank the peer reviewers who kindly agreed to evaluate submitted papers. Their work is of great value for the scientific community.

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Fig. 1. Participants of the symposium ,Effects of labor on the fetus and the newborn', October 1-3, 1964, in Montevideo/Uruguay. In the first row are the four editors of the JPM: (1) Stanley James, (2) Edward Hon, (3) Roberto Caldeyro-Barcia, (5) Erich Saling. The other participants: (4) Fred Kubli. Second row: (6) J. Esteban-Altirriba, (7) D. Fonseca, (8) L. Escarcena, (9) S.V. Pose, (10) C. Mendez-Bauer. Third row: (11) L.O. Alvarez, (12) O.Althabe, (13) R. Schwarcz.

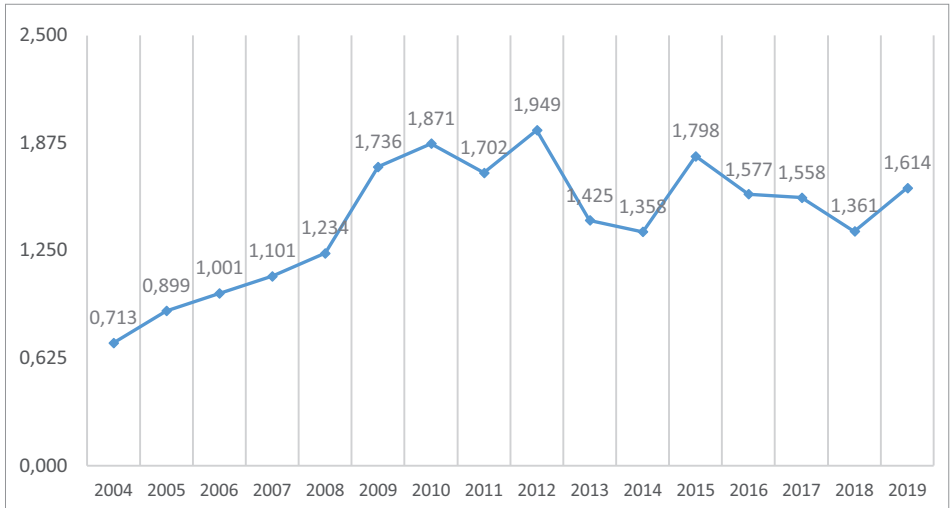


Fig. 5. Impact Factor of JPM 2004 - 2019

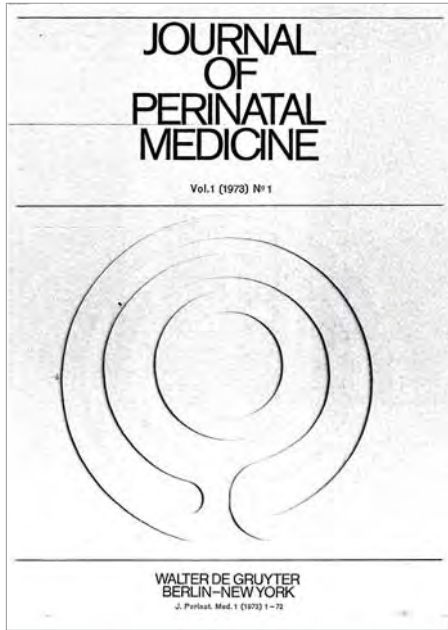


Fig. 2. Cover of the first issue of the Journal of Perinatal Medicine 1973



Fig. 3. Cover of JPM since 2014



Fig. 4. Cover of the first issue of the Case Reports in Perinatal Medicine 2012

chapter 1

**THE HISTORY
OF PERINATAL
MEDICINE**

INTRODUCTION

Although the Perinatal Medicine is as old as Humanity, this designation was not used until the second half of the XXth century, in particular since 1960.

During thousands of years, healers, shamans, doctors-priests, surgeons-barbers, physicians and midwives strove to understand the reproductive physiology, cure sterility and give relief to the women that were in the childbirth process. Along the history, some of these men and women managed to assure that their names and procedures would not be forgotten.

A LONG HISTORY

THE ANTIQUITY

With regards to the practice of Obstetrics which is the ancestor, together with Paediatrics, of the current Perinatal Medicine, it is thought that it began in the northwest of India, in the Valley of the Indus river, from where it extended, across Greece, to Europe, and towards the east up to China. But of what we have written testimony is of its practice in the **EGYPTIAN CIVILIZATION** by priests and scribes, thanks to the Kahum's papyrus dated in 1850 b. C., which deals about sterility and crocodile excrements as a contraceptive means. The papyrus, discovered by Ebers and known by his name, talks more extensively about reproductive problems such as the interruption of the pregnancy or the use of spermicides. It is also known that they used stimulants for contractions, gave birth in squatting position and evaluated the first cry of the newborn. They also recommended not to cut the umbilical cord until the child had been cleaned. They diagnosed pregnancy by making the supposed pregnant woman urinate on a mixture of wheat and barley seeds, dates and earth. If the seeds germinated she was pregnant. If only wheat seeds germinated, the fetus was a male, when only barley did, the fetus was a female.

The obstetric knowledge that reached Europe in the VIth century b. C., through the **GREEK COLONIZATION**, correspond with the period in which the medicine of this civilization, until then esoteric, magic and priestly, stopped focusing in the invocation of their gods and centered on the curative practice of doctors, especially on wounds of war. *Hippocrates*, born in Cos (460-377 b. C.), left written testimony of their conception of clinical medicine focused mankind. The hippocratic school produced 72 books which were kept in the library of Alexandria. There were 10 dedicated to embryology and obstetrics. *Aristotle* (384-322 b. C.), biologist and physician, brought to the medical knowledge theories about menstruation, fecundation and fertility.

The decline of Greece and the growing dominance of the **ROMAN EMPIRE** shifted the world center of medicine to Rome from the Ist to the VIth centuries a. C. In the first century of the Christian era, it is important to emphasize *Celsus*, who in his book *De Re Medica* written in Latin, included the previous and contemporary knowledge which detailed the breech version, the treatment of prolapse and the use of *especulum*. But the

one considered the first obstetrician of history is **Soranus of Ephesus***, who studied in Alexandria and practised in Rome from 98 to 138 a. C. He wrote in Greek a treatise about the affections of women which had a great diffusion and where he described the fetal positions, advocated for the internal version, dealt with amenorrhea and about the female anatomy.

Galen (131-201) also studied in Alexandria, wrote extensively and epitomized the knowledge of his time, basically the hippocratics, in his book *Ars Magna* in which there is though little content on obstetric gynecological. He influenced on the medical practice for some 14 centuries.

About obstetric practice in the imperial Rome, we know that the midwife with two assistants attended the bedridden woman in labour until the expulsion period, when they moved her to the birthchair to give birth. They helped her with pressures in the belly and manual traction in the breech presentation. When the fetal birth failed, they used hooks and other instruments for the extraction. Breastfeeding was the usual practice. In the cure of patients faith in miracles, medals and exorcisms played an important role. After the collapse of the Roman Empire in the Vth century, an era of cultural and scientific darkness started that stretched over six centuries. It was not until the beginning of the second millennium that the interest in science gradually resurged, until the Renaissance (1450-1600), that glorious awakening after a long period of ignorance and feudalism.

THE AGE OF DARKNESS

Between the years 400 and 1000 a. C., a period called «age of darkness», no hint of scientific activity is to be found. In the VIth century, the Schools of Medicine of Alexandria and Athens were closed. The innovative and research spirit that had begun with the Mesopotamian, Indian and Greek cultures, was replaced almost entirely by **SCHOLASTICISM**. It banned dissection of the human body, and all the progress achieved until then in the field of medicine started to fall in oblivion.

Fortunately, the art of Medicine, and especially Obstetrics, as it had been practiced in ancient cultures, was collected and compiled by some authors. For example, *Paulus Aegina* (625-690 a. C.), in his manuscript *An Epitome*, summed up the most part of the medical knowledge of antiquity. Throughout his seven large volumes, the author collected the Greco-Roman medicine. *Oribasius* (325-403 a. C.) of Pergamon, renowned obstetrician in Bizantium, also wrote an encyclopedia of medicine, gathering together the ideas of *Galen*. *Aetus of Amida* (502-575 a. C.) was another compiler of the obstetrical-gynecological knowledge. His texts were based on the knowledge of the School of *Soranus*. Some of these collections were translated into Arabic by other writers, constituting the basis of knowledge and praxis of most Arab physicians until the twelfth century. Byzantine physicians of the fourteenth century, on their side, translated and adapted the Arab texts. It can be stated that these texts and knowledge were the basis of *Harmonia Gynaeciorum*, written by *Caspar Wolf*, in the sixteenth century.

In the beginning of the second half of the eighth century the **ARABIC MEDICINE**, which was based on the Greco-Roman rules, dominated or influenced decisively the few

* The names in bold type are the historic personalities that identify the individual academic medals or are regular fellows of the International Academy of Perinatal Medicine.

Schools of Medicine of Occident. It was especially from Baghdad where knowledge irradiated towards all the known world. Among the important compilers of obstetrical texts, we must especially mention *Rhazes* (850-923 a. C.) and his two important books: *Continentes*, with noteworthy gynaecological references, and *Liber Helohavy*, entirely dedicated to the art of attending childbirth. There were great teaching hospitals, and not only in Baghdad, also in Damascus and Cairo.

But the Arabic physicians who most influenced in their time, and whose teachings became the basis of some of the best European books of the XVI century, were *Avicenna* (980-1037), introducer of cautery, and the jewish **Moses Maimonides** (1135-1204).

Surely, the scanty gynecological knowledge that doctors of the European Mediterranean bank had, was based on this arabic medicine. Likewise, two principles were opposed to the advancement of knowledge: the prohibition to dissect, because the religions were against it (both Christianity and Islam), and the principle of delegating the practice of obstetrics to midwives, considered improper for the physicians.

So in Europe the attention to pregnancy and childbirth throughout the **MIDDLE AGES** was in the hands of uneducated women, without any kind of training, whose knowledge passed from mother to daughter. In a certain way, the status of «midwife» was acquired though inheritance. Until the XVth century we cannot speak of real midwife's Schools. However, in no case doctors were called to try to solve a distocia. The extraction of the fetus, if needed, was entrusted to surgeons.

For all these reasons, we have not registered almost any scientific obstetric activity during that time. Only in **SALERNO**, near Monte Casino, in the South of Italy, around the VIth century a Medical School was created; it survived until the XIth century. A member of this School, called *Trotula* (there are doubts on if it was a man or woman), wrote a book entitled *Passionibus Mulierum Curandarum, De Aegritudinibus Mulierum De Curis Mulierum*. In this book, translated into English at the beginning of XVth century, different fetal positions and misconceptions are described and illustrated. Another doctor of the same School, Richard of Salerno, in the XIIIth century wrote the book *Anatomy Vivorum*, which contains the gynaecological anatomy. This book is considered as the first text that allowed for the understanding of the feminine diseases.

Nevertheless, the most brilliant representative of the medicine of the XIIIth century, and especially of the obstetrics of that period, was **Arnau of Vilanova** (1238-1311). He was doctor of Popes and Kings (Royal Houses of Anjou and Aragon) and stood out in all the fields of knowledge (including Theology, Astrology, Alchemy); he wrote dozens of treatises about Hygiene, Obstetrics and Sterility.



Moses Maimonides (1135-1204).



Arnau of Vilanova (1238-1311).

THE RENAISSANCE

Between 1450 and 1600, evolved what is known as «the Renaissance», an authentic cultural spring.

In Europe it was the era of some great anatomists: *Gabrielis Fallopius* (1523-1562), **William Harvey** (1578-1657), and *De Graaf* (1641-1673); of great clinicians, like *Paracelsus* (1493-1541), and also of the first great surgeons, as **Ambroise Paré** (1509-1590). All of them real pioneers who, left aside prejudices and routines, gave the scientific nature to the medicine. But still an authentic medical specialization did not exist, besides the dichotomy between doctors and surgeons. This situation was kept almost unchanged until well into the XVIIth century; only from 1600 on there was a turning point, although it continued to be usual that the specialist of childbirth be also a specialist in children; in Europe there started to spring up exceptional persons in the field of the Obstetrics and the Gynaecology. Among them, *François Mauriceau* (1637-1709) and *William Chamberlen* who popularized the forceps (1620).



William
Harvey
(1578-1657).



François
Mauriceau
(1737-1809).

THE ENLIGHTENMENT

The XVIIIth century is known as the *Age of Reason*, the *Enlightenment* and the *Century of the Lights*. During its course, science progressed splendidly throughout Europe.

In the field of Medicine, it was an epoch in which the medical profession obtained an important social consideration, recognizing its scientific and charitable character. In the obstetric area some scientific research began, and several doctors obtained reputation for their contributions to the art of Obstetrics (Smellie, Hunter, White, Levret, Bichet, Morgagni, etc.). Especial mention must be given to **Jean Palfyne** (1680-1730), **John Gregory** (1724-1733) and **Rene Laennec** (1781-1826) due to their large scientific contribution.

THE XIXth CENTURY

Across Europe the beginning of the XIXth century was marked by progress and development of surgery, the increased use of anesthesia and the fight against puerperal fever.

In the obstetric field, *Thomas Bull* wrote the first book exclusively dedicated to prenatal care. It was entitled *Hints to mothers for the Management of Health During the Period of Pregnancy and in the Lying-in Room*, and in it he explained the most frequent mistakes

associated with these situations. The book achieved a great success (25 editions were sold between 1837 and 1877), in spite of existing little evidence that his advices were followed by physicians and obstetricians of his time, that went on not taking care at women during pregnancy.

James Young Simpson (1811-1870) for the first time in Edinburgh used ether in an obstetric patient (1846). On the following year chloroform was used during childbirth. By the way, it was necessary that the Londoner *John Snow* administered chloroform to the queen Victoria, in 1853, as an analgesic in childbirth, for the anesthesia to become socially acceptable.

Studies on Genetics acquired scientific endorsement thanks to the activities of Friar **Gregor Johann Mendel** (1822-1884) who formulated the laws called after him.

On the other hand, puerperal fever, first described by *Thomas Willins* in 1662 (puerperarum febris), was finally fought effectively with chlorine by *Robert Collins*, between 1826 and 1833. Later, *Joseph Lister* introduced the aseptic techniques. Years before, in Vienna, **Ignaz Philipp Semmelweis** (1818-1865), had demonstrated its infectious nature, and its transmission to women in labour by the same attending doctors and nurses.

Among the great obstetric physicians of this period we must point out **Adolf Pinard** (1844-1934) and **Pierre Budin** (1846-1907). Two celebrities of that century made possible the foundation of two paramount advances which received full development in the next century: **Le Jumeau de Kergeradec** (1818-1865), who discovered the importance of detecting the fetal cardiac beat, and **J. Christian Doppler** (1803-1859) who established the physical basis for the «effect» known after his name.

The discovery of the fetal heartbeat by Kergeradec led to the first tentative research on intrauterine life, an activity which began to progress decisively only after *Cremer* produced the first fetal electrocardiogram.

However, although **René Laennec** (1781-1826) invented the stethoscope in 1819 it did not become widely used. **Adolf Pinard** (1844-1934) invented and popularized the instrument which bears his name (1869).

Unfortunately, from a scientific point of view, those initial findings (1821) were followed by over a hundred years of absolute scientific silence. **Etienne Stephane Tarnier** (1828-1897) in Paris invented his axis traction forceps, carried out the first successful Porro operation, and developed an incubator.



James Young Simpson
(1811-1870).



Etienne Stephane Tarnier
(1828-1897).



Tarnier surrounded by collaborators.

THE XXth CENTURY: THE TECHNOLOGICAL DEVELOPMENT OF PERINATAL MEDICINE

Perinatal medicine did not begin to take shape until the beginning of the 1960s. In 1961 the first direct examination of the human fetus was carried out by taking blood samples from its presenting part during labor was carried out. Late in the 1960s two further events brought essential breakthroughs, namely when cardiotocography and also ultrasonography were introduced on a broad scale and suitable equipments became available for the first time for routine use. Armed with these new resources specialists began to realize, for the first time, that the fetus could be considered «as a patient», their efforts focused on monitoring it, during both pregnancy and birth itself.

The history of fetal medicine is, in some ways, the history of «fetal accessibility». Until the 1960s the fetus remained a genuinely unknown entity, to both obstetricians and the medical world in general. Besides studying in a rudimentary fashion its position inside the maternal claustrum, its approximate growth and the presence of a fetal heartbeat, doctors were incapable of obtaining any other kind of fetal information.

NON-INVASIVE ASSESSMENT OF THE AMNIOTIC FLUID: A CLINICAL VIEW OF FETAL ENVIRONMENT

Throughout the late twentieth century assessing the characteristics of amniotic fluid became a widely used procedures in fetal surveillance. Amniotic fluid became a source of information about the fetus (biochemical, genetic, immune analyses, etc.) with the clinicians mainly evaluated by its volume and colour.

Initially the volume of amniotic fluid was assessed through purely clinical procedures, but with the introduction of ultrasonography a more objective procedure was available. Of particular importance here is the ultrasound score of *Phe-lan* (1985), which allowed a semi-quantitative evaluation of amniotic volumetry.

For over a century the **COLOUR OF AMNIOTIC FLUID** has provided clinicians with information about fetal well-being but only in single cases when amniocentesis has been performed (Schwartz, 1858; Redd, 1918; Desmond et al., 1957; Walker, 1959). However, it was not possible to study the colour of amniotic fluid on a routine basis prior to amniorrhaxis until **ERICH SALING** (1962) invented the amnioscope in 1962.

Since 1962 amnioscopy has been regarded an essential and, at that time, reliable technique in

the surveillance of prolonged (Knox et al., 1979) and other high-risk pregnancies (IUGR, diabetes, etc.). In some hospitals it was performed systematically in patients admitted as a result of an overdue birth.

ENTERING THE AMNIOTIC CAVITY: AN IMPORTANT QUALITATIVE STEP

The first step towards knowledge of the fetal environment was taken by *BEVIS* in 1952, when the first amniocentesis for diagnostic purposes (erythroblastosis fetalis) was performed. This opened up a wide range of diagnostic possibilities, including the study of fetal karyotype and biochemistry, the evaluation of fetal maturity, and immunological study of the fetus.

In 1956, *Fuchs* and *Riis* were the first to determine the sex of a fetus through the study of chromatin X (Barr test) in amniotic fluid obtained by means of puncture.

During this period the development of cytogenetic techniques (*Tjio* and *Levan*, 1956) and the determination of the human karyotype (Lejeune et al., 1959) led *Fuchs* and *Philips* (1963) to perform the first cultures with cells taken from amniotic fluid. Thus, in the years 1965-1966 the first **FETAL KARYOTYPES** were developed from amniotic fluid cells, and, two years later, the first

prenatal diagnosis of chromosome abnormalities was made (Jacobson and Barter, 1967).

As has already been mentioned, around the middle of the twentieth century the most common reason for entering the amniotic cavity in advanced stages of pregnancy was by amniocentesis in cases of possible **FETAL ERYTHROBLASTOSIS**. The amount of indirect bilirubin was evaluated by means of a spectrophotometric study of the amniotic fluid, through determination of «peak» or optical density at a wavelength of 450m μ . William Liley (1929-1983) designed a series of curves, with three areas related to the degree to which the fetus was affected, onto which the observed value was plotted. This methodology was subsequently perfected by Queenan et al. (1993).

In the 1970s Louis Gluck and Borer (1971) introduced into clinical practice the assessment of fetal lung maturity by determining the lecithin/sphingomyelin ratio in amniotic fluid obtained by amniocentesis. Subsequently, the study of other phospholipids, such as phosphatidylinositol and phosphatidylglycerol, was introduced, the concept of «lung profile» developed by Graham Liggins et al. (1972).

These studies led to the development of procedures for stimulating pulmonary maturing in the fetus, the main one being the administration of glucocorticoids.

Finally, the **IMMUNOLOGICAL STUDY** of amniotic fluid has, since 1980, enabled the risk of fetal infection to be assessed, initially by determining fetal antibodies and later through PCR testing of DNA sequences from the causal agent (R. Romero, 1986).

THE STUDY OF THE FETAL HEART RATE (FHR) DURING LABOR: ELECTRONICS ENTER THE DELIVERY ROOMS

Although Cremer performed the first **FETAL ELECTROCARDIOGRAM** in 1906, placing one abdominal electrode at the maternal uterine fundus and one in the vagina, attempts to record continuously the FHR did not bear fruit until the mid-twentieth century, when the fetal monitors based on **PHONOCARDIOGRAPHY** were designed (Steer, 1951; Hellman, 1965, among others). In a related development, Reynolds et al. (1948) described an external toco-dynamometer for recording uterine contractions.

However, from 1956 onward several groups of researchers (Hon in Yale, Sureau in Paris, Caldeyro-Barcia in Montevideo) decided to abandon the principle of «uterine inviolability» and recorded the fetal ECG by means of intrauterine electrodes in direct contact with the fetus. Subsequently, E.H. Hon and later Roberto Caldeyro-



Meeting in Montevideo (October 1964). First row: Poseiro, Quilligan, James, Hon, Caldeyro-Barcia, Kubli, Saling and Adamsons. Second row: Röhrlich, Santos, Towell, Esteban-Altirriba, Fonseca, Escarcena, Pose and Mendez-Bauer. Third row: Faúndes, Althabe and Schwarzc.

Barcia attached the electrodes to the fetal scalp and simultaneously recorded intrauterine blood pressure, thus enabling them to describe the changes produced in FHR with respect to uterine contractions during birth. Decreases in FHR, termed «decelerations» by Hon (1967) and «dips» by Caldeyro (1966), constitute the basis of FHR monitoring during labor.

In 1968 **Konrad Hammacher's** work on phonocardiocotography enabled the use of less invasive techniques of fetal monitoring (external recording of FHR and uterine contractions). In cooperation with Hewlet and Packard the cardiocotography, as he called it came into broad routine use for the first time.

Since 1990, **Geoffrey S. Dawes** (1917-1996) and other authors (for example, Van Geijn et al., 1990; Bernardes and Pereira-Leite, 1991) have attempted to provide a scientific backing for, and introduce into clinical practice, automated (computerized) analysis of both ante- and intrapartum cardiograms. Although the systems available have improved in terms of both hardware and software they continue to pose several problems and have yet to become widely used.

FETAL BIOCHEMICAL MONITORING DURING BIRTH: FETAL DISTRESS CAN BE DIAGNOSED

Arvo Herrik Ylppo (1916) pioneered the study of fetal acid-base balance, observing that by adult standards the cord blood of the fetus was in complicated cases often acidotic. Subsequently, **Blair Bell** et al. (1928), **Eastman and McLane** (1931), and **Vedra** et al. (1959), built on these initial findings, almost always by studying cord blood in neonates. **L. Stanley James** (1924-1994) standardized the procedures.

The intermittent analysis of fetal blood sampled at the **FETAL SCALP**, introduced by **Erich Saling** in 1961 and published more extensively in 1962. Fetal Blood Analysis (FBA) was the first method to enable the human fetus to be directly explored. The combination of cardiocotography and the biochemical analysis of fetal blood was introduced into routine use in 1968 by **Saling** after cardiocotography became available on a broad scale with suitable equipment. From the very beginning his studies in 1968 and 1970, later also from other authors for instance 1971 from **Richard Beard** showed that cardiocotography is an unreliable method to diagnose fetal

hypoxia. When cardiocotography was used alone without fetal blood analysis the rate of false positive findings was too high (>50%). For several decades now, the most reliable methods of monitoring the fetus during labor has been combination of cardiocotography with fetal blood analysis (**A. Antsaklis, K. Maeda, S. Kar-chmer**, etc.).

An important historical step in **FETAL SURVEILLANCE DURING LABOR** was taken when biophysical monitoring was combined with fetal biochemical monitoring in first observational cases at a meeting in Montevideo in 1964. **Roberto Caldeyro-Barcia** and **Erich Saling** were champions of this event. In 1986, **Kypros Nicolaides** et al. obtained, with the aid of ultrasound, samples of umbilical cord and placental blood in order to assess fetal acid-base status.

A technique currently being introduced into clinical practice is pulsioxymetry, a procedure which enables the arterial oxygen saturation (SaO₂) to be measured continuously. This technique is minimally invasive and easy to use (**Gardosi** et al., 1991; **Mendelson** et al., 1991; **Burchmann**, 1992; **Harris** et al., 1993; **Didly** et al., 1994).

STUDY OF FHR DURING PREGNANCY: AN ATTEMPT TO DIALOGUE WITH THE FETUS

In 1967, **Pose** et al. demonstrated that when the partial pressure of fetal oxygen falls below a given critical level, late decelerations (or Dips II) appear in the continuous recording of FHR. This led to what is known as the **POSE TEST**, or **OXYTOCIN CHALLENGE TEST**, which involves studying the contractile activity and recording FHR following administration of oxytocin by means of an intravenous perfusion pump. In USA this test was protocolized by **Konrad Hammacher** (1969) and became known as the oxytocin challenge test or contraction stress test. **Rochard** and **Schiffirin** (1976) subsequently confirmed that in normal, well-oxygenated fetuses the absence of decelerations coincided with the presence of accelerations which accompanied contractions and fetal movements (fetal reactivity). This led to the development of the non-stress test (NST), which assesses baseline FHR, its short- and long- term variability and the presence of accelerations and/or decelerations. After 1975, recordings began to be classified as reactive pattern (**Schiffirin** et al., 1975), no reactive pattern (**Rochard**, 1976),

and sinusoidal pattern (Kubli et al., 1969, 1972), although other classifications have been introduced more recently (Van Geijn et al., 1994, 1996). Several authors have also suggested that recording can be reduced, or even made more sensitive, through the use of certain test of **FETAL SIMULATION**, whether mechanical (Read and Miller, 1977), acoustic using a bicycle bell (Saling and Arabin 1986), sonic (Arulkumaren et al., 1989), vibroacoustic (Crade et al., 1988), light-based (Peleg and Goldman, 1980) or biochemical (Aladjem et al., 1979). At all events, fetal simulation and study of the response aims to enter into «dialogue with the fetus».

Several **SCORING SYSTEMS** have been developed in order to facilitate and compare recordings: these include those of **Konrad Hammacher** (1975), **Kubli and Ruttgers** (1972), **Fischer** (1976), **Pearson and Weaber** (1976), **Carrera et al.**, (1977), and **Visser and Huisjes** (1977).

PRENATAL BIOCHEMICAL DIAGNOSIS: THE LABORATORY IN ACTION

The first biochemical methods for fetal monitoring were based on the **STUDY OF PLACENTAL PRODUCTS**. In 1927, **Sellman Ascheim** and **Bernard Zondeck** discovered a protein hormone secreted by the placenta (chorionic gonadotrophin) and, in 1930, **Guy Marrian** isolated oestriol from the urine of pregnant woman. However, it was not until 1961 that the second placental protein (placental lactogen) was discovered by **Igo** and **Higashi**. Subsequently it was intended to effect the biochemical fetal monitoring by means of the determination of some proteins or enzymes (oxytocinase, SP-1, phosphatase, etc.).

In 1968, independent reports by **Nadler** and **Dancis** described the first diagnoses of **CONGENITAL ERRORS** in fetal metabolism; over the subsequent four years more than forty innate metabolic defects were diagnosed prenatally (Milunsky, 1970, 1972). Since then, the number of this kinds of prenatal diagnostic procedure has continued to increase.

During the same period, **Brock, Scrimgeour** and **Sutcliffe** (1972) confirmed the usefulness of **ALPHA-PROTEIN**, in both amniotic fluid and maternal serum, for determining neural tube defects (NTD). The combined use of alpha-protein screening in maternal serum has meant that the majority of such defects are now detectable.

During the last years, the **BIOCHEMICAL SCREENING** of aneuploidies has been introduced in all the gestations, independently of maternal age (Cuckle et al., 1984).

During second trimester (15-18 weeks), and using maternal age and values of AFP (Mer Katz et al., 1984), E_3 (Carnick et al., 1988) and HCG (Borgart et al., 1987) in maternal serum (triple screening), the combined estimate of risk of aneuploidies (singularly Down Syndrome) showed a detection rate of nearly the 60 %, with a false positive rate of 5 %.

And in the first trimester (10-13 weeks) the combined use of PAPP-A and the free beta unit of hCG reach a sensibility higher than 80 %, that can climb to the 90 % if it is used together with the ecographical markers (Reynolds et al., 1989, Nicolaides et al., 1993 and Brizot 1995).

The controversy is still open between the defenders of the population biochemical screening and the supporters of the ultrasonographic screening (Nicolaides et al., 1993, Wald et al., 1996).

THE ARRIVAL OF ULTRASOUND: THE FETUS BECOMES VISIBLE

The introduction of **ULTRASONOGRAPHY** into obstetrics by **Ian Donald** in 1965, meant that for the first time it was possible to study the fetal phenotype, and make reliable diagnoses in an area in which radiography had failed to make significant advances: gestational age (Robinson, 1973), fetal presentation and position, placental location, fetal biometry, fetal growth, multiple pregnancy, ectopic pregnancy, abnormalities of amniotic volume and, especially, fetal malformations.

The evaluation of fetal growth through **BIOMETRIC STUDY** of the fetus began in 1961, when **Campbell** and **Brown** introduced ultrasonic cephalometry (1968).

Ultrasound has also found a role as **SUPPORT TECHNOLOGY** in those invasive procedures used for prenatal diagnosis, such as amniocentesis, chorion biopsy, fetoscopy and cordocentesis. Furthermore, it has proved a fundamental tool for studying the **PHYSIOLOGY AND FUNCTIONALITY** of various fetal systems.

One of the most decisive contributions of ultrasonography has been the diagnosis of fetal cardiac pathology. Consequently, anatomical

cardiac anomalies are now identifiable through the use of 2-D and 3-D **ECHOCARDIOGRAPHY**, which provides visualization of the fetal anatomical cardiac structures. And the Doppler colour echocardiography studies provide additional dynamic information (Allan, 1984; Cameron et al., 1988, Romero, 1990).

However, the most spectacular developments have undoubtedly come about as a result of the various methods of Doppler and the new **THREE AND FOUR DIMENSIONAL ULTRASOUND TECHNOLOGY**, which, thanks to highly sophisticated computer systems, provide 3D images of the embryo and fetus. These procedures have improved the visualization and characterization of fetal malformations (Levi et al 1991, Carrera et al 1995, D'Addario et al 1996).

FETAL MOVEMENTS: AN APPROACH TO INTRAUTERINE LIFE

Although **Ambroise Paré** had described in 1634 the usefulness of observing fetal movements as a way of diagnosing fetal life or death, the following three centuries of medical literature contain hardly no studies or observations on this subject. Only at the beginning of the twentieth century did certain researchers (Ahlfeld, 1905) attempt to classify such movements, or show that it was possible to provoke them by means of sonic stimuli (Peiper, 1925; Ray, 1932; Sontag and Wallace, 1936).

From a practical point of view the most important findings appeared when Lee et al.(1975) demonstrated that FHR accelerations associated with movements should be considered a sign of fetal well-being. In contrast, the presence of decelerations in fetal movement was considered a sign of poor prognosis (Rochard et al., 1976; Aladjem et al., 1977).

The **ULTRASONOGRAPHIC STUDY** of embryo and fetal movements began in 1968 with the work of *Hinselmann*, and was developed through research by others such as *Reinold* (1973), *Timor-Tritsch* (1976), *Kurjak* (1976), *Carrera* (1977), *Trudinger* (1978), *Birnholz* et al. (1978), *De Vries* et al. (1982) and *Maeda* (1998).

The integration of respiratory movements, wide body movements, eye movements and the FHR pattern enabled *Nijhuis* (1982) to describe certain behavioural states of the human fetus, these being labelled from 1F to 4F.

DIRECT ACCESS TO THE FETUS: A DREAM THAT IS YET TO BE FULLY REALIZED

The first fetoscopies proper were carried out by *Hobbins* and *Mahoney* (1974), *Phillips* (1975), and *Rocker* et al. (1978), and only after 1980 did the procedure become regular practice in some prenatal diagnosis centers (Rodeck et al., 1980).

Fetoscopy not only provides a direct view of the fetus but also allows **BIOPSIES OF SKIN** (Valenti, 1972; Rodeck et al., 1980), for enzymatic or other types of study, or liver (Rodeck et al., 1982) to be taken, as well as the **SAMPLING OF FETAL BLOOD** before start of labor (Valenti, 1972, 1975; Hobbins and Mahoney, 1974; Rodeck and Campbell, 1978, 1979; Nicolaidis and Rodeck, 1982, among others). The latter enables the diagnosis of hemophilia and fetal hemoglobinopathy, immunological study of the fetus, karyotyping by means of lymphocyte culture, and the diagnosis of heterozygosity.

However, just when it seemed that **ENDOSCOPIC PROCEDURES** were an essential part of direct fetal diagnosis (obtaining fetal blood, chorion biopsy, etc.), *Daffos* et al. (1983) demonstrated that it was possible to obtain fetal blood without fetoscopy, by means of funiculocentesis. This research group obtained fetal blood by means of an ultrasound-guided direct puncture of cord vessels. The efficacy of this technique was subsequently confirmed by *Hobbins* et al. (1985) and *Nicolaidis* et al. (1986).

At present endoscopic procedures have enabled the fast progress in intrauterine surgical therapy, especially in the treatment of transfusion syndrome fetus-fetal.

THE FETAL BIOPHYSICAL PROFILE: A WAY OF INTEGRATING INFORMATION

In 1980, *Manning* et al. developed a **FETAL BIOPHYSICAL PROFILE** requiring two different exploratory techniques (cardiotocography and ultrasonography) which brought together five parameters thought to be related to fetal well-being: fetal body movements, fetal respiratory movements, fetal tone, reactivity of the FHR and the volume of amniotic fluid. In the various series published by *Manning* et al. (1980, 1981, 1985, etc.), the rate of false negatives was less

than 1 %, and that of false positives was considerably reduced with respect to the individual variables.

Several modifications have subsequently been made to the biophysical profile proposed by Manning. The following research is of particular interest: *Vintzileos* et al. (1983), who add a sixth parameter, the ultrasound-placental grade; *Eden* et al. (1988), who prioritize the use of the non-stress test and amniotic volume; and *Shah* (1989), who developed a score based exclusively on ultrasound examination (fetal body and respiratory movements).

Nowadays, the biophysical profile and its variants compete with Doppler techniques. By the way when, as in the case of the progressive biophysical profile, several kinds of examinations are followed the results are highly favourable.

FETAL HEMODYNAMICS: AN ENDLESS SOURCE OF DIAGNOSES

During the 1950s and 1960s several researchers tried, using invasive procedures, to assess the blood flow of the gestational uterus (*Assali* et al., 1960), the fetus (*Geenfield* et al., 1955; *Stembera* et al., 1964; *Rudolph* and *Heymman*, 1967) and the placenta (*Dawes*, 1968). The pioneers of this studies were **Joseph Barcroft** (1872-1947) and **Geoffrey S. Dawes** (1918-1996).

Brosens et al. (1967) reported that in normal pregnancy the trophoblast invades the placental bed and migrates the entire length of the spiral arteries by about the 20th postmenstrual week.

Unfortunately, these procedures were, as a rule, rather bloody (they sometimes required fetal exteriorization), difficult and potentially dangerous; many of them could only be applied in animal experimentation.

Therefore, the **NON-INVASIVE STUDY OF FETAL HEMODYNAMICS** was not possible until the introduction of the «Doppler effect» into clinical practice. Although this principle had been reported by the Austrian physicist **Christian Doppler** (1803-1859) as long ago as 1843, certain technical problems preventing its use in medicine were not solved until the 1970s. The analogue representation of the signal in the form of velocity curves, and real-time spec-

tral analysis finally enabled the analysis of blood velocity waveforms (*Coghlan* and *Taylor*, 1979).

Fitzgerald and *Drumm* (1977) were the first to record the blood velocity waveform of the umbilical artery using continuous Doppler. Subsequently, *McCallum* (1978) did the same using pulsed Doppler. *Eik-Nes* et al. (1980) introduced the linear array duplex system with ultrasound and pulsed Doppler. *Campbell* et al. (1983) were the first to **STUDY UTERO-PLACENTAL CIRCULATION** using Doppler, although the main study which correlated the Doppler analysis of the uterine arteries with pre-eclampsia was that of *Fleischer* et al. (1986). Recordings of all the fetal vessels were subsequently obtained. **Kypros Nicolaides** et al. (1988) found a very high incidence of acidosis and hypoxia, as determined by cordocentesis, in pregnancies complicated by absent and diastolic flow.

The various modes of Doppler (continuous, pulsed, colour, power-Doppler, etc.) have enabled the **INVESTIGATION OF THE CARDIOVASCULAR SYSTEM** and fetal hemodynamics to become a reality, and provide an accurate assessment of blood flow patterns in uterine, placental and fetal circulation (*Kurjak* et al., 1982; *Campbell* et al., 1983; *Giles* and *Trudinger* et al., 1985). In 1987, **Kurjak** et al. introduced **COLOUR FLOW MAPPING** into fetal studies.

EMBRYO MEDICINE: REVEALING THE START OF LIFE

It could be said that consideration of the embryo as a patient has been the consequence of three kinds of events:

1. the acquisition, as a result of assisted reproduction techniques, of new and unexpected knowledge about the implantation of the conceptus, of uterine receptivity, and immune tolerance at the fetomaternal interface and its abnormal and pathological aspects;
2. improved understanding of early embryo development and the placenta; and
3. the progressive introduction of various types of **EMBRYO MONITORING** and diagnostic techniques, such as pre-conception diagnosis (*Strom* et al., 1990) and pre-implantation diagnosis (*Handyside*, 1990; *Munne* et al., 1998), as well as the discovery of biochemi-

cal and biophysical markers of aneuploidies already mentioned. The rise of embryo medicine and the development of certain methods aimed at avoiding the loss of embryos have also played a role.

The application of **ULTRASONOGRAPHY**, and its variants, during the first trimester of pregnancy has, in recent years, been both widespread and highly productive. The technique has enabled the *in vivo* study of uterine receptivity (Kurjak, 1991; Kupesic et al., 2001), embryo implantation (Sterzik et al., Courlan et al., 1994; Hafner and Kurjak, 2001; Hustin and Shaaps, 1988, among others), the formation of the yolk sac (Jauniaux et al., 1991), ultrasound-biochemical correlations (Bree et al., 1990), the first stages of embryo development, in both 2D and 3D (Timor-Tritsch et al., 1988; Montenegro, 1993; Bonilla-Musoles, 1996) and early embryonic circulation (Arduini and Rizzo, 1991; Kurjak, Chervenak and Zudenigo, 1994; Kurjak and Kupesic, 1998). The application of all this new technology and the consideration of the embryo as a patient has ethical implications which have been studied by Frank Chervenak et al. (2001).

IMMUNOLOGICAL SCREENING TECHNIQUES: PREVENTIVE PERINATAL MEDICINE

The consequences of **MATERNAL INFECTION** for the fetus vary according to the infectious agent involved, its ability to cross the placenta, the maternal immune response and the gestational age at which the infection occurs (Jacquemard et al., 1998). Since 1949, when the harmful effect of the rubeola virus became clear, other diseases have been added to the list of maternal infectious processes which may damage the fetus: rubeola (Daffos et al., 1984), toxoplasmosis (Thulliez et al., 1992), cytomegalovirus (Hohlfeld et al., 1992), herpes simple (Whitley et al., 1995), hepatitis B, hepatitis C, parvovirus B-19 (Rodis et al., 1990), and human immunodeficiency virus (HIV) (Mueller et al., 1995).

The **MATERNAL IMMUNE RESPONSE** has traditionally been studied by determination of IgG and IgM, or sometimes IgA and the avidity reaction. The likelihood of fetal infection is assessed either by studying fetal blood using cordocentesis (IgG, IgM, biological reaction, etc.) or through the presence of the infectious agent in the placenta

(chorion biopsy) or amniotic fluid. The inoculation of fetal blood or amniotic fluid often has to be done in animals or via cell cultures. A recent development has been the use of PCR analysis of the DNA sequences of the causal agent. The PCR is even able to detect isolated fragments of an infectious agent (Hohlfeld et al., 1994).

Since 1983 (Boyer et al.) vaginal and rectal bacteriological sampling prior to birth has become standard practice for the diagnosis of group B streptococcal colonization (Schenker, 1998).

SIMPLIFICATION OF OBSTETRICAL PROCEDURES

In the last third of the XXth century we have witnessed a **PROGRESSIVE RENUNCIATION OF THE TECHNIQUES FOR FETAL EXTRACTION** through the vagina (forceps, version, breech extraction, vacuum extractor, etc.) in favor of the caesarean. The frequency of this procedure has changed in the majority of western countries from a 3-5 % at mid XXth century to a 25-30 % in the beginning of the XXIth century.

Of course the parallel reduction of perinatal deaths (from 20‰ to 3-5‰ during the same time lapse), cannot be ascribed exclusively to the caesarean procedure. Such a reduction is a consequence of a higher life level, a better prenatal and intrapartum attention, and also to the prenatal diagnosis of the congenital defects that, generally speaking, implies that the fetuses with serious problems are subject to abortion.

FETAL SURGERY. FINALLY THE SURGICAL ACCESS TO FETUS

In 1981, *M. R. Harrison* realized the first successful fetal surgery for obstructive uropathy (vesicoamniotic shunt) and later on, in 1989 he carried out the **OPEN FETAL SURGERY** for congenital cystic adenomatous malformation of the lung (1900), the open fetal surgery for resection of sacrococcygeal teratoma (1992), the **FETOSCOPY** temporary tracheal occlusion for congenital diaphragmatic hernia (1996), and the fetoscopic laser treatment of a single A-V communication in twin-twin transfusion syndrome. Several authors published their experience in this field: *Nicolaidis, Bruner, Sutton, Tulipan, Johnson, Deprest, Quintero*, etc.

However, at present there is a certain moratorium in the use of this techniques. The excep-

tion is the laser treatment of the twin-twin transfusion syndrome, which demonstrates its efficacy and safety (Hecher, Gratacos, etc.).

THE STRUGGLE AGAINST THE PREMATUREITY

Apart from the increase of the survival of premature infants, thanks to the use of incubators (Denuce, 1857; Lion, 1891; Couney, 1897, Zahorsky, 1904, etc.), the main steps of the struggle against the premature childbirth were: the ASSESSMENT OF «PULMONARY MATURITY» (L/S ratio) by amniocentesis (Gluck et al., 1971); indomethacin treatment of patent ductus arteriosus in pretermes (Sharpe, 1974), the introduction of ritodrine and the betamimetic for treatment of premature labor, and the surfactant treatment for respiratory distress syndrome (Fujiwara, 1980).

In the last years the PREVENTIVE STRATEGIES to avoid the prematurity have improved: the cervical ultrasound evaluation, the vaginal detection of fibronectin and other biochemical markers, the study of inflammatory factors, etc. And also the progesterone administration in selected group of prematurity risk (Nicolaidis, 2001, Di Renzo, 2002) have decreased the ratio of preterm labor.

Erich Saling et al. introduced a simple program for prevention of ascending infections — the main cause of prematurity— by frequent measurement of the vaginal pH by the patients themselves (1994).

The new trends in TOCOLYSIS, specially the blockade of oxytocin receptors drugs, the steroids administration, and the transfer of the mother to adequate Centers, thanks to Atosiban, have improved the perinatal morbimortality (Cabero, 2002).

Roberto Romero and coworkers published essential new aspects of backgrounds of prematurity (2006).

NEW DEVELOPMENTS IN PRENATAL DIAGNOSIS: THE FUTURE IS ALREADY HERE

From the moment that James Watson and Francis Crick (1916-2004) described the exact structure of the ADN molecule, the explosion in MOLECULAR BIOLOGY has revolutionized the medical practice. Prenatal diagnosis has benefited enor-

mously. The prospect of embryonic and/or fetal gene therapy may not be as far in the future as many believe or fear.

One of the most active areas of fetal medicine is PRENATAL DIAGNOSIS. In recent years, an increasingly satisfactory and early view of the fetus has been achieved (through 3D ultrasonography, early echocardiography and embryoscopy), molecular techniques have been developed for studying certain fetal diseases and, moreover, new techniques of prenatal diagnosis have also been introduced.

The study of FETAL BEHAVIOUR by means of 4-D ultrasonography provides de most useful indicators of brain function. ASIM KURJAK et als. started to analyze fetal behaviour as a measure of neurological condition.

CLOSING HISTORICAL REMARKS TO THE CHAPTER TECHNICAL DEVELOPMENT FROM A MORE GENERAL POINT OF VIEW

Apart from the many valuable, partially very special achievements and concerned progress, described in the previous paragraphs some developmental backgrounds and facts are also of general historical importance.

Prenatal Medicine, this means the field of concrete care of the fetus and embryo in its essential form —respectively perinatal medicine, including the neonate— started at the beginning of the 1960s. The following facts played the main role: the availability of modern measures, a direct accessibility to the new patient and a applicability suitable for a broad routine use.

Until this stage of obstetrics the use of a stethoscope was the only way for auscultation of fetal heart sounds all over the world. And then, more or less suddenly, the chance was given to get blood samples from the fetus during labor which could be analysed for laboratory parameters initially for blood gases and acid-base values.

After the first publications on fetal blood analysis during labor in 1961 and more extensive in 1962, the interest in this field increased rapidly. Already in 1963 one week introductory postgraduate courses (about fetal blood analysis, amnioscopy, new policy of fetal surveillance, etc.) started in Berlin in which consequently partici-

pants from more than 40 countries took part. The term «Perinatal Medicine» was created in 1967 (Saling). Particularly for younger colleagues it was a special atmosphere of the awakening of a new era of obstetrics, in which the fetus beside its mother suddenly also played the central role and became a real patient. A typical comment from the two well-known British neonatologists, Dobbs and Gairdner, published in 1966 as an editorial in the Archives of Diseases in Childhood underlined this situation: *Up to now the formidable inaccessibility of the human foetus has meant that foetal medicine apart perhaps from foetal electrocardiography (our note: Which was in a basic experimental state and should not be mistaken for cardiocography.) has virtually not existed. In an age when man has been able to measure most things from an atom to a galaxy, it is thus paradoxical that to measure his own size during the most critical and precarious period of his life, he still has to depend upon the extreme fallibility of the palpating hand...*

...With the advent of the techniques of amnioscopy and foetal blood sampling and of amniocentesis and foetal transfusion, we witness the end of the long period of foetal inaccessibility, and we

hopefully believe the start of the science of foetal medicine.

As a next step, the first national —the German— Society of Perinatal Medicine was founded in Berlin in 1967, and one year later, the first international Society, the European Association of Perinatal Medicine, was also founded in Berlin.

In 1968 routine application of cardiocography, and also of ultrasonography started on a broad scale after suitable equipments had become available, bringing the next essential breakthroughs.

In the meantime Perinatal Medicine is growing into one of the biggest interdisciplinary new fields of human medicine. Initiating and supporting factors are that not only we the modern obstetricians and perinatologists are exploring the up to now unknown intrauterine space intensively, but also the most well established other disciplines of medicine are joining us and discovering the intrauterine compartment from their point of view to find out which features are of particular importance for the later stages of human health.

THE BIRTH OF NEONATOLOGY*

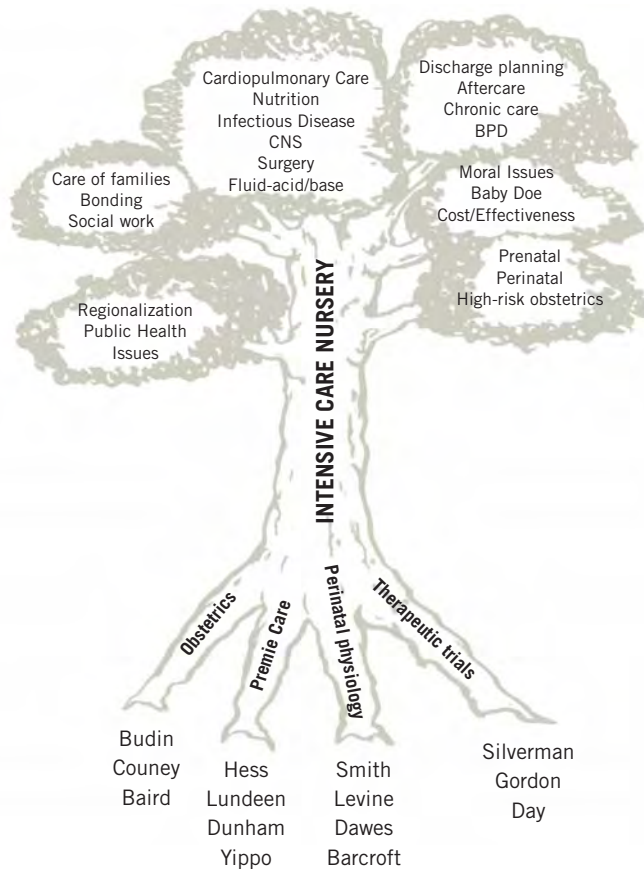
Curiously the history of neonatology begins with innovative French midwives and obstetricians, not with pediatricians.

The French Physician *Charles-Michael Billard* (1800-1832) was one of the pioneers of neonatal medicine. In 1828 wrote a book on his experience, which was the first systematic clinical pathological text on newborn infants. He advocated the use of postmortem examinations. Other fathers of neonatal medicine in nineteenth century were: then French's *Etienne Tarnier*, *Charles-Michael Billard* and *Pierre Budin*, and Germany's *Finkelstein*, *Leo Langstein* and *August Ritter von Reuss*.

The term «neonatology» was coined by *Alexander Schaffer*, whose book on the subject, «Disease of the Newborn», was first published in 1960. As *Gordon B. Avery* says (1994), this book, together with *Clement Smith's* «Physiology of the Newborn Infant» (1945) formed cornerstones of the developing field. Structurally, it can be compared with a tree. Its «roots» —knowledges on matern-fetal medicine, pediatrics and physiology— began at the turn of the century. A sturdy «trunk» has developed in the intensive care nurseries (ICNs)

* This text has been extracted and modified from: Gordon B. Avery: Neonatology, Fourth Edition, edit. By G. B. Avery, M. A. Fletcher and M. G. Mac-Donald, JB. Lippincot Company, Philadelphia, 1994. The table has been extracted from webmaster@neonatology.org (2008).

scattered across around the world. The «branches» have spread so widely that it is difficult for a single person to be expert in all the areas of activity required for tertiary neonatology service. Important interactions have gone beyond allied disciplines such as obstetrics, anesthesiology, cardiology, radiology and surgery (G. B. Avery).



From: Gordon
B. Avery (1994).

THE ROOTS

The first children's hospitals were opened in Paris (1795), London (1852), New York (1854) and Philadelphia (1854).

One of the main roots from which neonatology grew was supplied by obstetricians such as **Pierre Budin** (1846-1907) and *Sir Dugal Baird*, who were interested in the babies they delivered and not merely in the immediate welfare of the mother. It may be a serious oversimplification to imply that in former times, obstetricians were content if the baby was liveborn. It was **Budin** and his pupil *Couney* who pioneered incubator care or premature infants and thus helped change some of the early, pessimistic attitudes toward these babies. But the first published description of incubator in western literature was in 1857 by Denncce.

Another significant root of neonatology can be found in the «quiet premature nursery» such as that run by *Julius Hess* and *Evelyn Lundeen* in Chicago in the early 1900s. Only premature infants were admitted to these nurseries, and gentleness with minimal intervention was the policy. To prevent infection, staff wore gowns, caps and masks and set up a scrub routine that excluded parents and minimized traffic in the area.

Physiology is a tap root of neonatology. Advances in neonatal care rest directly on descriptions of the changing body processes of the newborn infant. Men such as **Joseph Barcroft** (1872-1947) and **Geoffrey Dawes** (1918-1996) began delineation of fetal circulation and placental function. Neonatal metabolic, gastrointestinal, respiratory and central nervous system functions were studied by *Levine, Smith, Peiper* and others. **Ernest Moro** (1874-1951) put the basis of neonatal neurologic evaluation with the description of the integrated reflexes (Moro reflex).

A final anchoring root of neonatology is the therapeutic trial. Innumerable traditional teachings about premature infant have eventually been proved false. An example is prophylactic sulfonamide treatment of premature infants, which was found the cause increased kernicterus. **William A. Silverman** (1917-2004), *Gordon* and *Day* were pioneers who insisted on rigor in such trials.

THE TRUNK

Along the 20th Century a succession of discoveries inventions and technological advances permitted the emerging and consolidation of neonatology.

20 th Century: Timeline of progress in neonatology	
1908	First transfusion for hemorrhagic disease of the newborn (Carrel).
1908	Description of «inborn errors of metabolism» and their inheritance according to Mendel's Laws (Garrod).
1922	First transport incubator for newborns (Hess).
1925	First exchange transfusion for erythroblastosis fetalis (Hart).
1932	Hydrops fetalis, icterus gravis, and anemia of the newborn unified as «erythroblastosis fetalis» (Diamond, Blackfan, Batty).
1933	First use of pertussis vaccine in the USA (Louis W. Sauer).
1934	Modified electrically heated incubator for O ₂ administration (Hess).
1934	Discovery of phenylketonuria (PKU).
1936	Discovery of «Koagulations Vitamin» (Vitamin K) (H. Dam).
1937	Vitamin K treatment of coagulation abnormalities of the newborn (W. W. Waddell).
1938	Design of modern infant incubator (Charles Chapple).

1940	Cardiac catheterization for diagnosis of congenital heart disease (Cournand and Richard).
1941	Discovery of the Rh factor (Landsteiner and Levine).
1941	Congenital cataracts related to Rubella epidemic (Gregg).
1941	First clinical recognition of retrolental fibroplasia (RLF) (Clifford).
1942	First clinical use of Penicillin (Florey and Chain).
1942	Link established between Rh isoimmunization and erythroblastosis fetalis (L. K. Diamond).
1943	First blue baby operation for Tetralogy of Fallot (Blalock-Taussig).
1944	Angiocardiography for infants with congenital heart disease (Miller and Olney).
1946	Exchange transfusion via umbilical vein as treatment for erythroblastosis fetalis (L. K. Diamond).
1948	First use of the term «perinatal» (Peller).
1949	Triple vaccine for Diphtheria, tetanus, and pertussis (Bradford, Day and Morton).
1950	Bloxsom Air Lock introduced (Bloxsom).
1951	Retrolental fibroplasia first linked to O ₂ use (Cambell).
1952	Apgar score for assessment of Newborns (Virginia Apgar).
1952	First clear description of necrotizing enterocolitis (Schmid and Quaiser).
1953	Correct structure of DNA described in Nature (Watson & Crick).
1953	Description of natural history of respiratory distress syndrome (RDS) (Donald).
1953	Invention of high-frequency oscillatory ventilation (Emerson).
1954	Clinical description of «postmature» infant (Clifford).
1956	First publication of correct number of human chromosomes (Tjio and Albert Levan).
1957	Development of attenuated virus polio vaccine (A. Sabin).
1958	Controlled trial: hypothermia leads to decreased survival (Silverman).
1958	First description of light effect on bilirubin levels (Cremer).
1959	Surfactant deficiency is the cause of respiratory distress syndrome (M. E. Avery and J. Mead).
1959	Trisomy 21 identified in Down's Syndrome (J. Lejeune).

1960	First use of terms «neonatologist» and «neonatology» (A. Shaeffer).
1962	Isolation of the Rubella virus (Weller and Neva).
1963	First report of intrauterine fetal transfusion (Liley).
1963	Newborn screening test for phenylketonuria (R. Guthrie).
1963	Standard tables of neonatal biometry (Lubchenco).
1966	Live attenuated rubella vaccine (H. M. Meyer, P. D. Parkman and T. C. Panos).
1966	Prevention of maternal Rh sensitization by anti-Rh antibody (Freda).
1968	Neurological assessment of gestational age (Amiel-Tison).
1970	Gestational age scoring (Dubowitz).
1973	Transcutaneous PO ₂ monitoring in newborns.
1979	Description of surfactant as treatment for respiratory distress syndrome (Fujiwara).
2000	Initial mapping of human genome complete (F. S. Collins and J. Craig Venter).

The Intensive Care Nurseries (ICN) is the institution that forms the sturdy trunk of endeavours in neonatology. The ICN is a therapeutic environment, a collection of equipment, and a multidisciplinary team that is guided by dedicated leadership, by a group of specific protocols, and by a body or relevant scientific knowledge. It is the ICN as an integrated organism (G. B. Avery).

Over the years, there has been a steady increase in the intensity of illness observed in the ICN. In the 1950s, premature care was a major concern. The principal interventions were resuscitation, thermoregulation, careful feeding, simple and exchange transfusion and supporting care of respiratory distress. In 1953, **Virginia Apgar** introduced a new method for evaluation of the newborn infant (the Apgar Score), Cremer et al. discovered the benefits of phototherapy and Avery and Meade discovered that hyaline membrane disease was due to deficient surfactants levels.

By the 1960s, electronic monitors came into use, and blood gases began to be measured (Gösta Rooth). Feedings were aided by nasogastric tubes, and increased laboratory monitoring became possible (Ballabriga, Carbonell). Antibiotics became available for treatment of neonatal sepsis (Flore and Chain, etc.).

By the 1970s, the use of umbilical catheters and arterial pressure transduced was routine, and respiratory therapy of hyaline membrane disease began to succeed. Nutritional support for sick infants was aided by transpyloric feeding tubes and finally by complete intravenous alimentation. Microchemistry test for most necessary parameters became widely available. Neonatal surgery was shown to be feasible for many congenital abnormalities, including serious cardiac defects (Koup, 1962; Rashkind and Miller, 1966; Krantowitz, 196; Fontan, 1968, etc.).

With the 1980s came the advent of computer tomography and ultrasonography. Transcutaneous electrodes became available first for measurement of oxygen and then for carbon dioxide (Gösta Rooth and Albert and Renate Huch). Pulse oximetry increasin-

gly has been used for continuous physiologic monitoring. Surfactant replacement has reduced the severity of lung disease in premature infants (Fujiwara, 1980). Extracorporeal membrane oxygenation permitted the survival of some previously unsalvageable infant.

In 1900s, magnetic resonance imaging improved visualization of lesions, and positron emission, tomography and magnetic resonance spectroscopy promise to reveal the physiology of the intact brain.

THE BRANCHES

A body of specialized knowledge, a group of subspecialized professionals, the advent of technically advanced equipment, and the formation of special care units all contributed to the development of Neonatology. In Obstetrics, these same elements came together about 10 years later and resulted in the speciality of materno-fetal medicine. In many major teaching hospitals, materno-fetal and neonatal services have joined forces to form perinatal centers.

The main branches of Neonatology are: Good cooperation between obstetrics and neonatologists (High risk obstetrics, etc.); reorganization of Public Health Issues (maternal transport services, continuig education, standard protocols, relations among hospitals and community resources, etc.); care of the family (social workers, parent support groups, literature for parents, etc.); home care (family's pediatrician, parents instructions, physical medicine, etc.); the intensive care nursery as a space station; debate on medical ethics, etc.

THE BIRTH OF PERINATAL MEDICINE

Since 1960, a significant increase of basic and clinic investigation on normal and pathological pregnancy occurred in the developed world. The acquisition of new knowledge about the physiopathology of the pregnant women, fetus and newborn, and development of new technologies brought about the birth of a new medical subspecialty: Perinatal Medicine. Several Centers and hospital Departments specially dedicated to this new scientific field appeared and developed in several places of the world (Berlin, London, Montevideo, New York, etc.).

During these years, two prestigious medical personalities on this field have defined the limits of the subspecialty and published the first protocols: *Prof. Erich Saling* (Berlin), responsible for the introduction of the biochemical (acid-base balance) control of labor and *Prof. Roberto Caldeyro-Barcia* (Montevideo), who introduced the biophysical (electronic) control during labor.

During the following years the first National Perinatal Medicine Societies —the very first was the German in 1967— founded by obstetricians and neonatologists in several countries. In some others in the 70th Maternal-Fetal Medicine sections were constituted inside the Obstetrics and Gynecology National Societies. The American Board of Obstetrics and Gynecology established the Maternal-Fetal Medicine division in 1969.

According to this development, many Federations of Perinatology appeared. The first European Congress of Perinatology took place in 1968 in Berlin. In 1979 and 1980 the Asia-Oceania and the Latin American Federations of Perinatology were born.

Since 1978 the European Association of Perinatal Medicine (EAMP) is granting a prize, created and named by Prof. Saling as the «Maternité Prize». It is awarded every two years at the time when its congress takes place. The prize is awarded to those involved in Perinatology who have best contributed to its development. Therefore the list of winners is also a payroll of people that have helped to create and enlarge the Perinatal Medicine. They are: **Geoffrey Dawes**, Oxford (1976); **Graeme Collingwood Liggins**, Auckland (1978); **Gösta Rooth**, Uppsala (1980); **Erich Saling**, Berlin (1982); **Albert Huch** and **Renate Huch**, Zurich (1984); **Ian Donald**, Glasgow (1986); **Heinz R. Prechtel**, Groningen (1988); **Alexandre Minkowski**, Paris (1990); **Tom Eskens**, Nijmegen (1992); **Edward Osmund Reynolds**, London (1944); **Stuart Campbell**, London (1996); **Claudine Amiel-Tison**, Paris (1998); **Asim Kurjak**, Zagreb (2000); **Bengt Robertson**, Stockholm (2002) and **Emile Parnik**, Paris (2004).

The idea to have a body for Perinatal Medicine a World Wide international level came to the minds of our pioneers. In Europe Prof. E. Saling had the initiative to set up the International Congress of Perinatology which was unfortunately discontinued, and Prof. R. Caldeyro-Barcia, as FIGO president (1976-79) made several attempts to create, under FIGO auspices, an operative division specifically dedicated to Perinatal Medicine.

During the XI European Congress which took place in Rome (Italy) in 1988, Prof. *Erme-lando Cosmi* proposed the foundation of the World Federation of Perinatal Medicine (WFPM), and in the FIGO board meeting several renowned scientists agreed with this idea and subscribed a document to support this initiative.

Prof. Caldeyro-Barcia, Prof. Saling, Prof. Campbell and Prof. Kurjak headed the list of perinatologists who signed this document, followed by M. Moretti, G. Bevilacqua, G. Pardi, G. Liggins, S. Sakamoto, K. Maeda, J. M. Thoulon, J. M. Carrera, J. R. G. Challis, K. Jährig, E. Lukyanova, H. F. R. Prechtel, F. Cockburn, E. Cosmi, I. Villa-Elizaga, I. Välimäki, E. M. Scarpelli, S. Michalas, D. Anagnostakis, G. C. Di Renzo and L. Stern.

Finally, in the context of first World Wide International Congress of Perinatal Medicine, celebrated in Tokyo, Japan, in 1991, took place the definitive foundation of the «World Association of Perinatal Medicine» (WAPM).

Lastly, the «International Academy of Perinatal Medicine» (IAPM) was created in 2005, with the agreement of the Presidents of three scientific societies: the World Association of Perinatal Medicine (WAPM), the European Association of Perinatal Medicine (EAPM) and the International Society «The Fetus as a Patient» (ISFAP). The task to prepare its foundation and start-up was entrusted to the Secretary General of the WAPM, Dr. José M. Carrera.

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chapter 2

**THE FATHERS
OF PERINATAL MEDICINE:
The academic medals**



INTRODUCTION

Our Academy, with the wish to remember and honour the greatest personalities of the history of Perinatal Medicine, the so called founding fathers, has inscribed their names on the academic medals of the regular fellows.

ANTIQUITY

1. 98-138 SORANUS OF EPHEBUS

MIDDLE AGES

2. 1135-1204 MOSES MAIMONIDES
3. 1238-1311 ARNAU OF VILANOVA

MODERN PERIOD

4. 1517-1590 AMBROISE PARÉ
5. 1578-1657 WILLIAM HARVEY

THE ENLIGHTENMENT

6. 1650-1730 JAN PALFIJN
7. 1724-1773 JOHN GREGORY
8. 1781-1826 RENÉ LAËNNEC

CONTEMPORARY PERIOD

19TH CENTURY

9. 1803-1853 JOHANN C. DOPPLER
10. 1787-1877 LEJUMEAU DE KARGARADEC
11. 1818-1865 I. PH. SAMMELWEIS
12. 1822-1884 GREGOR J. MENDEL
13. 1830-1918 ABRAHAM JACOBI
14. 1846-1907 PIERRE BUDIN
15. 1872-1947 JOSEPH BARCROFT
16. 1844-1934 ADOLF PINARD
17. 1874-1951 ERNEST MORO
18. 1887-1992 ARVO HERRIK YLPOO

20TH CENTURY

19. 1909-1974 VIRGINIA APGAR
20. 1910-1987 IAN DONALD
21. 1916-2004 FRANCIS CRICK
22. 1918-1996 GEOFFREY S. DAVIS
23. 1921-1996 CALDEYRO BARCIA
24. 1928-2001 K. HAMMACHER
25. 1924-1997 LOUIS GLUCK
26. 1924-1994 L. STANLEY JAMES
27. 1891-1966 BERNARD ZONDEK
28. 1917-2004 WILLIAM A. SILVERMAN
29. 1917-2005 GRAHAM LIGGINS
30. 1929-1983 WILLIAM LILEY

REGULAR FELLOWS: INITIAL DISTRIBUTION OF ACADEMIC MEDALS

	Regular fellows	Historical personalities
1	Claudine AMIEL-TISON (France), 2005	Pierre BUDIN (1846-1907)
2	Aris J. ANTSAKLIS (Greece), 2005	Soranus of EPHEBUS (98-138)
3	Birgit ARABIN (The Netherlands), 2005	Ambroise PARE (1517-1590)
4	Ángel BALLABRIGA, 2005	Ernest MORO (1874-1951)
5	Eduardo BANCALARI (USA), 2005	Abraham JACOBI (1830-1918)
6	Chiara BENEDETTO (Italy), 2005	René LAËNNEC (1781-1826)
7	Luis CABERO (Spain), 2006	Gregor Johann MENDEL (1822-1884)
8	Manuel R. G. CARRAPATO (Portugal), 2005	Arvo Herrik YLPOO (1887-1992)
9	José M. CARRERA (Spain), 2005	Arnau of VILANOVA (1238-1331)
10	Frank A. CHERVENAK (USA), 2005	John GREGORY (1724-1773)
11	Gian Carlo DI RENZO (Italy), 2005	William LILEY (1929-1983)
12	Joachim DUDENHAUSEN (Germany), 2005	William HARVEY (1578-1657)
13	Wolfgang HOLZGREVE (Germany), 2005	Francis CRICK (1916-2004)
14	Samuel KARCHMER (Mexico), 2005	Bernard ZONDEK (1891-1966)
15	Asim KURJAK (Croatia), 2005	Ian DONALD (1910-1987)
16	Malcolm LEVENE (UK), 2005	Joseph BARCROFT (1872-1947)
17	Kazuo MAEDA (Japan), 2005	Konrad HAMMACHER (1928-2001)
18	Giampaolo MANDRUZZATO (Italy), 2005	Geoffrey S. DAWES (1918-1996)
19	Kypros H. NICOLAIDES (UK), 2005	J. Christian DOPPLER (1803-1853)
20	Hiroshi NISHIDA (Japan), 2005	Virginia APGAR (1909-1974)
21	Apostolos PAPAGEORGIOU (Canada), 2005	William A. SILVERMAN (1917-2004)
22	Zoltan PAPP (Hungary), 2005	Ignaz Phillip SAMMELWEIS (1818-1965)
23	Giorgio PARDI (Italy), 2005 ⁽¹⁾	Adolf PINARD (1844-1934)
24	Roberto ROMERO (USA), 2005	Graham LIGGINS (1917-2005)
25	Shouichi SAKAMOTO (Japan), 2005 ⁽²⁾	Roberto CALDEYRO-BARCIA (1921-1996)
26	Erich SALING (Germany), 2005	L. Stanley JAMES (1924-1994)
27	Ola D. SAUGSTAD (Norway), 2005	Louis GLUCK (1924-1997)
28	Joseph G. SCHENKER (Israel), 2005	Moses MAIMONIDES (1135-1204)
29	Serge UZAN (France), 2005	Lejumeau de KERGADEEC (1787-1877)
30	André VAN ASSCHE (Belgium), 2005	Jan PALFIJN (1650-1730)

⁽¹⁾ Died in 2007 and substituted by Robert Brent. ⁽²⁾ Died in 2006 and substituted by Yves Ville.



SORANUS OF EPHEBUS

(98 -138 a. D.)



Soranus was born in Ephesus, a city in Asia Minor, the gateway to the «Fertile Crescent». The era, the first and second centuries a. D., can rightly be called a «Twilight Zone»; the period in human history interposed between the tumultuous times of Christ and Caesar, and the Dark Ages; a period of relative peace and prosperity in the vastness of the Mediterranean lands. While very little is known about Soranus himself or the circumstances of his life, we do know that he practiced medicine in Rome during the rule of Trajan (98-117 a. D.) and Hadrian (117-138 a. D.).

Ever since its founding and almost up to the Fourth century, Alexandria, the magical town on the Mediterranean, remained the most prestigious place for all scientific learning. It is very likely that Soranus developed special skills in the art of the diseases of women and children in addition to his diverse interest in surgery, to which his works testify.

The majority of Roman medics were Greek since medicine was considered a profession «worthy only for slaves, freedmen, or foreigners». This prejudice against the men of medicine in the early Roman period seems to have had its origin in the pre-Christian era. The state of medical arts was a mixture of quackery and high sounding names. The Romans themselves had a god for every existing disease and every physiological function. Soranus, although a foreigner, was quickly accepted.

Over 20 books have been ascribed to Soranus but only a few have reached us in their original form, the most important being *Gynecology*. Others were *Bandages*, *Fracture*, *Surgery*, and *Life of Hippocrates*. Caelius Aurelianus (5-6 century a. D.) translated from the Greek original of Soranus's *On acute and chronic disease*. It appears that Soranus's interest was wide in many fields of medicine and he also wrote on embryology and the soul, exerting considerable influence on theologians of his time and future philosophers. For about 15 centuries following the views and practices of Soranus survived through translations into German, Latin, French, and possibly Arabic. Several abbreviations and additions were carried out by translators and compilers throughout the latter part of antiquity and the middle ages.

The rediscovery of Soranus, took place for the first time in 1830-31 in Paris by Reinhold Dietz. Later, Rose and Ilberg, philologists, undertook the massive task of reconstruction of Soranus' *Gynecology*. Johannes Ilberg spent 19 years attempting to reedit the 1882 edition of Rose and finally completed the translation of the Greek original of Soranus in 1927.

The Gynecology has four major parts: «Things Normal» are dealt with in Books 1 and 2, and «Things Abnormal» in Books 3 and 4. It is in Book 1 that we find an extraordinary chapter «on the care of the newborn,» probably the first chapter ever devoted entirely to the care of newborn infants; and many chapters in Book 4 deal with the care of abnormal pregnancy.

In Book 1, Soranus stresses that an ideal midwife must have good memory, be qualified and free from superstitions. In an age when magic and cults were the order of the day, this suggestion is noteworthy. An extensive discussion follows regarding anatomy of the female reproductive organs, physiology, or the «nature of the fetus,» and the care of the mother in pregnancy. He recognizes and carefully describes signs of imminent labor and delivery.

He notes that fetal nourishment takes place via the blood vessels in the umbilical cord. *The chapter on «care of the mother and baby»* at delivery testifies to the meticulousness of Soranus's observation and practice. Both psychological and physical comforts of the mother are stressed. The details are comprehensive and specific, providing good reasons for each recommendation.

Soranus states that some of the newborns survive at seven months of gestation. This is the only reference he makes to prematurity. He suggests that the navel cord be cut in the middle after ligating in two places to prevent bleeding from the mother and baby. His recommendation to cleanse and resuscitate the newborn were revolutionary for his time. He rejects splashing cold water, and recommends lukewarm water to cleanse the infant. He felt that the air was enough to stimulate the infant to cry. He recommend cleaning the eyes with olive oil. He studies and *makes sound* recommendations about infant nutrition, breast feeding, testing the milk, weaning from the breast milk, excess of crying, constipation, teething, assessment of growth and development, tonsillitis, thrush, skin lesions, diarrhea in infants, and wheezing and coughing. He is probably one of the first to describe clinical signs of rickets in Roman children.

Soranus was far ahead of his time in his approach to illness. He was a thorough clinician, a writer with a keen sense of observation. The text of *Gynecology* is divided into chapters which are similar to modern textbooks of Perinatal Medicine. Each suggestion is based on convincing reasoning. Until the Renaissance, very little was changed from what he wrote and, perhaps due to his influence, millions of pregnant women and infants were saved from the savage quackery that was prevalent throughout the Dark Ages.

Aris J. Antsaklis



MOSES MAIMONIDES/RAMBAM

(1135 -1204)



Maimonides's (Moses ben Maimon); in Hebrew he is known by the acronym of Rabbi Moses ben Maimon, Rambam (Arabic name Abu 'Imran Musa ibn Maymun ibn). Jewish philosopher, jurist, and physician, the foremost intellectual figure of medieval Judaism.

Maimonides was born in a distinguished family in Córdoba, Spain shortly before the fanatical Muslim Almohades came to power there. To avoid persecution by the Muslim sect which was wont to offer Jews and Christians the choice of conversion to Islam or

death, Maimonides fled with his family, first to Morocco, later to Israel, and finally to Egypt. He settled down at Old Cairo, in 1165. There he received the office of court physician, to the sultan Saladin, the famous Muslim military leader, and to his son al-Afdal and at the same time, as head of the Jewish communities in Egypt. He died in Cairo, in 1204, and was buried at Tiberias in Israel.

During his lifetime, Maimonides wrote several works that were very influential. His first one written in Arabic at the age of 16, was called *Millot ha-Higgayon*, or «Treatise on Logical Terminology».

One of his most notable pursuits was known as *Mishne Torah*, or «The Torah Reviewed». It was Maimonides's major contribution to Jewish life. His intention was to compose a book that would guide Jews on how to behave in all situations just by reading the Torah and his code, without having to expend large amounts of time searching through the Talmud. Needless to say, this provocative rationale did not endear Maimonides to many traditional Jews, who feared that people would rely on his code and no longer study the Talmud. Despite sometimes intense opposition, the *Mishneh Torah* became a standard guide to Jewish practice: It later served as the model for the *Shulkhan Arukh*, the sixteenth-century code of Jewish law that is still regarded as authoritative by Orthodox Jews. Beginning in 1176, Maimonides spent the next 15 years on his subsequent work, *Dalalat al-ha'irin* (The guide for the perplexed), in Hebrew, *Moreh nevukhim*. This was his most daring effort, as it asserted three major views: God's will is not bound by nature, man cannot know God, and God is an intellectual entity. Although he produced many other works during his lifetime, *Perplexed*, more than any other work by Maimonides, aroused opposition. His contemporaries saw his views as dangerous and heretical. However, his influence has stood the test of time, becoming a major part of religious philosophy for centuries to come. Maimonides was one of the few Jewish thinkers whose teachings also influenced the non-Jewish world.

There are no sources indicating that Maimonides had any formal medical education. Maimonides must have a profound knowledge of ancient Greek authors in Arabic translations, and Moslem medical works. Hippocrates, Galen and Aristotle were his Greek medical inspirations and Rhazes of Persia, Al Farabi, and Ibn Zuhr, the Spanish-Arabic physician, are Moslem authors frequently quoted by him. Maimonides acquired his medical knowledge from well-known Jewish and Muslim physicians in Spain and Fez.

In his *Glossary of Drugs* he refers to Spanish-Moroccan physicians and provides the names of drugs in Arabic, Spanish and Berber, reflecting his medical training. He lectured on medicine and his clinical position as royal physician exposed him to eminent doctors, which enhanced his professional reputation.

Rambam reached the peak of his professional reputation as a doctor when he was appointed to the staff of the court of Saladin as royal physician. He was charged with personally supervising the health of the Grand Vizier Alfadhel, as well as members of the royal family. He devoted himself whole heartedly and tirelessly to his profession, and his fame as a conscientious, skilled, compassionate physician radiated far and wide. His reputation spread to such an extent that King Richard the Lionhearted of England sought his medical services and offered him the position as his personal physician. Rambam declined the offer.

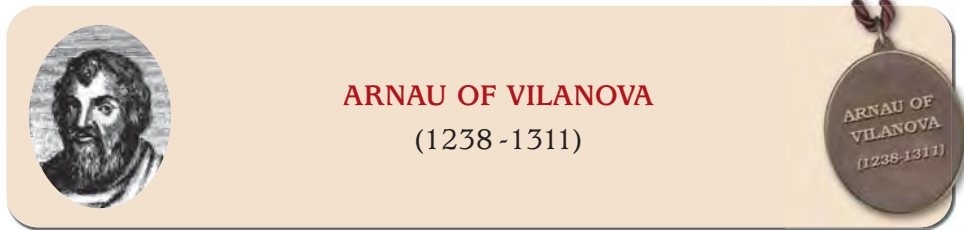
Maimonides devoted much of the last ten years of his life to medical theory and practice. He wrote: «The art of medicine is given in Judaism a very large role with respect to

the virtues, the knowledge of God, and attaining true happiness. He claimed that the preservation of health and life is a Divine commandment. He employed scientific methods in his treatment of disease and was outspokenly opposed to guesswork, superstition, and blind belief in authority.

Maimonides' medical writings (1190-1204) span a wide range of topics in contemporary medicine. His most famous and voluminous medical work, which includes clinical descriptions of many diseases like hemorrhoids, asthma, psychological well-being as well as intimate relations. His medical writings were translated into Hebrew and Latin, with many editions during the early period of printing, some of them becoming classics in medieval European medical schools.

Maimonides stresses the necessity of preventive medicine, hygienic conditions, physical exercise, proper breathing, work, family, an intimate life, diet, walks in pleasant surroundings. His understanding of the relationship between mind and body (psychosomatics). Maimonides states that the physician must use art, logic and intuition to obtain a comprehensive view of the patient: «Don't treat the disease, treat the patient.» Maimonides' respectful approach to all human beings regardless of their religious or national background are certainly an exceptional feature of his period.

Joseph G. Schenker



It is not sure where he was born; probably he was born in Valencia. He studied medicine in Naples with Joan de Casamicciola. After his return from Italy he came back to Valencia (1276) and a few year after he moved to Barcelona (1281) where he was the doctor of the Kings from Aragon Pedro the Great, Alfonso III and Jaime II. Probably he supervised or attended personally the royal labours since he was an experienced obstetrics. It is known that he attended the pregnancies of the queen Blanca d'Anjou, wife of Jaime II, including successful multiple childbirth (1302), although he could not avoid the queen's death at the last childbirth.

His will to know made him learn various languages, like: Latin, Arab, Hebrew, and Catalan. In 1290 he was nominated professor of the University of Montpellier, becoming the most famous doctor of the Christianity. That is why he became the personal doctor of various Popes: Benedict XI, Clemente V and Bonifacio VIII.

He was the author of the majority of the medical works of the time (1290-1300), especially in the field of Obstetrics and Gynecology («De Conceptione Tractatus», «Breviarium», etc.).

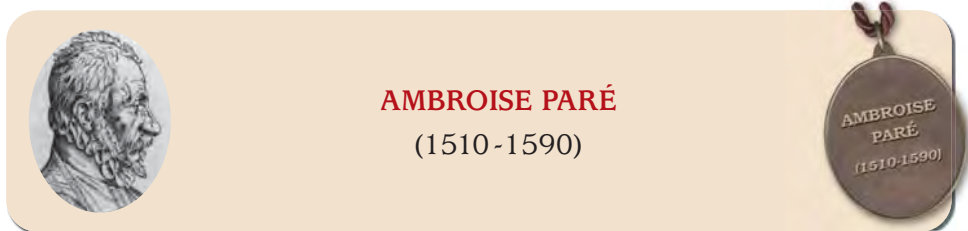
The works of Arnau of Vilanova are a mixture of medicine, alchemy and astrology. Some of his knowledge was surprising for his times. He suspected, for example, «in vitro» conception and he systematized causes of the infertility.

His ideas about the coming of the Antichrist expounded in «Tratado de tempore adventus Antichristi» (1278) caused him a lot of antagonism in some of the theological schools (especially Dominicans) and most of all in Paris. For this cause he was judged and found guilty. He avoided strong punishment because he was the doctor of Bonifacio VIII.

Tireless traveler, doctor and advisor of the Popes, obstinate polemist, mediator of the conflicts of the Royal Courts of Aragon and Anjou, writer, who knew all the medical knowledge of his time, died at the sea, at Genoa coastlines (1311), on the way to help Pope.

The best praise of Arnau of Vilanova is words of Neuburger, one of the most important historians of the medicine: «He was the most brilliant representative of the Medicine of the XIII century, and, without any doubt, the most important of the Middle Ages».

José M. Carrera



Ambroise Paré (1510-1590) is widely considered the greatest surgeon of the sixteenth century. Renowned as much for his compassion as his surgical skill, Paré guided his life with a humble credo of patient care: «I dressed him, God cured him».

Paré was born in an era in which physicians considered surgery well beneath their dignity. Doctors left all cutting to the lowly barber-surgeons. Pare initially served as an apprentice to a barber in the French provinces, and at age 19 went to Paris where he became a surgical student at the famous Hotel Dieu hospital. After his graduation in 1536, Pare joined the army as a regimental surgeon. He served intermittently in the army for the next 30 years, during which time he also developed a flourishing private practice and gained fame through his writings and his considerate, democratic treatment of soldiers of all ranks. Before his career ended, he had acted as surgeon to four French kings as well.

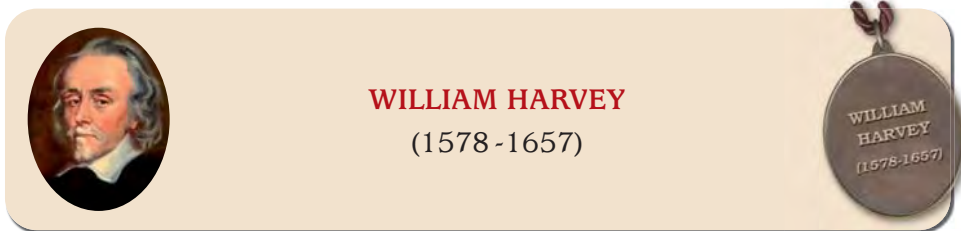
It was during the siege of Turin (1536 - 1537) that Paré made his first great medical discovery. Gunshot wounds, a new medical condition, were considered poisonous and routinely treated by cauterization (sealing off) with boiling oil. When Paré ran out of oil during the siege, he turned instead to simple dressings and soothing ointment, and immediately noted the improved condition of his patients. Pare popularized this revolutionary treatment in his *Method of Treating Wounds* in 1545.

Paré's next contribution to medicine was his promotion of ligation (tying off) of blood vessels to prevent hemorrhage (uncontrolled bleeding) during amputations. In a book on these new techniques, Paré also included large parts of **Andreas Vesalius's** authoritative work on anatomy, translated from the original Latin into French. This information dramatically increased the barber-surgeon's knowledge of anatomy, since the typical barber-surgeon was never taught Latin as part of his training.

Paré was an innovator, always willing to try new practices. He favored massage and designed a number of artificial limbs as well as an artificial eye. He advanced obstetrics (the study of childbirth) by reintroducing podalic version (turning a fetus in utero into a position possible for birth) and inducing premature labor in cases of uterine hemorrhage. As always, he spread knowledge of these discoveries through his writings.

Paré's greatest accomplishment, aside from actually coming up with new surgical techniques, was to spread this information throughout the barber-surgeon community, elevating surgery's status to a professional level and paving the way for vast improvements in surgical care.

Birgit Arabin



William Harvey (April 1, 1578 - June 12, 1657) was an English physician who is credited with being the first to describe the systemic circulation.

Harvey was born in Folkestone and educated at The King's School, Canterbury, at Gonville and Caius College, Cambridge, from which he received a Bachelor of Arts in 1597, and at the University of Padua, where he studied under Hieronymus Fabricius and the Aristotelian philosopher Cesare Cremonini, graduating in 1602. He returned to England and married Elisabeth Browne, daughter of Lancelot Browne, a prominent London physician. He became a doctor at St Bartholomew's Hospital in London (1609-43) and a Fellow of the Royal College of Physicians. After his time at St Bartholomew's he returned to Oxford and became Warden (head of house) of Merton College.

Harvey based most of his conclusions on careful observations recorded during vivisections made of various animals during controlled experiments, being the first person to study biology quantitatively. He did an experiment to see how much blood would pass through the heart each day. In this experiment he used estimates of the capacity of the heart, how much blood is expelled with each pump of the heart, and the amount of times the heart beats in a half an hour. He proposed that blood flowed through the heart in two separate closed loops. One loop, pulmonary circulation, connected the circulatory system to the lungs. The second loop, systemic circulation, causes blood to flow to the vital organs and body tissue. He also observed that blood in veins would move readily towards the heart, but veins would not allow flow in the opposite direction.

Harvey's ideas were eventually accepted during his lifetime. Harvey was still regarded as an excellent doctor. He was personal physician to James I and Charles I.

Harvey died of a stroke in 1657 at the age of seventy-nine. He was buried in Hempsted, England.

Joachim Dudenhausen



JAN PALFYN (Palfijn)
(1650-1730)



Jan Palfijn (name sometimes spelled Jean Palfyn) was born in Kortrijk, Flanders. He practiced medicine in Ypres and Paris, and in 1679 moved to Ghent, where he remained for the rest of his career. Palfijn is remembered for introducing the obstetrical forceps (*Main de Palfijn*) into medicine in the early 1720s. Palfijn's forceps initially had a problem because the two separate halves occasionally shifted during use. Later the two halves of the forceps were linked by a hinge to correct the problem.

Given his altruistic spirit he showed his invent to the Academy of Medicine and showed the obstetricians of the time how to use it. Including that he made hundreds of kilometers to popularize it.

Well educated, he spoke Dutch, Latin and French. He translated works like «De corporis humani fabrica» of Vesalio, and «De corporis humani fabrica» of Verbeyen. In 1718, under influence of those authors, and with his great experience as a surgeon, he published an influential work for surgeons called «l'Anatomie du corps humain» (Anatomy of the human body). Reportedly, this book was still in use in Japan in the late part of the 19th century. Today in Ghent there are the Palfijn Medical Museum and the Jan Palfijn Hospital.

He was not only a great surgeon and obstetrician, but also a noble man practicing a vocational medicine, giving priority to his wish to be useful over getting rich. This was what was attracting attention in the world where all inventions were being commercialized.



JOHN GREGORY
(1724-1773)



John Gregory was Professor of Medicine at the University of Edinburgh and First Physician to His Majesty the King of Scotland, the highest honor a Scottish physician could then receive.

Before practicing in Edinburgh, Gregory also maintained a medical practice in Aberdeen and London. He was revered by his medical students for his generosity and clinical teaching. Gregory's major contribution to the history of medicine was to write the first

modern professional medical ethics, which subsequently influenced the development of medical ethics in Continental Europe and North America in the eighteenth and nineteenth centuries. Gregory pioneered the ethical concept of the physician as fiduciary, which continues to shape the medical profession in our time around the world. As an early and vocal advocate for women's health and the rearing of children free of unnecessary encumbrance, he anticipated the development of modern obstetrics and pediatrics. This physician-philosopher is the father of professional medical ethics and an exemplar of the physician as a dedicated professional.

Frank A. Chervenak



French physician inventor of the stethoscope. René Laënnec was born on 17 February 1781 in Quimper, Brittany and studied medicine at the Hopital de la Charité, Paris, qualifying in 1804.

Laënnec began his medical studies in Nantes and was appointed surgeon at the Hôtel Dieu in Nantes in June 1799 at the age of 18. In 1800, Laënnec went to Paris and entered the École Pratique. He was fortunate to study with such famous teachers as Gaspard Laurent Bayle (1774-1816), Marie Francois Xavier Bichat (1771-1802), Jean-Jacques Leroux de Tillets (1749-1832) and Nicolas Corvisart des Marest (1755-1821), Napoleon's life physician. Within a year of entering École Pratique, Laënnec obtained the first prizes in both medicine and surgery at the medical school. In June 1802, he published his first paper and while still a student, published a number of papers on such notable topics as peritonitis, amenorrhea and liver disease. He also served as editor of the *Journal de Médecine*.

In 1808 he founded the Athénée Médical, which later merged with the Société Académique de Paris. Soon afterward, he was appointed personal physician to Cardinal Joseph Fesch (1763-1839), the uncle of Napoleon I; however the cardinal was exiled after the fall of Napoleon in 1814.

Throughout his professional career in Paris, Laënnec discovered that heart sounds could be heard more clearly and loudly using mediate auscultation rather than immediate auscultation. Laënnec may have been motivated by several factors in his invention of the stethoscope: He had discovered that it was a better way to transmit sounds from the chest as opposed to the method in vogue at the time of placing his ear over the chest, especially if the patient was overweight. Laënnec spent the next 3 years testing various types of materials to make tubes, perfecting his design and listening to the chest findings of patients with pneumonia.

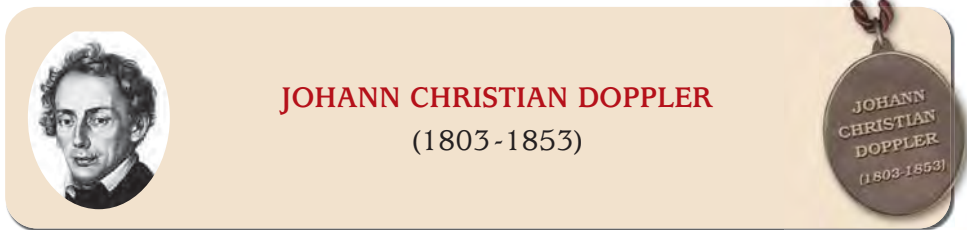
He invented the stethoscope in 1816 while working at the Hopital Necker. In 1819, he published the first seminar work on the use of listening to body sounds entitled «*De l'auscultation médiate ou Traité du diagnostic des maladies des poumons et du coeur fondé principalement sur ce nouveau moyen d'exploration*».

The French physician hailed as the father of thoracic medicine, forever transformed the diagnosis of chest disease through his invention of the stethoscope. His creative genius and tireless dedication to medicine have resulted in much of our modern day understanding of pathology.

Perhaps equally as important a contribution to medicine was his reawakening of the spirit of objective scientific observation. When he published his text in 1819, he included this motto in Greek, «the most important part of an art is to be able to observe properly». His text was held in very high regard by many doctors as a gold standard for the practice of medicine. Professor Benjamin Ward Richardson stated in *Disciples of Aesculapius* that «the true student of medicine reads Laennec's treatise on mediate auscultation and the use of the stethoscope once in two years at least as long as he is in practice. It ranks with the original work of Vesalius, Harvey and Hippocrates».

Laënnec died on August 13, 1826.

Chiara Benedetto



Austrian mathematician and physicist. He was the Professor of Physics and Mathematics at the technical schools of Prague and Chemnitz, as well as a Professor of experimental Physics at the University of Vienna.

His work «Über das farbige Licht der Doppelsterne» contained the hypothesis of the effect called «Doppler effect» which is the apparent change in frequency and wavelength of a wave that is perceived by an observer moving relative to the source of the waves. At the case of sound the theory was experimentally confirmed by Buys Ballot in 1845, and in case of the light by Armand Fizeau in 1848 (Doppler-Fizeau effect). The Doppler effect has been systematically used by the astronomers at the movements of the stars and other celestial bodies.

Soon it was verified that the «Doppler effect» was affecting not only audible waves, but also electromagnetic waves. It was the first step to use this observation in Medicine. At first the scepticism of some of Doppler's physicists colleagues regarding the phenomenon he described made him to organize a public show to convince them it was real. In front of the group of important mathematicians and physicists Doppler made a few musicians, move by train who were emitting constantly (using trumpets) the same note. As the train was getting closer or moving away they could verify that the trumpet sound was getting more or less intensive and the frequency was changing.

This effect was used in Medicine for the first time in 1950 by Japanese Shigeo Satomura and Yasuharu Nimura who managed to build a machine to make a cardiovascular study (the movement of the atrioventricular valves and great vessels). And so developed the continuous or pulsed Doppler and finally color Doppler.

He died from a pulmonary disease in Venice at age 49 on March 17, 1853. His tomb can be found just inside the entrance of the Venetian island cemetery of San Michele.



**JACQUES ALEXANDRE LE JUMEAU,
VICOMTE DE KERGADEDEC**
(1787-1877)



Jacques Alexandre le Jumeau, Vicomte de Kergaradec (1787-1877) was a French nobleman and a friend and a pupil of Laënnec (who discovered auscultation and stethoscope in 1819).

He had the first the idea of listening to fetal heart sounds thus extending auscultation to fetal monitoring and management in obstetrical care.

He described the auscultation of the fetal heart with a Laënnec stethoscope or with a wooden «fetoscope» in 1821. Le Jumeau was not an obstetrician, and his first report was about the hearing of fetal heart beats in 8 pregnant women. Le Jumeau suggested that fetal auscultation could be used to detect pregnancy as well as to identify twin gestation, fetal lie and even fetal health. So it can be considered as one of the fathers of fetal monitoring.

Serge Uzan



IGNAZ PHILIP SEMMELWEIS
(1818-1865)



Ignaz Philip Semmelweis (1818-1865), a Hungarian obstetrician educated at the universities of Pest and Vienna, introduced antiseptic prophylaxis into medicine. In the 1840s, puerperal or childbirth fever, a bacterial infection of the female genital tract after childbirth, was taking the lives of up to 30 % of women who gave birth in hospitals. Women who gave birth at home remained relatively unaffected. As assistant professor on the maternity ward of the Vienna General Hospital, Semmelweis observed that women examined by student doctors who had not washed their hands after leaving the autopsy

room had very high death rates. When a colleague who had received a scalpel cut died of infection, Semmelweis concluded that puerperal fever was septic and contagious. He ordered students to wash their hands with chlorinated lime before examining patients; as a result, the maternal death rate was reduced from 12 % to 1 % in 2 years. Nevertheless, Semmelweis encountered strong opposition from hospital officials and left Vienna in 1850 for the University of Pest. As a professor of obstetrics at the University of Pest Hospital, he enforced antiseptic practices and reduced the death rate from puerperal fever to 0,85 %. However, Semmelweis' findings and publications were resisted by hospital and medical authorities in Hungary and abroad. After a breakdown, he entered a mental hospital in Vienna, where he died of an infection contracted during an operation he had performed. (Emerging Infectious Diseases: Vol.7. No.2. 2001).

In 1885, 20 years after his death, Semmelweis was eulogized by Professor W.A. Freund as follows: «when fate calls upon such natures to play the part of prophets, the performance is always a tragedy. Fortunate for mankind if the prophecy is not overwhelmed with the prophet». (P. A. Dumesic, D. A. Dumesic: The Semmelweis Doctrine: A Prophecy Overwhelmed by Its Prophet. ACOG Clin. Review. January/February, 2001.)

Zoltan Papp



Mendel was born into a German-speaking family in Heinzendorf, Austrian Silesia, Austrian Empire (now Hyncice, Czech Republic), and was baptized two days later. He was the son of Anton and Rosine Mendel and had one elder and also a younger sister. During his childhood, Mendel worked as a gardener, studied beekeeping, and as a young man attended the Philosophical Institute in Olomuc. Upon recommendation of his physics teacher Friederich Franz, he entered the Augustinian Abbey of St. Thomas in Brno in 1843. Born Johann Mendel, he took the name Gregor upon entering monastic life. In 1851 he was sent to the University of Vienna to study, returning to his abbey in 1853 as a teacher, principally of physics.

Gregor Mendel, who is known as the «father of modern genetics», was inspired by both his professors at university and his colleagues at the monastery to study variation in plants, and he conducted his study in the monastery's garden. Between 1856 and 1863 Mendel cultivated and tested some 29,000 pea plants (i. e. *Pisum sativum*). This study showed that one in four pea plants had purebred recessive alleles, two out of four were hybrid and one out of four were purebred dominant. His experiments brought forth two generalizations which later became known as Mendel's Laws of Inheritance.

Mendel read his paper, «Experiments on Plant Hybridization», at two meetings of the Natural History Society of Brün in Moravia in 1856. When Mendel's paper was publis-

hed in 1866 in Proceedings of the Natural History Society of Brünn, it had little impact and was cited about three times over the next thirty-five years. His paper received plenty of criticism at the time, but is now considered a seminal work.

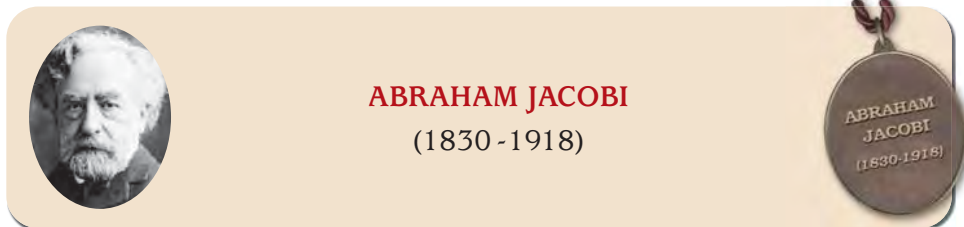
After Mendel completed his work with peas, he turned to experimenting with honeybees, to extend his work to animals. He produced a hybrid strain (so vicious they were destroyed), but failed to generate a clear picture of their heredity because of the difficulties in controlling mating behaviours of queen bees. He also described novel plant species, and these are denoted with the botanical author abbreviation «Mendel».

Elevated as abbot in 1868, his scientific work largely ended as Mendel became consumed with his increased administrative responsibilities, especially a dispute with the civil government over their attempt to impose special taxes on religious institutions.

At first Mendel's work was rejected (and it was not widely accepted until after he died). The common belief at the time was that pangenes were responsible for inheritance. Even Darwin's theory of evolution used pangenesis instead of Mendel's model of inheritance. The modern synthesis uses Mendelian genetics.

Mendel died on January 6, 1884, at age 62, in Brno, Austria-Hungary (now Czech Republic), from chronic nephritis. Czech composer Leos Janáček played the organ at his funeral. After his death, the next abbot burned all his papers he had in his possession.

Luis Cabero



The father of American pediatrics, Abraham Jacobi championed children's care in both academic and medical spheres. During his life, every medical school in the United States established a department of pediatrics.

Jacobi earned his medical degree at the University of Bonn in 1851. When he traveled to Berlin to take his state medical exams, he was arrested and held in prison for nearly two years on a charge of promoting political and social reform in the German revolution of 1848. Though he viewed his imprisonment as a badge of honor, he left Germany in 1853 to avoid being arrested again.

Jacobi arrived in New York later in 1853, where he practiced general medicine, surgery, and obstetrics, as was the custom of most of his contemporaries. Medical specialization was frowned on as being degrading, making physicians too much like tradesmen.

Jacobi wrote prolifically, publishing 200 articles and books during his career. His early contributions to the *New York Medical Journal* helped establish the field of pediatrics. In 1857, Jacobi lectured on childhood diseases of the larynx at the College of Physicians and Surgeons, his first formal pediatric lecture.

In 1860, Jacobi accepted a position as professor of infantile pathology and therapeutics at New York Medical College (not connected with the modern medical school of the same name). This appointment signaled a turning point as it was the first pediatric medical position and launched pediatrics as a medical and academic discipline in the United States.

In his first year at New York Medical College, Jacobi established a method of bedside clinical teaching, a landmark in medical education. Up to that point, physicians did not conduct teaching rounds on medical wards. In the same year, Jacobi also founded the first pediatric free clinic.

Jacobi accepted the position of clinical professor of diseases of children at New York University Medical College in 1865. The College of Physicians and Surgeons (Columbia University) appointed Jacobi as professor of clinical pediatrics in 1870. Jacobi worked at almost every hospital in New York, but he concentrated on the Jews Hospital (later Mount Sinai Hospital), where he set up the first outpatient pediatric clinic in 1874. By 1878, the Jews Hospital had the first department of pediatrics in a US general hospital. Jacobi declined several invitations to accept prestigious medical appointments in Germany.

Throughout his career, Jacobi took care to balance professional success with social commitment, and he advocated medical care for children on the basis of social justice. He studied breast feeding and safe breast milk substitutes. After the safety of pasteurization (Louis Pasteur) was proven, he fought to dispel the old belief that raw milk was beneficial. He advised parents to boil milk until bubbles appeared and advocated diluting milk.

Jacobi also studied diphtheria, gastrointestinal disorders, dental disease, and treatment of pediatric diseases. He invented the first laryngoscope but never patented it. He was one of the early advocates of birth control. Jacobi wrote about medical history and specialized in topics of pediatrics in the era of 1800, meningitis, tracheotomy and nursing. Jacobi's best known text is *Intestinal Diseases of Infants and Children*, published in 1887.

Jacobi was one of the first to treat diphtheric **croup** with intubation. In 1880, he published a monography on diphtheria.

Jacobi, who had been widowed twice, married the physician Mary Corinna Putnam in 1873. Mary Putnam Jacobi worked tirelessly with her husband on issues of child welfare and aid for the needy. They coauthored an article on infant feeding and Mary Putnam Jacobi published nearly 100 articles on her own, in addition to receiving the Boylston Prize from Harvard. In 1883, the Jacobis were devastated to lose their 7-year-old son to diphtheria.

Jacobi established the Pediatric Section of the American Medical Association in 1880, and the Pediatric Section of the New York Academy of Medicine followed in 1885. With the founding of the American Pediatric Society in 1888, Jacobi set up the first independent medical specialty society in the United States.

Jacobi had nearly completed his autobiography when a 1918 fire destroyed his only manuscript, along with his personal papers, letters and notes. He died within a year. Jacobi was honored with pediatric divisions named after him at Lenox Hill and Roosevelt hospitals in New York City. The Albert Einstein College of Medicine established the Abraham Jacobi Hospital as a memorial.



PIERRE BUDIN
(1846 - 1907)



Pierre Constant Budin was born in 1846 at Enancourt-le-Sec, en Vexin, a very small village in the northwest part of France. The son of farmers he attended grade school at the College of Beauvais located in an old Capucins convent, «where in Budin's words, our parents, more concerned with our future than with our personal aspirations, had imprisoned our childhood».

Budin started medical school in Paris in 1867. He became a resident in 1872 spending part of his first year of residency at the Maternity Hospital, since from the beginning he had been attracted by obstetrics. When Budin was a resident, Puerperal fever was ravaging maternity wards, so in 1874 he travelled to Edinburg, like his friend Lucas-Championiere, and did a fellowship with Lister to learn antisepsy; then visited the great masters of Obstetrics in England and Germany. Back at the Maternity in 1875 as a fourth-year resident, and worked under the supervision of Dr. Tarnier (the obstetrician who developed a means for using egg incubators to help sick newborn infants).

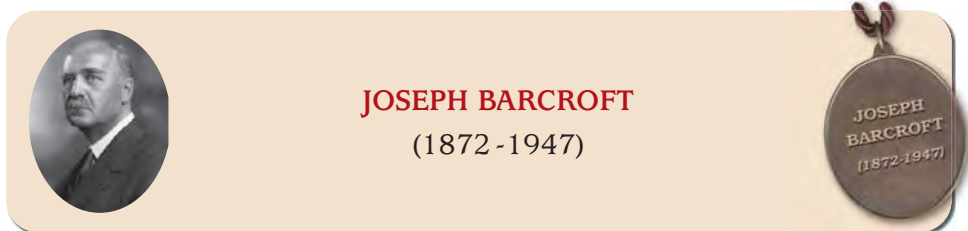
Budin received his Medical Doctor degree in 1876. His thesis, titled «*About Fetal health in Obstetrics*», has remained a classic. In 1878 he became Chef de Clinique. Finally became the Obstetrician in chief of the Hospital de la Charite (1882) in which position he modernized the teaching. Pierre Budin was the creator of the first Obstetric nursery for premature infants.

Pierre Budin, along with Tarnier, is the father of modern Perinatology. Lacking full documentation on Budin, some authors have attributed to him the invention of the incubator. In fact, his mentor, Tarnier, was the first to apply the egg incubator to weakling infants. The role of Budin, however, goes beyond the application of rescue technology to the newborn infant. Budin was the first obstetrician who realized that his role should not be limited to the care of pregnancy, the minimization of complications of delivery and the extraction of the fetus. Budin understood the importance of data gathering and analysis (a skill he had obtained from helping his father to manage the huge farming property of the Budins) in order to direct action. Budin focused his interest on infant mortality rates and, with logic, attacked its roots. He led the way in ensuring normal growth and nutrition for the infant by educating the mothers in preventing one of the most deadly complications of infancy (at the end of the 19th century), infantile diarrhea. Physicians of this period were not interested in the infant until two years of age. The obstetrician (an emerging specialist) thus took charge of mother and infant. Success in decreasing both maternal and infantile mortality are reflected in a lecture given in 1900.

Budin was also an influential physician. He had contacts with members of the French government. France, at the end of the 19th century, combined low birth rate and high infantile mortality. This led to the fear that the young French republic would be dwarfed and overwhelmed by Germany. The combination forced French authorities to invest simultaneously in both the development of a very modern-for-the-times system of health

care for pregnant women, and a very efficient educational system. There was also a tremendous need of men to colonize Africa and East Asia since raw materials were needed for the industrialization of France. Great Britain, already industrialized, exerted an intensive economical pressure on France. Budin (a member of the hygiene society) was deeply involved in the execution of the health care programs. The French saw very clearly that their best investment for the future was healthy, educated children. Their enterprise was very successful. By a tragic irony, however, numerous male children who Budin saved from dying of diarrhea and dehydration during their first year, fell on the battle fields of the first world war. Budin only postponed the death of these infants. They died as healthy adolescents, but perhaps after influencing the course of history. The French fear of depopulation led ultimately to the loss of 1,500,000 lives (not counting the wounded and handicapped) during the four years of the war.

Claudine Amiel-Tison



Sir Joseph Barcroft was born on 26 July 1872 in Down county, Ireland, the second of 5 children. He was educated in York and Cambridge and enrolled at Cambridge University in 1893 to study natural sciences obtaining a first-class degree in physiology in 1897. He was then immediately appointed to the Cambridge Physiological Laboratory where he worked for most of the rest of his life. Initially he was involved in studying various physiological projects including blood gases and he developed a differential blood-gas monitor. He was awarded the Walsingham medal in 1899 and appointed lecturer at King's College, Cambridge in 1904.

Joseph Barcroft made particular contributions in the areas of the effects of altitude on human physiology (he made several high-altitude expeditions to observe its effect) and fetal physiology. His book «The Respiratory Function of the Blood» was published in 1914 and he was elected a Fellow of the Royal Society in 1910.

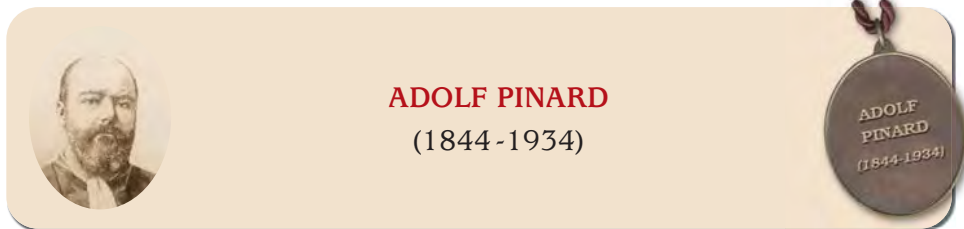
During the 1914-18 Great War he did not join the armed forces because of his family's religious views and was instead employed by the Ministry of Defence at Porton Down working on the physiological effects of poison gas, deliberately exposing himself to hydrocyanic acid and as he predicted showed no ill effects from this experiment. He was awarded a CBE for his services during the war.

In the 1930s he turned his attention to research in fetal physiology including placental blood flow, fetal growth and physiology of the fetal heart and this culminated in his book «Researches in Pre-Natal Life» which he completed only weeks before his death. He presented a paper on «Fetal Respiration» to the Royal Society in 1935 and was knighted by the King the same year. He gave the Linacre lecture at Cambridge in 1941

on «respiratory patterns at birth». In 1943 he was awarded the Copley medal of the Royal Society.

Joseph Barcroft died suddenly aged 74 years and was cremated in Cambridge. He was survived by two sons, one of whom (Henry) became professor of physiology at St Thomas' hospital, London.

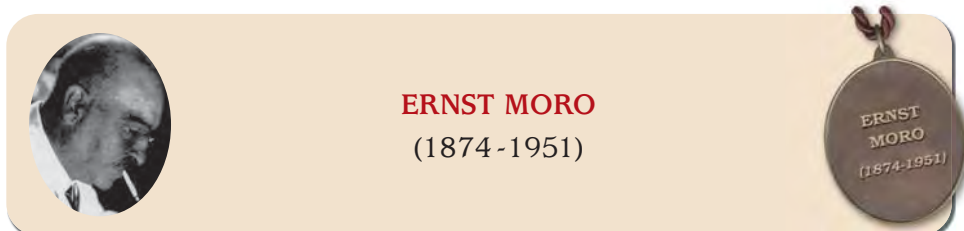
Malcolm Levene



He was a French obstetrician who was born in Méry-sur-Seine. He practiced medicine in Paris, where he was an assistant to Étienne Stéphane Tarnier (1828-1897) and a professor of obstetrics.

He had a decisive influence on the popularization of the bases of the fetal auscultation (Pinard's stethoscope), as well as of techniques of internal and external pelvimetry.

Pinard, together with Leopold, defined the bases of the obstetric exploration at the Congress in Moscow in 1897. The conclusions from this event had an influence in whole Europe on the immediate application of the abdominal palpation, the exam of the feminine pelvis and fetal auscultation. He contributed to the development of the childcare in his country and from his post as Member of Parliament he promoted the creation of labour laws in favor of mother and child.



Ernst Moro described the reflex that came to bear his name, and that has been used ever since as a useful sign in the evaluation of the newborn and young infant. Moro considered the reflex, therefore, as an atavistic phenomenon related to the behavior seen in young mammals, who, because of their limited independent mobility in early life, have to be carried by the mother.

Ernst Moro was born on December 8, 1874, the youngest of eight children, at Laibach in the Austrian-Hungarian monarchy. He planned to study botany, but changed his mind and enrolled as a medical student at the University of Graz. His progress was rapid, and even before his graduation he was appointed assistant to Theodor Escherich, Professor of Pediatrics. Moro soon joined his superior in studies of the intestinal flora of infants and children, Escherich's main interest. In 1900, he published his findings on a new organism, an acidophilic symbiont of *Lactobacillus bifidus*.

In 1901 Moro followed Escherich to Vienna and later worked under von Pfaundler in Graz and Munich. During these years his steady work was productive of many important contributions to the field of child health, among them the introduction of a carrot soup in the treatment of diarrheal diseases in infants. Soon after von Pirquet, in 1907, reported his intracutaneous test with old tuberculin. Moro described a modification of it. The «Moro test» up to this day, refers in many countries to a percutaneous skin test in which an ointment of old tuberculin and lanolin is rubbed into the skin, in later years Moro considered the skin test his most important contribution.

In 1911 Moro replaced Emil Feer as Head of Pediatrics at Germany's oldest university, Heidelberg; the Kinderklinik housed in the Luisenheilanstalt, named after its principal benefactress, the Grand Duchess Louisa of Baden. The years that followed, with the exception of those of the First World War, were years of great activity that soon gave Heidelberg its place among the leading child health centers of Europe. Among Moro's many outstanding assistants were men like Franz Lust, Ernst Freudenberg, Paul György, Walter Keller, and Alfred Adam. Much fundamental work was done by Moro and his fellow workers in such fields as vitamin and calcium metabolism, allergy and skin diseases, and the pathogenesis of infantile diarrhea. It was Moro who first suggested the role of bacterial invasion of the small intestine as a possible pathogenic factor in the production of diarrhea. He reasoned that whereas in normal infants the upper small intestine is practically sterile, increased peristalsis leading to diarrhea might well occur because of invasion and multiplication of bacteria, not necessarily virulent and often simply saprophytic, from the large intestine and lower ileum into the upper segments of the small intestine.

Moro did not have the dictatorial qualities of the caricature of the old German professor. He was accessible and friendly to his colleagues, especially to those whom he liked. He was sensitive and suffered from scientific-political currents against him, not unusual at the time in German pediatric-academic circles. His lectures were outstanding and given in the true tradition of the classical clinical lectures of the German or French school. His diagnostic acumen was equally unique, based on intuitive insight and deductive power: an experience that remained unforgettable to those who had the privilege to have been associated with him.

In 1936, because of ill health and the political upheavals in his country of adoption, Moro, although only 62 years old, resigned from his post. He spent his remaining years in Heidelberg, where he died on April 17, 1951. His solitude was shared by his devoted wife and daughter.

*Dick Hoefnagel, M.D. and Dieter Lüders, M.D.
Summarized*



ARVO HENRIK YLPOO
(1887-1992)



Arvo Henrik Ylppö was born in Finland (then part of Russia) in 1887. Apparently born preterm he remained of small stature throughout his life. At the age of 19 he enrolled at the University of Helsinki, graduating in Medicine in 1914. Between 1912 to 1920 he trained at the Kaiserin Auguste Victoria Haus in Berlin where he developed his special interest in Paediatrics, particularly in the field of neonatal jaundice, acidosis, dehydration and prematurity.

His research focused on prenatal and postnatal growth, following these children to school age and observing the delayed catch-up of preterm babies, especially those below 1,000 grams. In addition he described the overall sequela of cerebral palsy, neurosensorial impairment and mental retardation in survivors, a feature that has not altered that much in spite of all the new technologies now available but unheard of in his early days.

Thanks to his efforts and the farsighted support of his government, Finnish infant mortality and child welfare care, set examples for the rest of the world and is often quoted as the Dr. Benjamin Spock of Finland.

Awarded many prizes and honours, from Doctorates to Honorary Memberships of many learned societies, Arvo died at the splendid age of 104 leaving us a legacy of truly remarkable scientific and academic achievements, as accurate today as when he first described them.

This resume is based on the publications of Peter Dunn and Angel Ballabriga which I recommend to anyone wishing to know more about Arvo Ylppö. I am also very thankful to Ola Saugstad, himself a recipient of the Ylppö award some years ago, for the additional information and the photo.

Manuel R. Carrapato



VIRGINIA APGAR
(1909 -1974)



«Nobody, but nobody, is going to stop breathing on me.» These are the words to explain why Dr. Virginia Apgar kept basic resuscitation equipment with her at all times. This will be the best description of Dr. Virginia Apgar who is known to be a pioneer of modern neonatology to introduce the Apgar Score, the first standardized method for evaluating a newborn's condition at birth in early 1950s. Apgar Score had been challenged several

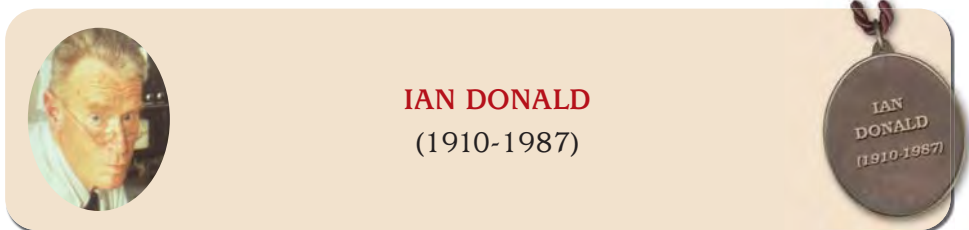
occasions in the past to be substituted by other methodology because its assessment is subjective, but all failed and Apgar Score is still the most popular way to evaluate a newborn's transition to life outside of the womb. It is now well documented that Apgar Score is well correlated with biochemical condition of neonate at birth represented by the acid-base balance of cord blood. Also the clinical value of Apgar Score, especially at five minutes, is proven by the statistically significant correlation with neurological outcome of the neonate. Without questions, historically the most well known physician's name in the field of perinatal- neonatal medicine is Virginia Apgar as Apgar Score.

Virginia Apgar was born in New Jersey in 1909, completed her MD in 1933 at Columbia University's College of Physicians and Surgeons. She became director of a new Division of Anesthesia in 1938 as the first woman to direct a division and appointed first full professor of anesthesiology in 1949, Virginia Apgar is one of few women physicians who have played a historical role in medicine and the real pioneer of modern anesthesiology which was mostly managed by nurses at that time.

Virginia Apgar obtained Master on Public Health from Johns Hopkins during her sabbatical in 1958-9 and became interested in teratology. Virginia Apgar has contributed a lot in preventing birth defects by public campaigning as chief of Division of Congenital Malformation, National Foundation-March of Dimes.

She has received numerous award and honorary positions; died in 1974. Even after her death, Virginia Apgar was honored on a commemorative U.S. postage stamp in 1994, inducted into National Women's Hall of Fame and the American Academy of Pediatrics has set a Virginia Apgar award for those that contributed to progress for neonatology.

Hiroshi Nishida



Ian Donald, with his invention of the diagnostic ultrasound, changed the face of obstetrics and gynecology in the middle of the twentieth century more than any others did. Hardly any area in medicine has experienced such dramatic technical advances during the past four decades as diagnostic ultrasound.

Donald was born in Cornwall on 27 December 1910. He went to school in England but when he was 14 years old his family moved to South Africa because of his father's ill health. His early education was in Edinburgh, and then in South Africa where he graduated in Arts in Cape Town. His father and grandfather had been doctors.

After wartime service in the Medical Branch of the Royal Air Force he returned to obstetrics and gynecology, and after becoming a Reader at the Institute of Obstetrics and

Gynaecology at Chelsea, he started his work on respiration of the newborn at Hammersmith. It was in 1954 when he was appointed Regius Professor of Midwifery at the University of Glasgow, that he went north of the border. His three main objectives were to build a new maternity hospital, to write a book on obstetrics based on his own experience and to perform some really original work. He was successful in all three.

He was a brilliant teacher and his textbook *Practical Obstetric Problems* went to five editions. He was later Professor of Obstetrics and Gynecology in Glasgow at the Queen Mother's Hospital, where the maternity unit was built entirely to his design.

The diagnostic ultrasound origins go back into maritime history. Donald's often stated preference for the term «sonar» (which stands for «sound navigation and ranging») when referring to ultrasonic echography is based on his acknowledgement of this historical fact.

On arrival in Glasgow in 1954 Donald soon set about trying to learn something about the energy properties of ultrasound and managed to borrow from an engineering firm a powerful ultrasonic generator situated in a bath of carbon tetrachloride in which it created massive turbulence. He then suspended samples of unclotted blood in it for varying periods and then, by cell counting, determined the degree of haemolysis.

His incursion into the study of pregnancy did not begin until 1957. In pregnancy the only echoes of which they could be reasonably sure at that time were those provided by the fetal head. It was this which led him to undertake a series of water tank experiments in which he learned to identify the biparietal diameter and, with later development, its accurate measurement.

True tissue differentiation was only to come many years later, especially with the development of grey scaling. Nevertheless, at this time (1958) they could differentiate with reasonable certainty between quite a variety of gynecological tumors and ascites both benign and malignant (the latter having a characteristically bizarre appearance) and, of course, gross obesity. They could also demonstrate fetal echoes in utero, particularly the fetal head provided the uterus was enlarged above the level of the symphysis pubis.

Donald's work first went to press in *The Lancet* in 1958 and he regarded this as one of the most important papers he had ever written, noteworthy also because there had, so far, been no subsequent need to repeal anything he had then written.

The automatic B scanner was completed in 1960 and Donald and his team were able to identify and measure biparietal diameter accurately.

Donald's experience grew in a number of directions, most notably of all perhaps in the rapid and easy diagnosis of hydatidiform mole. From 1962 onwards Donald's team established contact with Joe Holmes and his colleagues in Denver with whom a successful co-operation and association has been maintained ever since. Both groups made research to identify the placenta as an extension of the principles underlying the diagnosis of hydatidiform mole.

In 1974 a scan converter and accessories were linked up with Donald's standard Diasonograph B-scanner. This immediately made grey scaling possible. The quality of the pictures as regards organ outline remained as good as ever but also, by different shades

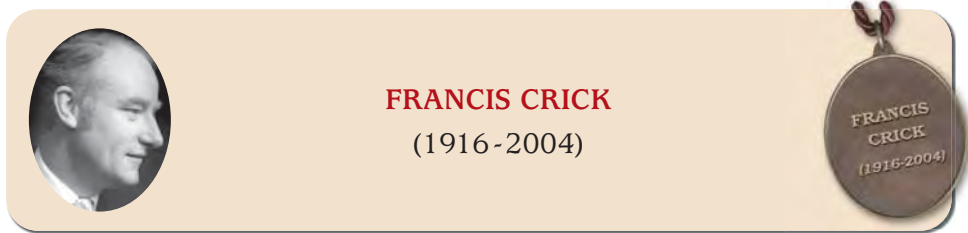
of grey, gave a far better indication of tissue characterization. This facility has opened up a whole new avenue of approach, especially in the study of tissue parenchyma.

Finally, just before his retirement in 1976, there came on the scene a whole crop of real-time scanning machines.

Donald's opposition to the Abortion Act of 1967 was somewhat controversial. Possibly because of it some of the honours he might have received were withheld from him. He died on 19 June 1987 in his retirement home in Essex to which he and his wife Alix had gone in order to be able to indulge his hobbies of water colour painting and small boat sailing.

The Ian Donald International School of Ultrasound bears testament to globalization in its most successful and worthwhile form. The school was founded in Dubrovnik in 1981. Since then, the growth has been meteoric and now consists of more than 100 branches throughout the world.

Asim Kurjak



Francis Crick was born and raised near Northampton. He was educated at Northampton Grammar School and Mill Hill School in London (on scholarship), where he studied mathematics, physics and chemistry. At the age of 21, Crick earned a B.Sc. degree in physics from University College London (UCL).

Crick began a Ph.D. research project on measuring viscosity of water at high temperatures, but with the outbreak of World War II Crick was deflected from a possible career in physics.

During World War II, he worked for the Admiralty Research Laboratory on the design of magnetic and acoustic mines and was instrumental in designing a new mine that was effective against German minesweepers.

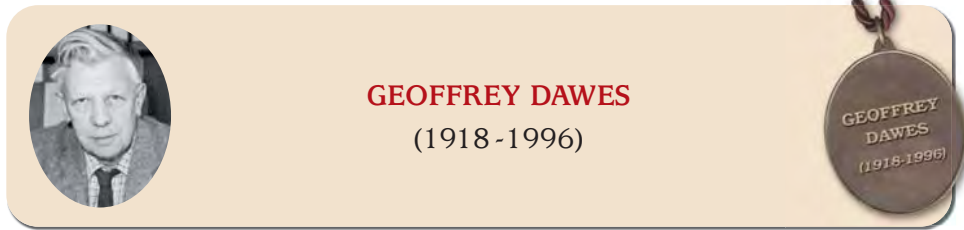
After World War II, in 1947, Crick began studying biology and became part of an important migration of physical scientists into biology research.

For two years, Crick worked on the physical properties of cytoplasm at Cambridge's Strangeways Laboratory, headed by Bridget Fell, with a Medical Research Council studentship, until he joined Perutz and Kendrew at the Cavendish Laboratory. The Cavendish Laboratory at Cambridge was under the general direction of Sir Lawrence Bragg, a Nobel Prize winner in 1915 at the age of 25. Francis Crick and Maurice Wilkins of King's College London were personal friends, which influenced subsequent scientific events as much as the friendship between Crick and James Watson. Crick and Wilkins first met at

King's College London. This team then succeeded to determine the structure of the DNA molecule and received the Nobel Prize for this important breakthrough.

Crick died of colon cancer on 28 July 2004 at The University of California's San Diego Thornton Hospital, San Diego, USA.

Wolfgang Holzgreve



Geoffrey Dawes has been the director of the Nuffield Institute for Medical Research in Oxford for nearly 40 years. He has been an outstanding international person in fetal physiology. He has published 194 articles in peer review journals and many books. Among them one is to be considered the Holy Bible for anyone involved in fetal nenaotal physiology and perinatal medicine. The title of this book is «Foetal and neonatal Physiology» and has been published by Year Book Medical Publishers, Inc, Chicago in the year 1968 and reprinted in 1969. This book appeared almost 40 years ago and was based on available human data and animal experiments, mainly sheep. It is surprising that the majority of the informations that have been obtained in humans after the introduction of invasive procedures (Fetal Blood Sampling) or non invasive (Doppler Technology) were already available or at least postulated in that work of Professor Dawes.

About the middle eighties Prof. Dawes started to move his interest onto the improvement of the clinical use of antepartal Cardiotochography by using computer assisted evaluation, in order to overcome the large intra- and inter-observer variability of the traditional evaluation. Acting as director of the Nuffield Institute of Medical Research, he first produced an algorithm that has been used in 7 centers. After the collection and analysis of 48,000 records the clinical significance has been studied. As a consequence the probability of fetal acidemia and intrauterine death according to the fetal heart variability, long term and short term as well, has been assessed. It has been a major step toward more precise assessment of fetal wellbeing, especially in case of risk pregnancies. This system is now largely used in clinical practice all over the world.

He was born during the last years of the First World War in Derbyshire. He completed his medical training in Oxford in 1943. After that he joined the Department of Pharmacology. After a fellowship in Harvard and Philadelphia in 1948 he became the Director of the Nuffield Institute until retirement in 1985. Nevertheless Prof. Dawes never «retired» as he continued to develop ideas, write papers and edit books until his death.

Professor Geoffrey Dawes was not only an outstanding scientist, he was a person full of interests and a true gentleman.

Giampaolo Mandruzzato



ROBERTO CALDEYRO-BARCIA
(1921-1996)



Roberto Caldeyro-Barcia was born in 1921 in Montevideo (Uruguay).

He obtained his degree in Medicine and Surgery in September 1947 in the Faculty of Medicine in Montevideo and was awarded with the Silver Medal in his degree. He specialized in Obstetrics and Gynecology, and also in Physiology, and obtained his doctorate in the same university. Successively, he worked as a lecture assistant, an assistant doctor, an attached lecturer and a titular lecturer (1948). In 1949 he was asked to be in charge of the coordination of the Section of Obstetric Physiology of the Obstetric-Gynecologic Clinic. In the 60s decade he founded the «Latin-American Centre of Perinatology» (CLAP) and introduced decisively a new, integrating concept related to the fetus-neonatal physiopathology.

The CLAP of Montevideo was a mythic reference for the obstetricians and neonatologists of all around the world during three decades, especially for those speaking Spanish and Portuguese. Caldeyro-Barcia and his group of collaborators will go down in history of the medicine for being the researcher who introduced the scientific methodology in the «old art of giving birth» and having fixed the physiopathologic and technologic bases of the procedures that we know today as «biophysical monitorization» of the labour.

From 1950 on, he collaborated with Hermógenes Alvarez, a great expert in «uterine contractility», which favoured the definition of the relationship between uterine dynamics and fetal heart ratio. His training in Physiology, his command of the scientific methodology and his technical experimental preparation, together with his witty critical spirit, made it possible for his research works to revolutionize not only the control of labour, but also its medical supervision.

From 1955 on, as his scientific prestige enlarged, he was invited to give courses and conferences in most of the Universities and Scientific Societies of the United States of America as Michigan, the Wayne University, the University of Colorado, the University of Southern California, New York Hospital, John's Hopkins Mount Sinai Hospital of New York, the Carnegie Institution, the University of Kansas, the University of Tennessee, George Washington, Cumberland Hospital, etc. At the same time, he received invitations from most European universities.

For more than 30 years, he attended most of international and national Congresses on Obstetrics and Perinatal Medicine, that were held in the world, particularly those in the Latin-American, as an honorable guest.

From the institutional point of view, he had a decisive role in the foundation of the World Association of Perinatal Medicine (Tokyo, 1991) thanks to his participation in the European Congress of Rome (1987) and the Congress of the FIGO in Rio de Janeiro

(1989). He made an important contribution to the foundation of the Iberoamerican Society of Prenatal Diagnosis (SIADP) in Rome (1987) and, moreover, thank to his encouragement, some societies of Prenatal Medicine were constituted in several Latin-American countries.

The majority of the most prestigious perinatologists from all over the world, that often visited Montevideo, were friends of his: Saling, Quilligan, James, Hon, Kubli, Adamsons, Towel, Cibils, Zuspan, Esteban-Altirriba, etc. Some of them were considered to be his disciples. As a logical consequence of his international prestige and moral authority, he culminated his professional career in 1976, when he was appointed President of the International Federation of Gynecology and Obstetrics (FIGO).

He died in Montevideo in 1996, after a long deteriorating illness.

José M. Carrera



Prof. Dr. med. Konrad Hammacher, one of «Fathers» of the Cardiotocography, was born in January 29, 1928 in Essen in Germany. He graduated in University medical school and passed state examination in Bonn in 1955, obtained full approbation in 1956 and Doctor title in 1957.

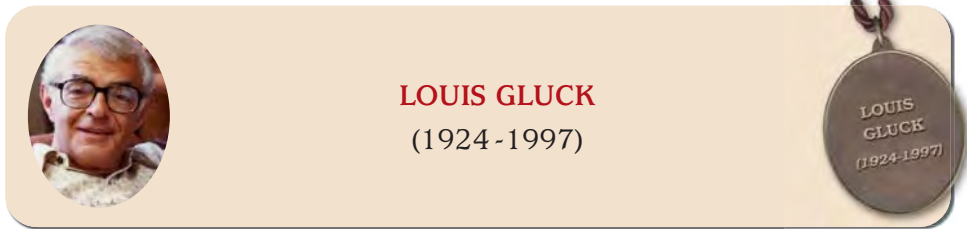
He entered in the Department of Gynecology of Düsseldorf University where he worked on the apparatus to acoustically obtain and record fetal heart tone. He reported a clinically applicable fetal heart rate (FHR) tracing method in collaborative studies of physiological Institute of Münster University and Department of Gynecology of Düsseldorf Medical Academy in 1962, and the significance of beat-to-beat variation of FHR in 1968. He studied non-invasive external fetal heart rate (FHR) tracing with the signal formed from the 1st and 2nd fetal heart tones at the maternal abdomen. The uterine contraction was recorded simultaneously with external tocodynamometry in his unique «Kardiotographie», while other authorities, Roberto Caldeyro-Barcia in Montevideo and Edward H. Hon in California utilized ECG signals obtained by direct electrodes for the FHR tracing, e.g. Hon recommended fetal scalp spiral electrode for the FHR and intrauterine catheter for the labor contraction. Maeda also applied fetal heart tones to obtain fetal heart beat for the FHR tracing with a tachogram, and contraction was recorded by external tocodynamometry in 1960s. Hammacher and Maeda reported their external fetal monitoring in the 7th International Conference on Medical and Biological Engineering held in Stockholm in 1967. The monitoring method was further improved in modern fetal monitor by the ultrasonic Doppler fetal heart signal and autocorrelation heart rate meter to achieve non-invasive external monitoring of the fetus during pregnancy and labor.

He returned to Düsseldorf University, obtained titles of specialist and «Oberarzt». He went to the Department of Gynecology of Basel University. He had his scientific interests in the bio-medical fields of Hoffman-LaRoche and studied feedback heating PO₂ electrode in the measurement of partial pressure of oxygen.

He was appointed to the Ordinarius, Professor and Chairman of the II Department of Gynecology and Obstetrics in the University of Tübingen in April of 1977. He had to retire early in November 1985 due to health problems. He was awarded with particularly high grade order of Germany.

Prof. Hammacher passed away in October 4, 2001, when he was 73 years old.

Kazuo Maeda



Louis Gluck was born in Newark and graduated from Rutgers University in 1948. He received his medical degree from the University of Chicago.

Working at the Yale University School of Medicine in the 1960's, Dr. Gluck developed a radical design for a nursery for ill full-term babies and premature babies.

After having worked at Yale, he also established an intensive-care program at the University of California at San Diego. Later, he was a professor at the College of Medicine at the University of California at Irvine.

Dr. Gluck is among the major founders of neonatology, he created the basic concept of intensive care for newborns. At the time, premature infants were often isolated in small cubicles. They had little direct contact with doctors and nurses and none with parents because of a fear of airborne infections from staphylococcus and other bacteria. But Dr. Gluck, based on his research on the spread of infection in newborns, was certain that the problem lay elsewhere. He basically thought if you washed your hands, you didn't have to worry much about staph infection.

Dr. Gluck was also instrumental in developing the L/S ratio, a test to determine whether a fetus's lungs were mature. He showed that when the lungs were fully developed, the ratio of two fatty substances (lecithin and sphingomyelin) in the amniotic fluid changed. This discovery made him world famous and represented an important step forward in understanding the function of human surfactant. His unit at University of California San Diego therefore became a major center for surfactant research and many of his fellows, both international and national ones, strongly have influenced the development in this field. Among many international awards he was the recipient of the Arvo Ylppö medal in 1977.

Ola Saugstad



L. STANLEY JAMES
(1924-1994)



For the reverse side of my academic medal which I wear as a Regular Fellow and as the President of the International Academy of Perinatal Medicine, I have chosen Prof. L. Stanley James as my historic person, who in former times worked at the Department of Pediatrics at Columbia University New York.

Stanley, as an outstanding neonatologist and I, as an obstetrician of the new generation and as a prenatalologist, had a good relationship with each other, because of similar scientific and clinical engagements. We met for the first time when we both took part at the first historic International Symposium in Oct. 1964 in Montevideo, where representatives from the field of fetal heart-rate recording (Roberto Caldeyro Barcia, Uruguay and Edward Hon, USA) got together with representatives of the measurement of acid based balance in the fetus (myself) and in the newborn (Stanley James).

My respect for his outstanding scientific contributions made me chose him as the honoured person for my academic medal.

The following short text contains some extracts of his biography published by the L. Stanley James Perinatal Research Fund:

Stanley James (1924-1994) has been widely considered as one of the founders of modern perinatology and a pioneering researcher in the physiology of newborn infants for more than 30 years.

His identification of key factors that adversely influence newborns, such as acidosis of birth asphyxia and the pulmonary and arterial changes at the birth, helped improve the care of newborns, specifically resuscitation and management of asphyxiation. After Virginia Apgar developed the Apgar score, a widely used system to assess infant condition following delivery, Stanley James conducted research with Apgar that established a scientific basis for the score. Their research also showed the score could be used to evaluate different methods of newborn resuscitation.

Erich Saling



BERNHARD ZONDEK
(1891-1966)



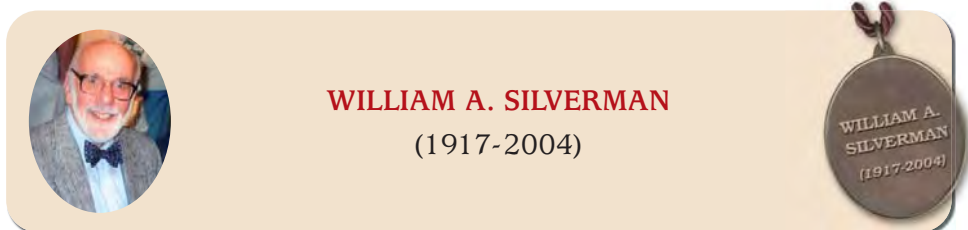
German obstetrician and gynecologist. He studied at Berlin, where he obtained his doctorate in 1919. He became assistant under Karl Franz (1870-1926) at the university women's clinic in the Berlin Charité, where he was habilitated for obstetrics and gynecology.

cology in 1923. In 1926 he became *ausserordentlicher professor*, and in 1929 physician-in-chief at the department of obstetrics and gynecology in the municipal hospital of Berlin-Spandau. When the Nazis came to power in 1933 he was dismissed from his posts and he left Germany for Stockholm. In 1940 he moved to Jerusalem where he was appointed professor of obstetrics and gynecology at the Hebrew University, and head of obstetrics and gynecology at the Hadassah Hospital.

He was one of the proponents of the inter-dependence of the endocrine glands under the guiding hand of the pituitary and his studies on pituitary-ovary interaction did much to establish this fundamental tenet. He established that the chorionic tissue of the placenta had endocrine capacity and this led to diagnostic techniques important for the recognition and treatment of hydatiform mole and chorionic carcinoma.

In 1928 in collaboration with Ascheim he achieved the isolation of the gonadotropic hormone. Both of them created a test known as the A-Z Test; this very first scientific pregnancy test was developed in Germany. It involved several subcutaneous injections of varying amounts of a woman's urine into the backs of immature female mice weighing between five and eight grams. One hundred hours after the first injection, the mice were killed and the ovaries were examined.

Zondek was the first person to describe the ovarian hormone and earned worldwide renown for discovering gonadotropins.



Dr. Silverman, who died December 16, 2004 at the age of 87, was a major figure in the field of pediatrics and neonatology and was one of the founders of American Neonatal Medicine. He established one of the first specialty units for premature infants at Columbia University in New York and conducted classical series of controlled trials. Major contributions include studies on neonatal thermoregulation and the discovery that sulphenamides can interfere lethally with bilirubin binding. He was well known for raising troubling questions about the scientific basis and ethics of what neonatologists were doing to the infants.

Throughout his professional life, Dr. Silverman fought to clarify ideas and challenged what he thought were insufficiently proven therapies. He had a provocative mind and was admired for his major contributions in trying to clarify controversial issues which arose in the field of neonatal/perinatal medicine.

Apostolos Papageorgiou



SIR GRAHAM LIGGINS

(1917-2005)



Emeritus Professor of The University of Auckland, Sir Graham Liggins, one of New Zealand's most highly respected and internationally renowned medical research scientists, pioneered research into the fetus and newborn. His work demonstrated the power of a brilliant mind to recognise the unexpected, to perform fundamental biomedical research and to rapidly translate it into clinical research, followed by clinical application.

He showed that giving steroids to women experiencing early labour could accelerate infant lung development enough to enable premature newborn babies to breathe independently. His work, which led to a much deeper understanding of the birth process, transformed the practice of neonatology and led to dramatically improved survival rates among premature babies all over the world. His technique is now standard obstetric practice.

Sir Graham and his work have been a source of inspiration to the founding scientists at the Institute that is proud to bear his name.

Sir Graham Liggins passed away in 2005.



SIR WILLIAM LILEY

(1929-1983)



Albert William (Bill) Liley received his MB ChB from Otago University, Dunedin (New Zealand) in 1954. Under the guidance of the neurophysiologist Professor J. C. Eccles (1903-1997), he carried out major research on neuromuscular transmission both as an undergraduate at Otago University and as a postgraduate at the Australian National University at Canberra. In 1957 Bill Liley switched to research in obstetrics at the Women's National Hospital at Auckland in New Zealand. He refined the diagnostic procedure for Rh haemolytic disease of the newborn and was able to predict its severity. Liley developed the technique of intrauterine transfusion of rhesus-negative blood for severely affected fetuses and led the team which carried out the first successful fetal transfusions in the world. He was a passionate advocate of the medical and societal rights of the unborn child.

From his primary school days onwards his intellectual capacity had been obvious and he distinguished himself in his years at Auckland University and at Otago. He was gold medallist in anatomy in 1950, obtained a Senior Scholarship in medicine and was awarded the Travelling Scholarship in medicine in 1954. Together with many of that generation he was inspired to enter a career in medical science through the opportunity to

undertake a Bachelor of Medical Science under then Professor, later Sir John, Carew Eccles. Together with Ken North, he undertook some pioneering work in neurophysiology and he maintained strong contact with Eccles and the Department of Physiology whilst completing his MBChB degrees.

He undertook the final year of his medical course in Auckland and came under the influence of Professor Harvey Carey who recognised Bill Liley for his intellectual qualities, his capacity for lateral thinking, enthusiasm and depth of compassion.

Bill Liley took up a research scholarship in physiology at the Australian National University and worked on various aspects of synaptic transmission. During this period he published four papers in the *Journal of Physiology*, an outstanding achievement for a recently qualified medical graduate from New Zealand. These were single-author papers, a tribute to Liley and to Eccles and the environment he had created in Canberra.

From 1958 until the time of his premature death in 1983, he held a series of appointments within the Medical Research Council of New Zealand and the University of Auckland. In 1968 he was appointed to a Personal Chair in Perinatal Physiology at the Postgraduate School of Obstetrics and Gynaecology in the University of Auckland.

In 1965 he took his only extended period of overseas leave when he accepted a position at the Columbia University College of Physicians and Surgeons in New York during the tenure of a US Public Health Service international post-doctoral research fellowship. In 1967 he was awarded CMG and in 1973 was made KCMG.

He was particularly attracted to the problems of unborn and newly born children. Although he did not follow a classical career as a newly qualified doctor, he remained a dedicated and compassionate medical professional. He also recognised the need in all forms of science to select and concentrate his energy on one major issue. He chose what was then (and still is) known as Rh haemolytic disease of the newborn. His approach to the problem typified his ability to stand back at each stage, review scientific progress and assess what issues remained and to put them into perspective. He was a meticulous clinical investigator checking each step carefully as he went. Equally, he had an hypothesis clearly in mind which he was testing at each stage. The problem of Rh haemolytic disease was a major issue in obstetrics, partly because some basic knowledge had been developed in the 1940s and early 50s. At the time he entered the field, perinatal mortality was about 25 %, quite clearly an unacceptable situation.

Liley extended spectrophotometry of amniotic fluid to a much wider range of potentially affected pregnancies, thus establishing a sound epidemiological base which he could relate to the erection of hypotheses aimed at improving diagnosis and management. He believed this was one of his main contributions to obstetrics and he certainly rapidly gained an international reputation for this work. In particular, because of his work, it was now possible to identify which baby could be retained safely in utero for a normal gestation period and which should be delivered. This diagnostic precision resulted in a fall of perinatal mortality from haemolytic disease to 8 % at the National Women's Hospital. However, it was clearly not possible on that basis alone to further reduce the mortality.

Liley's clinical investigation extended well beyond the issues raised by Rh haemolytic disease. He thought hard and worked hard on the very important problems of what was formerly called toxæmia of pregnancy, with its frequent tragic outcomes. His sound background in physiology served him well as he explored the relationships between blood volume, weight gain and rising blood pressure in pregnant women. His reading covered

an enormous range, he consulted widely and spent much time thinking, in his attempts to produce an embracing hypothesis which could solve these problems, which are still not covered even today, by a unifying hypothesis.

He was elected a Fellow of the Royal Society of New Zealand in 1965 and was a Fellows' Councillor in 1971 and between 1973 and 1978. He was a member of the WHO Expert Advisory Panel on maternal and child health from 1968 until his death.

He became an Honorary Fellow of the American College of Obstetricians and Gynaecologists in 1975 (elected), he was a member of the Medical Research Council of New Zealand between 1972 and 1978 and Chairman of the South Pacific Committee between 1973 and 1978. In 1980 he was appointed a member of the International Association for Advice and Research on Mental Deficiency and was Chairman of the Scientific Council of that association from 1980 until his death. He was elected Honorary Foreign Fellow of the Chicago Gynaecological Society in 1965 and of the New Jersey Obstetrical Society in 1966. In 1972 he was elected to Honorary Life Membership of the Paediatric Society of New Zealand and in 1977 elected to Honorary Membership of the Neonatal Society of the United Kingdom.

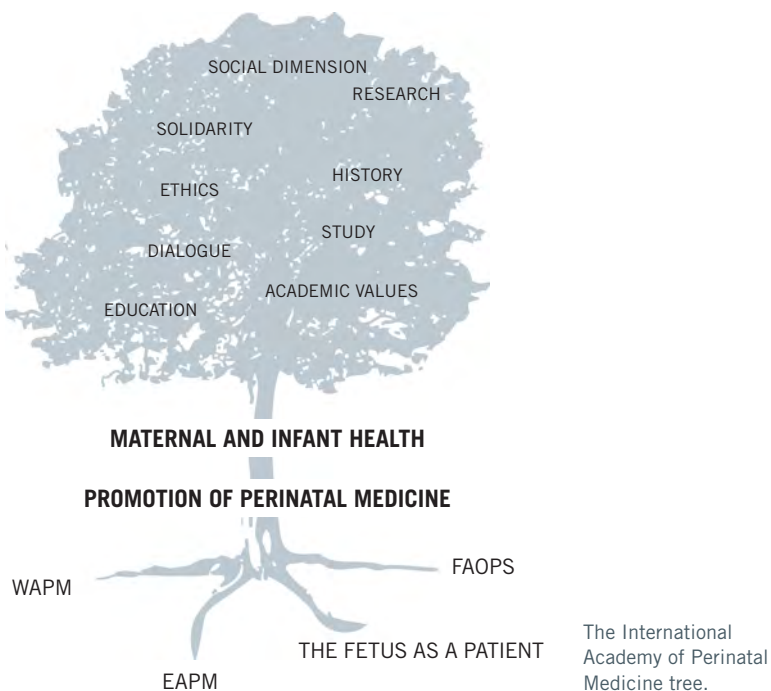
Sir John Scott

chapter 3

**IDENTITY AND MISSION
OF INTERNATIONAL
ACADEMY OF PERINATAL
MEDICINE (IAPM)**

THE ROOTS OF THE ACADEMY

The roots of the IAPM are firmly set on the fertile soil of three internationally renowned scientific societies, that have served as sponsors of its foundation.



They are:

1. **THE WORLD ASSOCIATION OF PERINATAL MEDICINE (WAPM)**, which brings together specialists of Perinatal Medicine from all over the world; it was founded in Tokyo (Japan)



Prof. Asim Kurjak reads the names of the regular fellows proposed by the World Association of Perinatal Medicine (Foundational Ceremony, 2005).

on November the 6th, 1991. Their Presidents have been: Prof. Schouichi Sakamoto (Japan), Prof. Ermelando Cosmi (Italy), Fredrick C. Battaglia (USA), Prof. Asim Kurjak (Croatia), Prof. Manuel R. G. Carrapato (Portugal), Frank A. Chervank (USA), Aris Antsaklis (Greece), Milan Stanojević (Croatia) and Cihat Sen (Turkey). Up to now there have been 15 world congresses (Tokyo, Roma, Buenos Aires, San Francisco, Barcelona, Osaka, Zagreb, Florence, Berlin, Moscow, Madrid, Belgrade and Istanbul 2019 and 2021). Its official journal is «The Journal of Perinatal Medicine» led by J. W. Dudenhausen (W. de Gruyter, Berlin).

2. **THE EUROPEAN ASSOCIATION OF PERINATAL MEDICINE**, founded in Berlin by Prof. E. Saling on March the 30th, 1969, during the 1st European Congress of Perinatal Medicine.



Prof. Aris Antsaklis reads the names of the regular fellows proposed by European Association of Perinatal Medicine (Foundational Ceremony, 2005).

It is composed of several very active Study Groups and it organizes the European Congress of Perinatal Medicine every two years. Their Presidents have been: E. Saling (Berlin), L. S. Prod'Hom (Lausanne), Z. Stembera (Prague), G. Rooth (Uppsala), O. R. Thalhammer (Vienna), A. Ballabriga (Barcelona), F. Thierry (Gent), J. Alvey (Dublin), A. Jahrig (Greifswald), E. V. Cosmi (Perugia), J. M. Thoulon (Lyon), J. G. Koppe (Amsterdam), K. O. Raivio (Helsinki), F. Cockburn (Glasgow), A. Kurjak (Zagreb), M. Carrapato (Porto), O. R. Saugstad (Oslo), A. Antsaklis (Athens), H. Haliday (Belfast) and Cihat Sen (Istanbul).

Until now it has organized 20 European congresses: Berlin, London, Lausanne, Prague, Uppsala, Vienna, Barcelona, Brussels, Dublin, Leipzig, Rome, Lyon, Amsterdam, Helsinki, Glasgow, Zagreb, Porto, Oslo, Athens, Prague and Istanbul (2008). Its official magazine «The Journal of Maternal Fetal and Neonatal Medicine» is headed by G. C. Di Renzo and Dev Maulik.

3. **THE INTERNATIONAL SOCIETY «THE FETUS AS A PATIENT»**; this Society was founded in 1984 by a very prestigious group of Perinatal Medicine specialist, including Profs. S. Campbell (UK), J. Dudenhausen (Germany), M. Hansmann (Germany), P. Jouppila (Finland), K. Maeda (Japan), Z. Papp (Hungary), J. G. Schencker (Israel), I. Timor Tritsh (USA) and J. Wladimiroff (The Netherlands).

The founder and first President was Prof. Asim Kurjak (Croatia). Later on several experts from all over the world joined that first group, and now there are 50 members. At present the President of the Society is Prof. F. A. Chervenak. The Society holds an annual International Congress as well as several Advanced Training Courses for post-graduates in Maternal Fetal Medicine. Some of the courses take place in developing countries. On the other hand, The Society periodically publishes a book entitled «The fetus as a Patient» which summarises the most important lectures presented at the aforesaid congresses. The official journal is «Fetal Diagnosis and Therapy» led by W. Holzgreve (Karger Basel).



Prof. Frank Chervenak reads the names of the regular fellows proposed by the International Society «The Fetus as a Patient» (Foundational Ceremony, 2005).

The Society has organized congresses in: Sveti Stefan (Yugoslavia), Jerusalem (Israel), Matsue (Japan), Bari (Italy), Paris (France), Detroit (USA), Bonn (Germany), Oulu (Finland), Fuji (Japan), Brijuni (Croatia), New York (USA), Grado (Italy), Basel (Switzerland), Amsterdam (The Netherlands), New York (USA), Fiuggi (Italy), Pattaya (Thailand), Budapest (Hungary), Barcelona (Spain), Fukuoka (Japan), Buenos Aires (Argentina), Sveti Stefan (Montenegro), Poznan (Poland), Manila (Philippines), Frankfurt (Germany), etc.

With the inclusion of Prof. M. Nishida to the Board of Directors of the IAPM, the prestigious **FEDERATION OF ASIA AND OCEANIA PERINATAL SOCIETIES (FAOPS)** founded in 1980 and including seventeen countries is also represented in our Academy.

THE ACADEMY SPONSORS

It is an old tradition that new academies (both domestic and international) be sponsored by an old Academy. In the case of IAPM this function has done by the **ROYAL ACADEMY OF MEDICINE OF CATALONIA** (Reial Academia de Medicina de Catalunya).

The Royal Academy of Medicine of Catalonia was created in 1770, receiving in 1785 the privilege to be called «Royal». The Academy is composed by 60 academic Fellows, 20 honorary Fellows and 120 corresponding members. Besides it has an unlimited number of foreign corresponding members.

At present, and since 1929, the headquarters of this Royal Academy reside in the building which was formerly the Royal College of Surgery of Barcelona (dating back to 1764). It is one of the most important buildings of the neoclassical architecture in Barcelona. Regular fellows of the Royal Academy have been the most prestigious personalities of Medicine and Biology of Catalonia.

Its current President, Professor Jacint Corbella, offered all facilities for the Foundational Ceremony of the IAPM, so that it could take place at its headquarters. And in his capacity of President of the Academy he was the president of the foundational ceremony. Moreover two of its regular fellows served as academic godfathers (J. M. Dexeus and A. Ballabriga). To reward this excellent collaboration the IAMP appointed Prof. Jacint Corbella and José M. Dexeus honorary fellows and the Royal Academy reciprocated appointing corresponding fellows to Professor Erich Saling, president of the IAPM. This last took solemn possession of his post in November 2006, in the Amphitheatre Gimbernat, in the course of the second meeting of the IAPM.



President of «the Royal Academy of Medicine of Catalonia», Prof. Jacint Corbella.

MISSION

The mission of the International Academy of Perinatal Medicine is guided by the international ethical concept of fiduciary responsibility to protect and promote the health of pregnant women, fetal patients, and newborns globally. In adopting this ethical concept as its foundation, the Academy seeks to transcend differences of national origin, history, religion, ethnicity, gender and race.

In furtherance of this mission, the Academy is committed to provide evidence-based and ethically justified advice on scientific, clinical, research, and health policy matters related to perinatal medicine. A nonprofit organization was specifically created for this purpose (as well as an honorific membership organization): the International Academy of Perinatal Medicine, chartered in May 2005, in a meeting at the Headquarters of the Royal Academy of Medicine of Catalonia in Barcelona, Spain.

The Academy provides its advice independently of the framework of other professional organizations and of governments, to ensure scientifically and ethically justified information concerning health and policy to physicians, leaders of healthcare organizations, government officials, and the broader public globally concerning all aspects of perinatal medicine (F. A. Chervenak and L. McCullough).

THE ORIGIN OF THE ACADEMIES

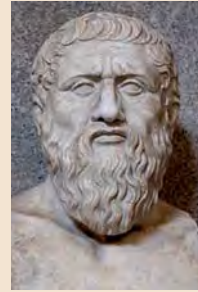
An academy is an institution designed to promote the progress of letters, arts and science, drawing on the experience of its members, who use, following Plato, dialogue, reflection and study to achieve its objectives.

The name comes from the Plato Philosophical School, called Academy to honour the attic hero Academ (Athens 387 a. C.) where there was a community dedicated to the study of mathematics, astronomy, music and general science. Being inspired in this spirit and in the methodology proposed with «The dialogs» in the fifteenth century appeared the first modern academies, mostly of philosophical nature (Platonic Academy of Florence, Roman Academy, Bostonian Academy, etc.). During the seventeenth century new academies were created with a stronger scientific or cultural roots, most of which still persist, like for example the Académie Française (1635), British Academy (1662), Deutsche Akademie der Wissenschaften (1700), the Spanish Academy (1714) or the Russian Academy of Sciences (1725) etc.

Finally, in the course of the eighteenth and nineteenth centuries most of the Medicine academies were founded; among them we wish to mention the Academy of Medicine of Catalonia, whose neoclassical building sheltered the Foundational Ceremony of the IAPM.

First rationalism (seventeenth century) and then supporters of the Age of Enlightenment (eighteenth century), inspired the creation of the new academies. The «reason why» constitutes the basic belief of its members. They dropped the Revelation as a scientific explanation and looked for «the knowledge» by reading the book of Nature and not the Holy Scriptures.

An Academy differs from a Society or Association due to some basic features: the rigorous selection of their regular-fellows (sometimes the academic title is the coronation of a lifetime devoted to science), the «numerus clausus», the lifelong and sable character of its membership (although their officials are renewable), the liking of the ceremonial aspects as for example the oath of the newly appointed members, the emphasis on the cultivation of history, bioethics and the philosophy of science, the desire to influence in the general society through solemn declarations and statements and the thrust of science through sound reflection, clarifying discussion and calm reasoning analysis of the problems. Ultimately an Academy wants become the critical spirit and conscience of the scientific community.



IDENTITY

As it is stated in art. 1 of the Constitution of the IAPM (International Perinatal Academy of Medicine) it is a scientific, international and independent nonprofit academic institution for the study, evaluation, dialogue and promotion of Perinatal Medicine across the world.

SPECIFICS CHARACTERISTICS

The IAPM has among its identity credits:

1. The wish to promote knowledge of Perinatal Medicine and its clinical and technological applications, placing special emphasis on its social, ethical and anthropological dimensions.
2. The application of the values, the style and the outstanding academic principles (love for science, seriousness, mutual respect, freedom, independence etc.) to enrich the dialogue between controversial ideas and views in the field of Perinatal Medicine.
3. To offer objective and independent advice to institutions and to the general public of the world's scientific society on problems and dilemmas about Perinatal Medicine, making use of its moral authority, and promoting the basic principles of charity, justice and autonomy.
4. The publication of statements demanding that the human reproductive process takes place, anywhere in the world, in terms of physical mental and social well-being, both for the mother and the child, overriding the brutal current imbalances.
5. The will to provide perinatologists all over the world with suitable tools (recommendations and guidelines) to help to develop their task within parameters of excellence, and cultivate their knowledge on the history of perinatal medicine, terminology and bioethics.

OBJECTIVES OF THE IAPM

According to the art. 3 of the Constitution of the IAPM, the objectives of the Academy are as follows:

1. To promote **the study** of scientific principles and practical applications in the area of Perinatal Medicine. For this purpose it will create in its bosom adequate «Study Groups» to investigate and reflect on specific problems. Its findings will be released in the form of statements, recommendations and/or guidelines.
2. To promote **research and education** in the field of Reproductive Health, conducting courses and workshops either by itself or through sister organizations (Ian Donald School of Ultrasonography, World School of Perinatal Medicine, etc.).

3. To develop and improve the **exchange of information and dialogue**, in accordance with the academic principles mentioned, convening an Annual Scientific Conference to discuss the most current and conflicting issues.
4. To foster **international aid to developing countries** to actively promote maternal and child health care across the world. This objective shall be done through «Matres Mundi International».
5. To maintain an adequate **relationship with societies and institutions** involved in Perinatal Medicine.

CORPORATE IMAGE

The **logo of IAPM**, designed by Issa Maristany and Helena Agusti, brings together the items that symbolize the objectives of the Academy: a pregnant mother with a child in her arms. The figure is circumvolved by the inscriptions INTERNATIONAL ACADEMY (above) and OF PERINATAL MEDICINE (below).

The **Academic medal** has been designed by the sculptor artist Helena Agusti Maragall (signed HA). It has the dimensions of $6.5 \times 5.5 \times 0.4$ cm and reproduces in relief the same elements as the logo. On its back stands the name of a historical world personality in Obstetrics and Paediatrics.



Logo of the International Academy of Perinatal Medicine.



Academic medal.

It is a bronze medal exclusively created by order and courtesy of IAPM. The artist certifies that medal is unique and different. No medal is exactly alike to the others.

In the careful pigmentation process, the pieces are hand treated in an individual manner for each unit. The bronze during the end treatment reacts in a specific way for each medal, which is the reason of its uniqueness and exclusive shade.

At the finishing process, every one medal is hand finished with natural clays and wax polish.

Masterpiece creation, as well as production process control and pigmentation of each sculpture, has been personally executed by the artist.

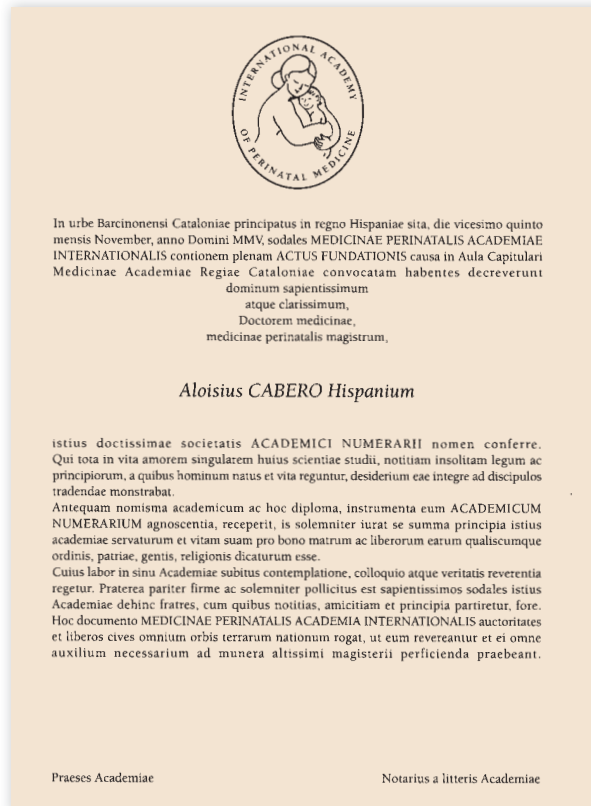
The Academic Medal is not only regularly used by the regular fellows in academic solemn acts, but also at times when their holders act as representatives of the IAPM.

The **academic diploma**, designed and produced by Alex Ventura, is written in Latin on special paper (parchment). Under the logo of the Academy there is the description of the city, country, date and place plus the persons convened and, immediately after, the name of the regular fellow awarded. Below it mention is made of the merits of the nominee that has become creditor of such high distinction, while it is appealed of him to fulfil what he has promised in his oath.

Finally the authorities of all nations are requested to assist and facilitate the work of such high personality.

The President of the Academy, «Praeses Academiae», and the Secretary General of the same in the function «Notarius litteris Academiae» sign the document. The hallmark of the Academy is stamped between the two signatures.

The document is included and adhered to a black folder that exhibits the coat or logo of the Academy in gold.



Academic diploma.

The **web-site** of IAPM is:
www.iaperinatalmedicine.org

THE ACADEMIC DRESS STYLE

Frac (dress coat) is the usual uniform of the regular academic fellows of the IAPM.

The colour of the tail coat itself is to be black, with satin lapel of the same colour. The vest is white pique and may be of a single row or crossed. The sides of it are to be hidden under the jacket. The ribbon or bow tie is usually black during the academic acts.

The shirt of turned neck, to be starched, as well as the vest and the cuffs. The use of cufflinks is mandatory as well as the set of gala buttons.

The pantaloons or trousers must be tall of setting, with folds but no turnings, made of the same cloth as the tail coat, and with a silk or satin ribbon at the sides of the outer trouser legs. If a sash is used, it must be black and satin.

Socks and varnished shoes in full black.

The uniform is completed with the IAPM academic medal, and if wished other badges and insignia may be worn, but not other academic medals, like university medal, etc.

The women's regular fellows academic dress is a black evening gown.

In the founding act of the IAPM, the regular fellows to be wore also on their coats the emblem or logo of the scientific Society of provenance. The sash of the members proposed by WAPM was yellow, that of the EAPM was blue, and those of the International Society «The Fetus as a Patient» was red.

These sashes, ostentatiously identifying the institutional sources was withdrawn by the Secretary-General of WAPM, acting as notary of the institution, before imposing the medal to each member. With this gesture he symbolized that from that moment on, the new regular fellows changed its responsibilities and loyalties.



Academic uniform. Dress coat.

GAUDEAMUS IGITUR

This song based on a Latin text of the thirteenth century, of goliardic origin, is currently regarded as the academic and international university anthem. For this reason is the official anthem of the majority of the European universities and also of the International Academies and the «Universiadas».

Is alleged stemming from the thirteenth century is apparently based solely on a Latin manuscript dated 1287 at the Bibliothèque Nationale, Paris, which Erk-Böhme and evidently others have not looked at.

The words of two of the verses of the poem commencing «Scribere proposui» are nearly identical to the words of two of the later verses in «Gaudeamus Igitur» but the words «Gaudeamus Igitur» nowhere appear; the words of the all-important first «Gaudeamus Igitur» verse are absent; and most important, there is music in the manuscript, but it bears no resemblance whatsoever to the well-known melody.

A German translation of all the verses was made about 1717 by Johann Christian Günther commencing «Brüder, laßt uns lustig sein,» and this German text, without music, was printed in «Sammlung von Johann Cristian Günthers» (Frankfurt and Leipzig, 1730).

Apart from the 1267 Latin manuscript of the 2 and 3 verses mentioned above, the oldest known version of the Latin words is in a handwritten student songbook between 1723 and 1750 now at the westdeutsche Bibliothek, Marburg; it differs considerably from the present version. The first appearance of the modern version of the Latin words is in «Studentenlieder» by C. W. Kindleben, published in Halle in 1781. No copy of this work has been located, but an 1894 facsimile reprint is at Harvard University.

The author of the music is Johann Christian Grünther (1717) but the first known printing of the present melody is in «Leider für Freunde der Geselligen Freude», published in Leipzig in 1788.

Musical notation of Gaudeamus Igitur

The musical notation consists of four staves. The top three staves are for vocal parts (Soprano, Alto, and Tenor) and the bottom staff is for the Bass. The music is in 3/4 time and features a key signature of one flat (B-flat). The lyrics are written below each staff, with some words underlined to indicate syllable placement. The lyrics are as follows:

1. Gau-de-a-mus i-gi-tur	ju-ve-nes dum su-mus,	post ju-cun-dam ju-ven-tu-tem,
2. U-bi sunt qui an-te-nos	in mun-do fue-re.	A-de-as ad in-fe-ros.
3. Vi-vat A-ca-de-mi-a,	vi-vant pro-fes-so-res,	vi-vat mem-brum quod-li-bet,

The lyrics are repeated for each of the three vocal parts and the bass line.

Text of the Anthem

LATIN

I: Gaudeamus igitur,
Juvenes dum sumus; :|
Post jucundam juventutem,
Post molestam senectutem
I: Nos habebit humus! :|

I: Ubi sunt qui ante
Nos in mundo fuere? :|
Vadite ad superos,
Transite ad inferos,
I: Hos si vis videre. :|

I: Vita nostra brevis est,
Brevi finietur, :|
Venit mors velociter,
Rapit nos atrociter,
I: Nemini parcetur. :|

I: Vivat academia,
Vivant professores, :|
Vivat membrum quodlibet,
Vivant membra quaelibet,
I: Semper sint in flore! :|

I: Vivat et respublica
Et qui illam regit, :|
Vivat nostra civitas,
Maecenatum caritas,
I: Quae nos hic protegit! :|

I: Pereat tristitia,
Pereant osiores, :|
Pereat diabolus,
Quivis antibursarius,
I: Atque irrisores! :|

I: Quis confluxus hodie
Academicorum? :|
E longinquo convenerunt,
Protinusque successerunt
I: In commune forum; :|

I: Vivat nostra societas,
Vivant studiosi :|
Crescat una veritas,
Floreat fraternitas,
I: Patriae prosperitas. :|

I: Alma Mater floreat,
Quae nos educavit; :|
Caros et commilitones,
Dissitas in regiones
I: Sparsos, congregavit; :|

ENGLISH

I: While we're young, let us rejoice,
Singing out in gleeful tones; :|
After youth's delightful frolic,
And old age (so melancholic!),
I: Earth will cover our bones. :|

I: Where are those who trod this globe
In the years before us? :|
They in hellish fires below,
Or in Heaven's kindly glow,
I: Swell th' eternal chorus. :|

I: Life is short and all too soon
We emit our final gasp; :|
Death ere long is on our back;
Terrible is his attack;
I: None escapes his dread grasp. :|

I: Long live our academy,
Teachers whom we cherish; :|
Long live all the graduates,
And the undergraduates;
I: Ever may they flourish. :|

I: Long live our Republic and
The gentlefolk who lead us; :|
May the ones who hold the purse
Be always ready to disburse
I: Funds required to feed us. :|

I: Down with sadness, down with gloom,
Down with all who hate us; :|
Down with those who criticize,
Look with envy in their eyes,
I: Scoff, mock and berate us. :|

I: Why has such a multitude
Come here during winter break? :|
Despite distance, despite weather,
They have gathered here together
I: For Philology's sake. :|

I: Long live our society,
Scholars wise and learn-ed; :|
May truth and sincerity
Nourish our fraternity
I: And our land's prosperity. :|

I: May our Alma Mater thrive,
A font of education; :|
Friends and colleagues, where'er they are,
Whether near or from afar,
I: Heed her invitation. :|

chapter 4

**HISTORY
OF INTERNATIONAL
ACADEMY OF PERINATAL
MEDICINE (IAPM):
The foundation**

PREPARATION OF THE FOUNDATION OF IAPM: SLOW MATURATION OF AN IDEA

The idea of founding an academic institution that would get together most of the outstanding personalities of the world's Perinatal Medicine, came up for the first time in *Osaka*, Japan, in 2003, on occasion of the 6th World Congress of Perinatal Medicine. The newly appointed secretary general of the WAPM, Dr. José M. Carrera, during an informal dinner with a small group of friends belonging to several scientific societies (WAPM, EAPM, FAOPS, The Fetus as a Patient) convinced them of the need for an institution whose mission would go beyond that of the Scientific Societies to which they belonged and could serve as a space for reflection and dialogue, a corporation such as a stable Senate that would pick up personalities from all over the world.

It was proposed, among other things, that this corporation ought to be the conscience of the world's Perinatology. The majority of the present, among them profs. Kurjak, Chervernak and Antsaklis, reflected positively on the idea and requested Prof. J. M. Carrera to explore possibilities, to work in a theoretical project that could be presented in an elaborated way in the next Congress of the international Society the «The Fetus as a Patient», that was to be celebrated in April of the following year, 2004, in Fukuoka, Japan.

Indeed on *April* the 23rd a Brainstorming took place in *Fukuoka*, attended by several members of the directorate of the International Society «The Fetus as a Patient» and in the course of which the item «proposal of the foundation of an International Academy of Perinatal Medicine» was presented by Dr. J. M. Carrera, who distributed a very meditated report about how the project could take place (justification, patronage, Academy sponsor, historical names for academic medals, badges, organization of the founding act, etc.).

The project was briefly reviewed and the presidents of the three major societies (WAPM, EAPM, and The Fetus as a Patient) decided to postpone the final decision until later to have time to collect the opinions of some of the personalities present.



Informal meeting in Fukuoka. Japan, April 2004.

In *November 2004*, at a meeting in *Budapest (Hungary)*, under the auspices of Prof. Zoltan Papp, the three presidents (Profs. Asim Kurjak, Aris Antsaklis and Frank Chervenak) successfully agreed to start the project, and produced a list of potential fellows, establishing the grounds for a possible Constitution, appointing a commission to develop a draft of the same. It was also decided that the founding act would be held in *Barcelona*, organized by Professor J. M. Carrera.



Meeting in Budapest, Hungary, of the Presidents of the international societies and other personalities (Nov. 2004).



Invited speakers at the Course of the Hungarian Branch of «Ian Donald School». Profs. Mandruzzato, Chervenak, Carrera, Antsaklis, Papp, Kurjak and Holzgreve (Nov. 2004).

Finally, in *December 2004*, at a meeting convened by Frank Chervenak, which took place in *New York* in the Weill Cornell Medical Center, the texts for the founding of the International Academy of Perinatal Medicine (IAPM) were revised, amended and finally



Meeting of the Foundational Commission (New York, Dec. 2004).

approved, as well as the list of regular fellows and the composition of the Board of Directors. Of course all these decisions were provisory, since they had to be officially adopted or modified in a meeting prior to the Foundational Ceremony. This meeting was attended by the two authors of the draft Constitution (Profs. J. M. Carrera and A. Kurjak), Prof. Erich Saling (who, due to international prestige was considered the ideal person to preside the Academy), and Prof. Frank Chervenak, host of the meeting. For two days, this small committee connected by e-mail, fax and telephone with the rest of the personalities involved so to achieving a consensus on all the subjects covered. It was finally decided that the foundation act would take place on May the 25th 2005, in Barcelona.



World Association of Perinatal Medicine (WAPM)

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Past President
F. Borngain, USA

President Elect
M.R.G. Carrapato, Portugal

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Coordinators
W. Holzgreve, Switzerland

Educational Committee
Coordinators
K.H. Nicolaides, UK

Committee for Developing Countries
Coordinators
K. Maeda, Japan

Solidarity Committee
Coordinators
J.M. Carrera, Spain

Professeur Claudine Amiel-Tison
Service de Gynecologie Obstetrique Baudetocque
Groupe Hospitalier Cochin
123, Boulevard de Port Royal
75674 Paris CEDEX 14

Barcelona, 22 Dec. 2004

Dear Prof. Amiel- Tison

The World Association of Perinatal Medicine (WAPM), the European Association of Perinatal Medicine (EAPM) and the International Society of The Fetus as a Patient will inaugurate the "International Academy of Perinatal Medicine", in which leaders in Perinatal medicine can meet to dialogue concerning perinatal matters of global importance.

All invited members are international leaders in Perinatal Medicine whose number is limited. You have been chosen to be one of thirty invitees at the foundation of the academy on Wednesday, May 25th in Barcelona. The ceremony will take place in the Council Room of the Royal Academy of Medicine. Your accommodation will be sponsored. Please respond as soon as possible if you are willing to accept this invitation. As the academy is not meant to be an honorary society, your attendance will be necessary in order for you to be a fellow of the academy. We truly hope that you will work with us on this worthwhile and enjoyable endeavor. Please reply to Jose M. Carrera as soon as possible with your response to this invitation. Once you have accepted, further information on this project will be sent to you.

Until then, please receive our kind regards.

Prof. Asim Kurjak, MD
President of the World Association of Perinatal Medicine



Prof. Aris Antsaklis
President of the European Association of Perinatal Medicine



Prof. Frank Chervenak
President of the International Society The Fetus as a Patient



Prof. Jose M. Carrera
Secretary General of the Academy Foundation



President Office: Sveti Duh Hospital, Sveti Duh 64, 10000 Zagreb, CROATIA
Tel. + 385 1 3712-293 / Fax: + 385 1 374-35.34 / e-mail: asim.kurjak@public.sccc.hr

Secretary General Office: Dept. of Ob./Gyn. Institut Universitari Dexeus, Passag Bonanova, 67, 08017 Barcelona, SPAIN
Tel. + 34 93-2274705 / Fax: + 34 93 4147832 / e-mail: joscarr@dexesus.com

Treasurer Office: Clinic of Obstetrics, Neukölln Hospital, Marsdenstr. weg 28, 12051 Berlin, GERMANY
e-mail: sel.gabmed@kik-berlin.de

Invitation to be a member of the «International Academy of Perinatal Medicine».

To this end, the task to prepare its foundation (letters, invitations, performance of the Ceremonial Act) and starting-up was entrusted to the Secretary General of the WAPM.

LAS SOCIEDADES CIENTÍFICAS
WORLD ASSOCIATION OF PERINATAL MEDICINE
EUROPEAN ASSOCIATION OF PERINATAL MEDICINE
THE INTERNATIONAL SOCIETY "THE FETUS AS A PATIENT"

le invitan a Vd. a la

CEREMONIA FUNDACIONAL

de la **INTERNATIONAL ACADEMY OF PERINATAL MEDICINE**
que tendrá lugar en la **REAL ACADEMIA DE MEDICINA DE CATALUNYA**
el próximo día 25 de Mayo de 2005 a las 5 de la tarde

Asim Kurjak <i>President of WAPM</i>	Aris Antsaklis <i>President of EAPM</i>	Frank A. Chervenak <i>President of "The Fetus as a Patient"</i>	José M. Carrera <i>Secretary General of the Academy Foundation</i>
--	---	---	--

Barcelona, Mayo de 2005

Le rogamos comunique a los Tels. 93 227 47 05 (Sílvia) ó 93 227 47 09 (Victòria) antes del día 23 de Mayo, su intención de asistir a la Ceremonia.

Las puertas de acceso a la sala se abrirán a las 16.40 y se cerrarán a las 17 h. Después de la Ceremonia se ofrecerá un cocktail.

La invitación es personal e intransferible

Invitation to Foundational Ceremony (in Spanish).

**FOUNDATIONAL CEREMONY OF
INTERNATIONAL ACADEMY OF PERINATAL MEDICINE
(IAPM)**

*Ceremonia Fundacional de la
Academia Internacional de Medicina Perinatal*




Barcelona, Spain, May 25, 2005

ROYAL ACADEMY OF MEDICINE OF CATALONIA
Reial Acadèmia de Medicina de Catalunya
Carrer del Carme, 47

Programme of the
Foundational Ceremony.

Cover of the Programme
of the Foundational Ceremony.



INTERNATIONAL ACADEMY OF PERINATAL MEDICINE (IAPM)
FOUNDATIONAL CEREMONY
Ceremonia Fundacional
PROGRAMME
Programa

17.00 FIRST PART/ Primera Parte

- Establishment of the Presidency
Constitución de la Presidencia del Acto
- Entrance of Regular Fellowships nominated by the World Association of Perinatal Medicine (WAPM)
Entrada de los académicos propuestos por la WAPM
- Entrance of Regular Fellowships nominated by the European Association of Perinatal Medicine (EAPM)
Entrada de los académicos propuestos por la EAPM
- Entrance of Regular Fellowships nominated by the International Society "The Fetus as a Patient".
Entrada de los académicos propuestos por la Sociedad Internacional "The Fetus as a Patient".

United Nations Hymn: "El cant dels ocells"
Himno de las Naciones Unidas: "El cant dels ocells"

17.30 SECOND PART/Segunda Parte

- Solemn Oath of Fellowships
Solemne jurament de los Académicos
- Delivery of academic distinctive signs (medal and diploma)
Entrega de los símbolos académicos (medallas y diplomas)

European Hymn: Hymn to joy
Himno de Europa: El canto de la alegría

18.15 THIRD PART/Tercera Parte

- Election of Board of Directors
Elección de la Junta Directiva
- Designation of Honorary Fellows
Nombramiento de Miembros de Honor
- Closing of Ceremony
Clausura de la ceremonia

Gaudeamus igitur. Academic Hymn

19.15 COCKTAIL offered by the International Academy of Perinatal Medicine at yard of the Institute of Catalan Studies
Refrigerio ofrecido por la IAPM en el claustro del "Institut d'Estudis Catalans"

SIGNATURE OF ACADEMY DOCUMENTS

The signature took place in the library of the Royal Academy of Medicine of Catalonia, at 11 a.m. on May the 25th, 2005, in the presence of a notary public, Mr. Enrique Hernandez of the College of Notaries of Barcelona.

The event, attended by the future regular fellows, was chaired by Profs. Erich Saling, Asim Kurjak, Aris Antsaklis, Frank Chervenak and José M. Carrera. Mrs. Carolina Poblete and Isabel Rodriguez served as assistant secretaries expert on documentation.



Library of the Royal Academy: Signature of the Foundational Documents.

At the beginning of the event, Prof. José M. Carrera informed the attendants that «in order to give the necessary legality to the act, Mr. Enrique Hernandez, Notary Public of Barcelona, was to «attest everything that here is to happen and happens». All the documents to be signed to be fivefold. One copy for each of the three Societies, one copy for the notarial register and the last copy for the archives of our Academy.

Successively the following documents were signed:

1. FOUNDATIONAL CHARTER OF THE INTERNATIONAL ACADEMY OF PERINATAL MEDICINE

In the first place, the three presidents of the scientific international societies who support the Academy foundation: Prof. Asim Kurjak, on behalf of the «World Association of Perinatal Medicine», Prof. Aris Antsaklis on behalf of the «European Association of Perinatal Medicine», and Prof. Frank Chervenak, on behalf of the International Society «The Fetus as a Patient» signed the Foundational Charter of the Academy (Doc. 1).

2. CERTIFICATE OF ELECTION OF THE INTERNATIONAL COUNCIL

In the second document the three presidents proposed ten regular fellows for each one of the Societies (**Doc. 2a and 2b**).

3. CERTIFICATE OF APPROVAL OF THE CONSTITUTION

Once the nomination of regular fellows was proposed and accepted, the next step was the approval of the Constitution of the IAPM. After reading the text itself, and with the approval of all present, the signing of the certification document took place, as well as that of the original text of the Constitution (**Doc. 3**).

4. CERTIFICATE OF APPOINTMENT OF THE BOARD OF DIRECTORS

Fulfilled the said procedures, the act went on to the election of the regular fellows that would become the Board of Directors of the Academy. In accordance with the Constitution, the Board is to be composed by a president, four vice-presidents, a General Secretary and a treasurer (**Doc. 4a, 4b and 4c**).

The candidates proposed were:

- President: Prof. Erich Saling (Germany).
- Vice-presidents:
 - Prof. Asim Kurjak, President of the «World Association of Perinatal Medicine».
 - Prof. Aris Antsaklis (Greece), President of the «European Association of Perinatal Medicine».
 - Prof. Frank Chervanak (USA), President of the International Society «The Fetus as a Patient».
 - Prof. Hiroshi Nishida (Japan), representative of the «Asia-Oceania Federation».
- General Secretary: Prof. José M. Carrera (Spain).
- Treasurer: Prof. Bigit Arabin (The Netherlands).

All the present agreed with the composition of this first Board of the Academy.

The Certificate was signed by all regular fellows.

5. INDIVIDUAL CERTIFICATES: APPOINTMENT OF THE REGULAR FELLOWS OF IAPM

As a consequence of the signature of the aforementioned set of documents, the legal conditions were in line to issue and sign the certificate-diplomas for each of the regular fellows. The diplomas, written in classical Latin, (**Doc. 5**), were signed by the newly elected President of the Academy (*Praeses Academiae*) Professor Erich Saling and by the member of the Board of Directors acting in the event as notary of the Academy (*Notarius litteris Academiae*) the elected Secretary-General Prof. José M. Carrera.

For obvious reasons, there were two exceptions to the rule: the diploma for Prof. Erich Saling was signed by the four vice-presidents and the diploma for Prof. José M. Carrera by the public notary besides the president.

6. AGREEMENT BETWEEN THE ROYAL ACADEMY OF MEDICINE OF CATALONIA AND THE INTERNATIONAL ACADEMY OF PERINATAL MEDICINE

Once the Board of Directors had been elected, it became necessary that the president of IAPM, on behalf of the institution, signed an Agreement with the President of the «Reial Acadèmia de Medicina de Catalunya» so that it become godfather of the Academy, allowing the use of its installations and facilities for the Foundational Ceremony, and its president to chair the Ceremony (**Doc. 6**).

The document explained also that the International Academy, in accordance with ancient academic usage, appointed Honorary Fellow the President of Royal Academy, Prof. Jacint Corbella.

Therefore, on behalf of both the Royal Academy and the IAPM, the two presidents signed the document.

7. CERTIFICATE OF APPOINTMENT OF HONORARY MEMBERS OF THE IAPM

This document rendered legal an agreement that had been decided in the preparatory meeting of Budapest by the presidents of the three societies and other members of the respective Boards. The agreement consisted in nominating Honorary Members of IAPM all the Honorary Members appointed by the three societies previous to this arrangement. In accordance with this spirit, and representing all of them, during the Foundational Ceremony Prof. José M. Dexeus was nominated HONORARY FELLOW of the IAPM, he being numerary member of the Royal Academy and academic godfather of the Foundational Ceremony of IAPM (**Doc. 7**).

This document was signed by the President and the Secretary General.

8. APPROVAL OF THE FOUNDATIONAL CEREMONY OF THE INTERNATIONAL ACADEMY OF PERINATAL MEDICINE

All the members of the International Council of the IAPM, after studying the documents presented by Professor José M. Carrera, organizer of the event (program, timing, scripts, proceedings of the Ceremony, etc.) approved the content and timetable of the Ceremony (**Doc. 8**).

The document of the approval was signed by the President and the Secretary General.

At the end of the ceremony the Secretary-General thanked all present for their attendance, congratulated Prof. Erich Saling for his election as president and voiced his appreciation to Mr. Enrique Hernandez for his legal support.

Then all regular fellows moved to the Gimbernat Amphitheatre to rehearsal the Ceremony that was to be held in the afternoon. In this trial, in addition to almost all the academics involved, participated the protocol experts (Sylvia Núñez and Paz Maristany), the director of the choir (Dra. Carmen Oliveras) plus two hostesses.



**FOUNDATIONAL CHARTER OF THE
INTERNATIONAL ACADEMY OF PERINATAL MEDICINE**

In the headquarters of the Royal Academy of Medicine of Catalonia,
(Barcelona, Spain, Carmen Street, no 47)

BY AND BETWEEN

Professor Asim Kurjak, President of the World Association of Perinatal Medicine,
Professor Aris Antsaklis, President of the European Association of Perinatal
Medicine, and Professor Frank Chervenak, President of the International Society
"The Fetus as a Patient".


THE PARTIES HEREBY AGREE

To found the International Academy of Perinatal Medicine, which shall be governed
in accordance with the Constitution agreed to in this Document. The temporary
headquarters of the said Academy shall be located in Barcelona.


The objective of the Academy shall be to create a space for the study, reflection,
discussion and promotion of Perinatal Medicine, in particular matters related to
bioethics, the suitable application of technological advances and the sociological
and humanist aspects of our discipline.

IN WITNESS WHEREOF

The parties present sign this document in Barcelona (Spain), at 11 o'clock on 25
May 2005, as proof of their commitment and willingness to serve the said Academy.


Professor Asim Kurjak
President of WAPM


Professor Aris Antsaklis
President of EAPM


Professor Frank A. Chervenak
President of the International Society
"The Fetus as a Patient"

Doc. 1. The original of «Foundational Charter».



**CERTIFICATE OF
ELECTION OF THE INTERNATIONAL COUNCIL OF THE
INTERNATIONAL ACADEMY OF PERINATAL MEDICINE**

In Barcelona (Spain), at the headquarters of Royal Academy of Medicine of Catalonia
(Carmen street, no 47)

BY AND BETWEEN

Professor Asim Kurjak, President of the World Association of Perinatal Medicine;
Professor Aris Antsaklis, President of the European Association of Perinatal
Medicine, and Professor Frank Chervenak, President of the International Society
"The Fetus as a Patient".

THE PARTIES HEREBY AGREE

To ELECT the following members of each of the following scientific societies as
regular fellows of the newly established International Academy of Perinatal Medicine
(IAPM):

For the World Association of Perinatal Medicine (WAPM):

Aris J. Antsaklis (Greece)
Birgit Arabin (The Netherlands)
Eduardo Barcalari (USA)
Jose M^a Carrera (Spain)
Samuel Karchmer (Mexico)
Malcom Levene (UK)
Apostolos Papagorgiou (Canada)
Roberto Romero (USA)
Shouchi Sakamoto (Japan)
André Van Assche (Belgium)

For the European Association of Perinatal Medicine (EAPM):

Claudine Amiel-Tison (France)
Angel Ballariga (Spain)
Manuel R.G. Carrapato (Portugal)
Frank A. Chervenak (USA)
Gian Carlo Di Renzo (Italy)
Peter Husslein (Austria)
Kyros Nicolaides (UK)
Giorgio Pardi (Italy)
Erich Saling (Germany)
Ola D. Saugstad (Norway)

Doc. 2a. Certificate of Election of the International Council.


For the International Society "The Fetus as a Patient":


Chiara Benedetto (Italy)
Joachim Dudenhausen (Germany)
Wolfgang Holzgreve (Germany)
Asim Kurjak (Croatia)
Kazuo Maeda (Japan)
Giampaolo Mandruzaito (Italy)
Hiroshi Nishida (Japan)
Zoltan Papp (Hungary)
Joseph Schenker (Israel)
Serge Uzan (France)


All the persons mentioned in this document ACCEPT their appointment as regular
fellows of the International Council of the Academy.

IN WITNESS WHEREOF

This document is signed in Barcelona, at 11.10 o'clock, on 25 May 2005.


Professor Asim Kurjak
President of WAPM


Professor Aris Antsaklis
President of EAPM


Professor Frank A. Chervenak
President of the International Society
"The Fetus as a Patient"

Doc. 2b. Certificate of Election of the International Council.



**CERTIFICATE OF
APPROVAL OF THE CONSTITUTION OF THE
INTERNATIONAL ACADEMY OF PERINATAL MEDICINE**

At the headquarters of the Royal Academy of Medicine of Catalonia, in Barcelona,
Spain (Carmen street, no 47),

BY AND BETWEEN


The regular fellows of the International Academy of Perinatal Medicine (IAPM)


THE PARTIES HEREBY AGREE


To unanimously APPROVE the text of the Constitution of the International
Academy of Perinatal Medicine, a draft of which is attached to this document as
an annex. In addition, they AGREE to the design of the logo
The regulations set down in the said document shall come into effect as soon as
it is signed.

IN WITNESS WHEREOF

This document is signed in Barcelona, at 11.20 o'clock on 25 May 2005.


Professor Asim Kurjak
President of WAPM


Professor Aris Antsaklis
President of EAPM


Professor Frank A. Chervenak
President of the International Society
"The Fetus as a Patient"

Doc. 3. Certificate of Approval of the Constitution.



CERTIFICATE OF APPOINTMENT OF THE BOARD OF DIRECTORS

In Barcelona (Spain), at the headquarters of the Royal Academy of Medicine of Catalonia, (Carmen Street, no 47)

BY AND BETWEEN

the following regular fellows of the International Academy of Perinatal Medicine (IAPM)

- Claudine Amiel-Tison (France)
- Aris J. Antsaklis (Greece)
- Birgit Arabin (The Netherlands)
- Angel Ballabriga (Spain)
- Eduardo Bancalari (USA)
- Chiara Benedetto (Italy)
- Manuel R.G. Carrapato (Portugal)
- Jose M. Carrera (Spain)
- Frank A. Chervenak (USA)
- Gian Carlo Di Renzo (Italy)
- Joachim Dudenhausen (Germany)
- Wolfgang Holzgreve (Switzerland)
- Peter Husslein (Austria)
- Samuel Karchmer (Mexico)
- Asim Kurjak (Croatia)
- Malcolm Levene (UK)
- Kazuo Maeda (Japan)
- Giampaolo Mandruzzato (Italy)
- Kypros H. Nicolaides (UK)
- Hiroshi Nishida (Japan)
- Apostolos Papageorgiou (Canada)
- Zoltan Papp (Hungary)
- Giorgio Pardi (Italy)
- Roberto Romero (USA)
- Shouchi Sakamoto (Japan)
- Erich Saling (Germany)
- Ola D. Saugstad (Norway)
- Joseph G. Schenker (Israel)
- Serge Uzan (France)
- André Van Assche (Belgium)

Amiel-Tison

who, together, constitute all the members of the International Council of the IAPM,

WHEREAS

After due consideration and in agreement with the Constitution of the International Academy of Perinatal Medicine, the said members wish to appoint the members of the Board of Directors of the Academy

NOW, THEREFORE,

The members present APPOINT the following regular fellows to positions on the Board of Directors of the Academy for the next five years:

To President of the Academy:
Professor Erich Saling (Germany)

To Vice Presidents of the Academy:
Professor Asim Kurjak (Croatia),
President of the World Association of Perinatal Medicine (WAPM).
Professor Aris Antsaklis (Greece),
President of the European Association of Perinatal Medicine.
Professor Frank Chervenak (USA),
President of the International Society "The Fetus as a Patient".
Professor Hiroshi Nishida,
representative of the Asia-Oceania Federation.

To Secretary General of the Academy:
Professor Jose M. Carrera (Spain)

And, lastly, to Treasurer of the Academy:
Professor Birgit Arabin (The Netherlands)

IN WITNESS OF WHEREOF

This document is signed in Barcelona at 11.30 o'clock on the 25 May 2005, with the agreement of all persons present.

Claudine AMIEL-TISSON (France) *Amiel-Tison*
Aris J. ANTSAKLIS (Greece) *Antsaklis*
Birgit ARABIN (The Netherlands) *Birgit Arabin*
Angel BALLABRIGA (Spain) *Ballabriga*

Doc. 4a. Certificate of Appointment of the Board of Directors.

Doc. 4b. Certificate of Appointment of the Board of Directors.

Eduardo BANCALARI (USA) *Bancalari*
Chiara BENEDETTO (Italy) *Benedetto*
Manuel R.G. CARRAPATO (Portugal) *Carrapato*
Jose M. CARRERA (Spain) *Carrera*
Frank A. CHERVENAK (USA) *Chervenak*
Gian Carlo DI RENZO (Italy) *Di Renzo*
Joachim DUDENHAUSEN (Germany) *Dudenhausen*
Wolfgang HOLZGREVE (Switzerland) *Holzgreve*
Peter HUSLEIN (Austria) *Husslein*
Samuel KARCHMER (Mexico) *Karchmer*
Asim KURJAK (Croatia) *Kurjak*
Malcolm LEVENE (UK) *Levene*
Kazuo MAEDA (Japan) *Maeda*
Giampaolo MANDRUZZATO (Italy) *Mandruzzato*
Kypros H. NICOLAIDES (UK) *Nicolaides*
Hiroshi NISHIDA (Japan) *Nishida*
Apostolos PAPAGEORGIOU (Canada) *Papageorgiou*
Zoltan PAPP (Hungary) *Papp*
Giorgio PARDI (Italy) *Pardi*
Roberto ROMERO (USA) *Romero*
Shouchi SAKAMOTO (Japan) *Sakamoto*
Erich SALING (Germany) *Saling*
Ola D. SAUGTAD (Norway) *Saugstad*
Joseph G. SCHENKER (Israel) *Schenker*
Serge UZAN (France) *Uzan*
André VAN ASSCHE (Belgium) *Van Assche*



In urbe Barcinonensium Cataloniae principatus in regio Hispaniae sita, die vicesimo quinto mensis Maii, anno Domini MMV, sodales MEDICINAE PERINATALIS ACADEMIAE INTERNATIONALIS continentem plerum ACTUS FUNDATIONIS causa in Aula Capitulari Medicinae Academiae Regiae Cataloniae convocatum habentes decreverunt dominum sapientissimum atque clarissimum, Doctorem medicinae, medicinae perinatalis magistrum,

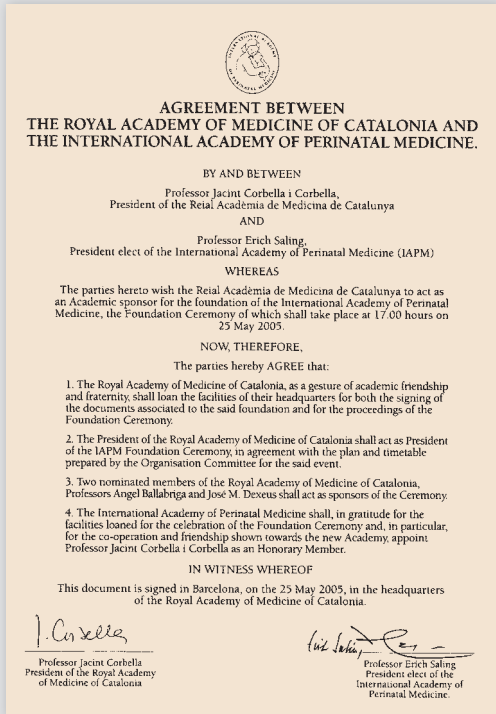
istius doctissimae societatis ACADEMICI NUMERARII nomen conferre. Qui tota in vita amorem singularem huius scientiae studii, notitiam insolitam legum ac principiorum, a quibus hominum natus et vita reguntur, desiderium eae integre ad discipulos tradendae monstrabat

Antequam nomisma academicum ac hoc diploma, instrumenta eum ACADEMICUM NUMERARIUM agnoscentia, receperit, is solemniter iurat se summa principia istius academiae servaturum et vitam suam pro bono matrum ac liberorum eorum qualiscumque ordinis, patriae, generis, religionis dicaturum esse. Cuius labor in situ Academiae subito contemplatione, colloquio atque veritatis reverentia regetur. Praeterea pariter firme ac solemniter pollicitus est sapientissimos sodales istius Academiae dehinc fratres, cum quibus notitias, amicitiam et principia partiretur, fore. Hoc documento MEDICINAE PERINATALIS ACADEMIA INTERNATIONALIS auctoritates et liberos cives omnium orbis terrarum nationum rogati, ut eum reverentur et ei omne auxilium necessarium ad munera altissimi magisterii perficienda praebant.

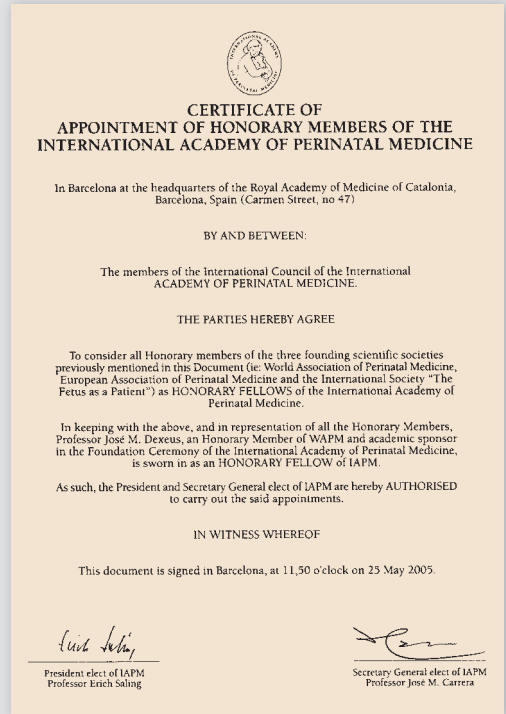
Erich Saling
Praeses Academiae
Notarius a litteris Academiae *[Signature]*

Doc. 4c. Certificate of Appointment of the Board of Directors.

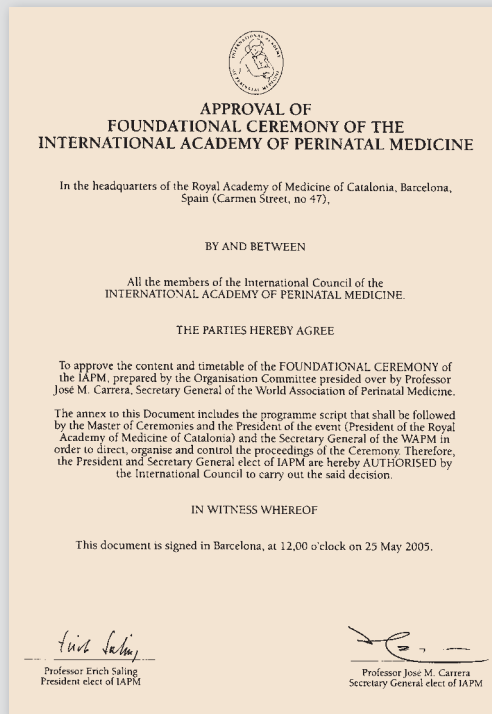
Doc. 5. Individual Certificate of a Regular Fellow.



Doc. 6. Act of agreement between the Royal Academy and the International Academy of Perinatal Medicine.



Doc. 7. Certificate of appointment of Honorary Members of IAPM.



Doc. 8. Approval of the Foundational Ceremony (program and timing).

FOUNDATIONAL CEREMONY

The ceremony started exactly at 17:00 on May the 25th, 2005. Twenty minutes before the doors of the compound had been opened so that the available places would be occupied by the personalities invited to the event (Presidents of Scientific Societies and Academies of Medical Sciences, Directors of Hospitals Maternal-Child, Directors of Hospital Departments, General Directors of the various governmental administrations, academic Fellows of the Royal Academy, etc., as well as the wives and relatives of most of the regular fellows.

The Foundational Ceremony was full of symbolic expressions and gestures, following a very precise and studied liturgy.

DESARROLLO ACTO (SOLO INFORMATIVO)	ONLY INFORMATION
Textos que no lee el maestro de ceremonias	Texts not readed by the Master of Ceremonies
Maestro de Ceremonias (Inglés)	Master of Ceremonies (English)
Maestro de Ceremonias (Español)	Master of Ceremonies (Spanish)

SCRIPTS

INTERNATIONAL ACADEMY OF PERINATAL MEDICINE:

FOUNDATIONAL ACT

May 25, 2005-04-04

DEVELOPMENT OF THE ACT AND SPEAKERS' SCRIPTS

16,40 h.

1. Entry to the Room of the invited audience
Entrada en el recinto del público invitado

Mientras, en una sala aparte a los nominados se les van colocando las becas correspondientes.
While, in an apart room the sashes are put on the nominated professors

La puerta de acceso a la Sala se abrirá veinte minutos antes de la hora señalada para el inicio del acto.
The access door will be opened twenty minutes before starting the act.
Una secretaria impedirá que se ocupen los lugares académicos, todos los cuales estarán identificados con un letrero personalizado.
A secretary will keep all the academic seats. All of them will be very well identified with a personal placard.

FIRST PART / PRIMERA PARTE

17,01 h.

2. Constitution of the Presidential Table
Constitución de la Mesa Presidencial

Los Maestros de Ceremonias ocupan su lugar y dicen lo siguiente:
Masters of Ceremonies occupy their places and say the following:

Ladies and Gentlemen,
Let me introduce myself, my name is **Ramon Aurell** and I am going to be the Master of Ceremonies at this event, together with my colleague **Maria López-Menéndez**, who will speak in Spanish.
Señoras y Señores:
Permítanme que me presente, mi nombre es **Maria López-Menéndez** y voy a actuar como Maestro de Ceremonias en este acto, conjuntamente con mi colega **Ramon Aurell**, que les hablará en inglés.

We are going now to commence the Solemn Ceremony of Foundation of the International Academy of Perinatal Medicine.
The event now about to start is divided in three parts. In the first one the Presidency will be established and the nominated personalities to become Fellow Members of the Academy will make a formal entry to the Room. In the second part they will make the oath and will receive all the symbols of their new academic condition. And in the third and last one we will proceed with the Nomination of the Board of Directors and Honorary Members of the Academy.
Señoras y Señores:
Vamos a dar comienzo a la Solemn Ceremonia de Fundación de la Academia Internacional de Medicina Perinatal.
El acto constará de tres partes bien diferenciadas. En la 1ª se establecerá la presidencia y harán su entrada en la sala las personalidades nominadas para convertirse en académicos. En la 2ª pronunciarán su juramento y recibirán los símbolos de su nueva condición académica y en la 3ª se procederá al nombramiento de la Junta Directiva y de los Miembros de Honor.

Front-page of SCRIPTS of Foundational Ceremony.



Entry of President of the Royal Academy, Presidents of Founders Societies, and Secretary General of WAPM. At the back of academic hall the sculpture of Sculapius.

The new academic fellows to be formally prepared themselves in the Presidential Hall. On top of their tail suits (academic uniform), two assistants (Dr. Pilar Prats and Carolina Poblete) placed the sashes corresponding to their respective scientific societies of provenance. When time arrived Silvia Nuñez and Victoria de Quadras ushered the nominees to the amphitheatre.

The needs of the courtroom were attended by two hostesses and two secretaries expert in protocol (Silvia Nuñez and Paz Maristany).



Masters of Ceremony (English and Spanish).

As Masters of Ceremony acted Dr. Ramón Aurell (in English) and Dr. María López-Menéndez (in Spanish).

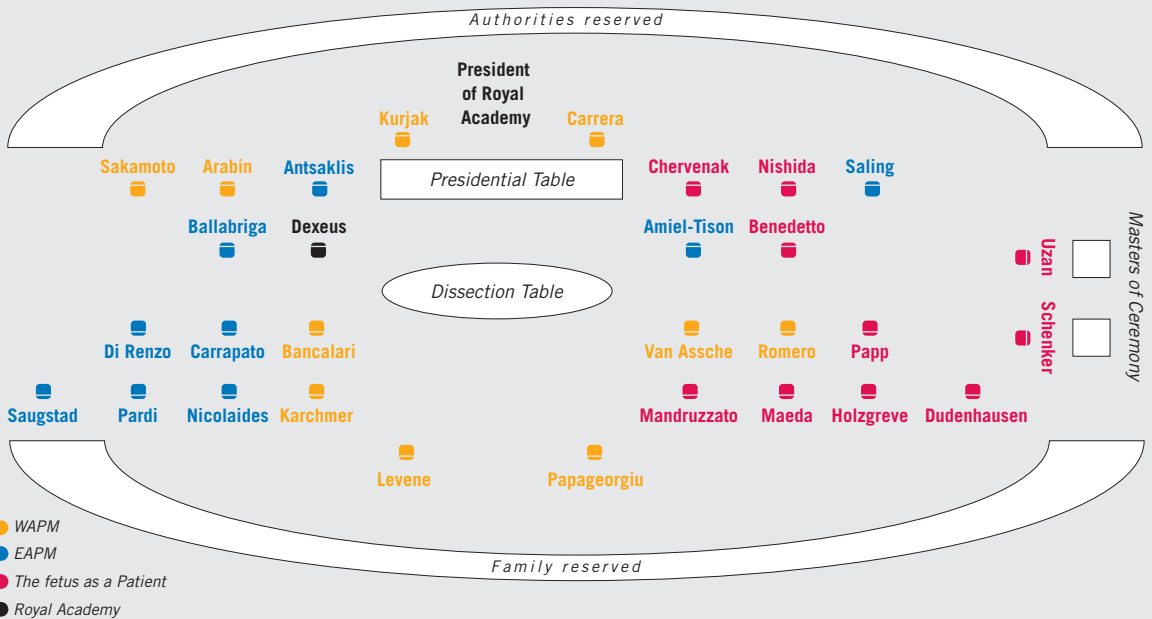
In the first part of the act, the presidency was constituted and the nominees made their solemn entrance into the courtroom to become Fellows Members of the Academy.

The presidential table was composed by: Prof. Jacint Corbella (President of the Royal Academy of Medicine of Catalonia), Prof. Asim Kurjak (President of the World Association of Perinatal Medicine), Prof. Aris Antsaklis (President of the European Association of Perinatal Medicine), Prof. Frank Chervenak (President of the International Society «The Fetus as a Patient») and Prof. José M. Carrera (Secretary General of the World Association of Perinatal Medicine).



Constitution of the Presidential Table.

Positions of regular fellows in the first part of Foundational Ceremony (diagram).



WHERE THE FUNDACIONAL ACT WAS HELD: THE ROYAL ACADEMY OF MEDICINE OF CATALONIA

The founding act of the IAPM took place on May the 25th, 2005, at the headquarters of the Royal Academy of Medicine of Catalonia.



Logo of the Royal Academy of Medicine of Catalonia.

The building where this institution sits was a part of a medieval hospital complex called «Hospital de la Santa Creu».

Its construction was undertaken by order of King Martí, King of Aragon and Catalonia; the corresponding papal permit dates from September 1401. The hospital provided health care to the city from that date on until 1930. In one of its wards in 1926 died the brilliant architect Gaudi.

The actual neoclassical style building was built between 1762 and 1764 following a royal order of 1760, to accommodate the first «Royal College of Surgery of Barcelona» (1760-1843) and then the Faculty of Medicine of Barcelona (1843-1906). Finally the Royal Academy of Medicine of Catalonia, created in 1770, was installed in the building, becoming its headquarters from October the 4th, 1929, when the building was handed over by the Spanish government in a ceremony presided by King Alfonso XIIIth.

The hall where solemn meetings are held by the academy corporation, and in which the founding act of the IAPM took place, corresponds to the anatomical amphitheatre of the old «College of Surgery». The marble dissection table (eighteenth century) that presides the stance is the work of Joan Eric. In it practised among others Pere Virgili (founder of the College), Antonio Gimberbat (prestigious European anatomist) and Santiago Ramon y Cajal (Nobel Prize in Medicine) The academic masonry, of high artistic value, is the work of Llorenç Roselló.



The building of the Royal Academy (drawing of the primitive edifice).

The complex currently known as the «Gimbernat Auditorium» is decorated with great magnificence, where stand out the gorgeous central ceiling lamp and the busts of Pere Virgili, Antonio Gimbernat, Charles the IIIrd and Alphonso the XIIIth.



Gimbernat amphitheatre.

Then the academic Fellows of the Royal Academy that were to serve as academic godfathers of the future regular fellows made their entrance. These were Profs. Angel Ballabriga Aguado and José M. Dexeus Trias de Bes.



Entry of the academic godfathers: a) Prof. A. Ballabriga; b) Prof. José. M. Dexeus.

Immediately after Prof. Jacint Corbella, President of the Royal Academy, opened the session and gave a word of salutation to the Board of Directors of IAPM.



Welcome words of the President of Royal Academy (Prof. J. Corbella).

Welcome Address of Prof. Jacint Corbella

PRESIDENT OF THE ROYAL ACADEMY OF MEDICINE OF CATALONIA

Prof. J. Corbella addressed the concurrence initially in English and then continued in his home language, Catalan. For the benefit of the English speaking readers we present the second part translated into English.

Dear doctors, dear academicians and dear friends:

Today it is an important date for the Perinatal Medicine, but also for the Royal Academy of Medicine of Catalonia, that receives the members of the International Academy of Perinatal Medicine (IAPM) for the foundational act. I present a short introduction.

We are grateful to all of you for choosing Barcelona and our Academy for your foundational meeting.

Now allow me to speak to you in the official language of our Academy, of the most important universities of Catalonia, and of the government of Catalonia. It is the Catalan.

So, I continue in Catalan:

«Senyors acadèmics, amics:

Ara estem en un edifici històric que te gairebé dos-cents cinquanta anys.

Data del segle XVIII i té...»

We are now in a historical building almost two hundred and fifty years old. It was constructed in the XVIIIth century and it contains one of the important anatomical amphitheatre of the world in its time. Here is where you are. It had been a College of Surgery and later held de Faculty of Medicine.

And here we shall now celebrate a historical ceremony, the creation, the foundation of the International Academy for Perinatal Medicine, thanks to the convergence of several medical societies.

It is good that it takes place in an ancient, historical building because it will allow us to remember the origin, the roots, of the new Academy, to which foundation we adhere fullheartedly. And so much so when the managers of the Academy have had the will to make use of the names of illustrious doctors from antiquity to modern times.

We deal with the attention to the baby that has just been born. This, before, was not the job of the doctors, and in many places of the world it still is not. The medical attention to childbirth and to the newborn is a reality on only recent times, historically of less than a century and geographically not even that.

The heroine of the deed, the one that suffered in the childbirth, was a woman, and she was taken care of by another woman, which later on started to receive some education and became known as the midwife.

We must recall this situation, the same way as the surgeons remember their origin in the old barbers; by the way let us remind that this building had been in its early times a College of Surgery.

With time Obstetrics (pregnancy and childbirth) and Gynecology (women's diseases) developed as independent subjects. Also Pediatrics evolved independently. But with the progress of medicine confluence of the three disciplines came back to a specific centerpoint, the initial and basic product of all this, the newborn, and this has become the origin of Perinatal Medicine. Today it has reached such a level of maturity that it deserves the creation of an International Academy. And that is what we are here celebrating in this very moment, the foundational act.

Lastly, allow me an explanation about the language I have used in this address. Barcelona is the capital city of Catalonia, a country with a fair level of self-government, in which the vernacular tongue is Catalan.

This is the official language of the Academy that houses your foundational act, and that of the universities of Catalonia, in which I myself convey the daily teaching to the university students.

For this reason, while many languages in the scientific world are receding their use in favour of English, I have deemed adequate to remind to us all the existence of other more minor tongues still, but yet existing.

Thank you.

Then the Secretary General of the WAPM read The Foundational Charter of the Academy, after which Prof. Asim Kurjak read the list of the ten regular fellows proposed by his Association. Following, Profs. Ballabriga and Dexeus, in their condition of Academic godfathers, proceeded to request these nominees to come into the courtroom.



Reading of the Foundational Charter of the International Academy of Perinatal Medicine.



Prof. Asim Kurjak reads the names of the regular fellows proposed by WAPM.



Prof. Aris Antsaklis reads the names of the ten personalities proposed by the EAPM.

Following the same formula, Prof. Aris Antsaklis named the ten personalities proposed by the European Association of Perinatal Medicine, which entered the courtroom accompanied by the godfathers.



Prof. Frank Chervenak reads the names of the regular fellows proposed by International Society «The Fetus as a Patient».



Entry of the regular fellows proposed by the International Society «The Fetus as a Patient».

THE OATH

The formula used in the oath of the IAPM membership formally connects with the structure and the terms of the promises of customary pledges of the classical and renaissance academies. For this reason it was done in Latin.

Under oath it is requested to the candidate to voice his solemn commitment of honour and life to defend the principles advocated by the Academy.

Faced with this exhortation the candidate solemnly pledges his adhesion to such principles as advocated by the Academy and that, in the defence of this engagement, his sole weapons to make use of will be reflection, dialogue and respect for the truth. He besides adds that starting from the moment of his oath the members of the Academy become his brethren with whom he will share knowledge, friendship and ideals. This last statement of intention was common in all oaths of progressive or hermetic (with numerus clausus) societies of Renaissance.

Finally, the person acting as notary invokes the divinity, so that the new academic be rewarded if he meets his promise, or when he does not demanded for it. This formula is still common use when swearing or promising for a public post in most of the Western countries.

TEXT OF OATH IN LATIN

Notarius a litteris Academiae:

Honore vestro erga fundamenta huius academiae fidem servare et vitam matribus et filiis suis dedere iuratis?

Candidati iuramentum:

Meo honore amorem medicinae perinatalis studio, cognitioni et progressu fundamenta fore quae mea acta academica regent et mea instrumenta laboris fore meditationem, dialogum et respectum veritate.

Ex hodie mei fratres, quibus cognitionem, amictiam et ideas comitabor, membra huius academiae erunt.

Notarius a litteris Academiae:

Deus, vita et humanitas vobis praemia dent si ita facitis et nisi vos puniat.

TEXT OF THE OATH IN ENGLISH

Academic Notary:

Do you swear on your honour to keep faithfully the foundational principles of this academy and to devote your life to the good of the mothers and their children?

Oath of the candidate:

I swear on my honour that the love to the study, to the knowledge and to the progress of the perinatal medicine will be the principles that will rule my academic activity, and the reflection, the dialogue and the respect for the truth will be my work instruments.

From today on, the members of this academy will become my brothers and sisters, with whom I will share my knowledge, friendship and ideals.

Academic Notary:

If you do so, god, life and humanity will reward you for it; if not, they will demand you for it.

Finally Prof. Frank Chernenak proposed ten regular fellows on behalf of the International Society «The Fetus as a patient». They too entered the compound preceded by the godfathers.

This first part came to an end with the interpretation by the choir of the song «El cant dels ocells» of Pau Casals, the current United Nations anthem.

The second part of the ceremony consisted in the solemn oath of each new regular fellow, and the award of the symbols (medal and diploma) of their new academic status.

The collective oath of the academic fellows was done in standing position using the Latin formula. The Secretary General of the WAPM, in his condition of institutional notary, took notice of their commitment.



Oath of the new regular fellows.

After the solemn pledge, the act went on with the imposition to each regular fellow of the academic medal that identified them as such. The next proceeding was for the Master of Ceremonies to call one by one the regular fellows, and the Secretary General remove the distinctive sash of the institution of precedence and impose the academic



Imposition of Academic Medal to Prof. A. Kurjak (president of WAPM) by J. M. Carrera (Secretary General of WAPM as institutional Notary of Ceremony). The sash of the Scientific Society was previously taken off as a symbol of his new academic linking.

medal. The sashes were retired as a sign of the new entailment of the academics. Then, once the medals had been imposed to the academics they approached the podium to receive from the hands of the Presidency the diploma crediting them as regular fellows of the Academy. After receiving this document each of the new academic voiced a word of thanks.



The president of the Royal Academy delivers Diploma (in this case, to Prof. K. Maeda).



Imposition of Academic Medal to Prof. Chiara Benedetto.

The last regular fellow to receive the medal and the diploma was Prof. José M. Carrera, who until then had acted as notary of the institution. He received the academic medal from the hands of his master Prof. José M. Dexeus, and the diploma from the President of the Royal Academy. This second part ended with the interpretation of the European anthem.

The notary of the Ceremony and Secretary General of WAPM, received the academic medal in the hands of his Master, Prof. José. M. Dexeus, member of the Royal Academy.



THE ACADEMIC MEDAL

The Academic medal identifies each regular fellows as member of IAPM.

Each medal is different. In its obverse it shows the logotype of the International Academy and in its reverse the name of a prestigious historical personality linked to the field of Obstetrics or Paediatrics, the two medical specialities that have fathered the actual Perinatal Medicine. The fellow member is the temporary «owner» of the medal while he keeps his condition of Member of the Academy; when he reaches an end to this status, the medal becomes the property of the new person that replaces him by honour and responsibility.



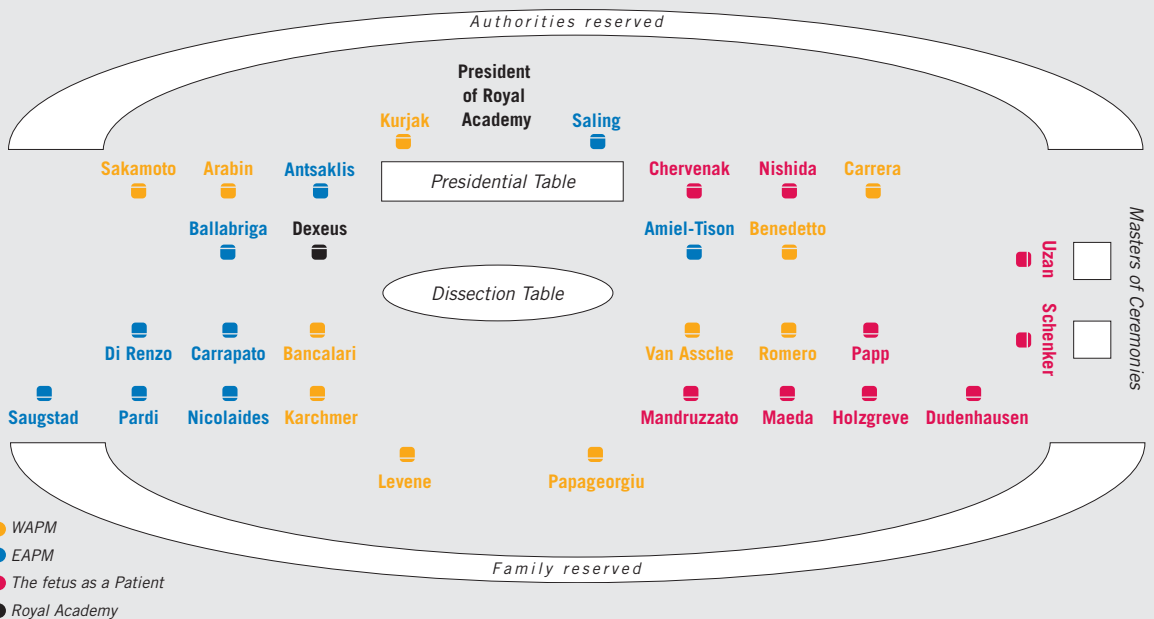
Academic Medal.



The International Council during the interpretation of the United Nations Anthem.

The **third part** of the founding ceremony consisted in the reading of the agreement taken by the three founding societies for the nomination of the Board of Directors of IAPM and the constitution of a new presidency, in order to render these nominations

Diagram with the position of several protagonist of the Foundational Ceremony, after election of Prof. Erich Saling as a President of IAPM.



effective. The identifying table cards were interchanged. Prof. Saling in his new condition of President of the IAPM moved to occupy his seat in the Presidential Table; he pronounces a speech accepting the new post. Then the first vice president of the Academy, Prof. A. Kurjak, also gave his speech.



Constitution of the new Presidential table. Prof. Erich Saling occupied the seat at the Presidential table.



Words of Vice-President I (Prof. A. Kurjak) of a IAPM on behalf of the Board of Directors and the three Founding Societies.

First presidential Address of Prof. Erich Saling**PRESIDENT OF THE INTERNATIONAL ACADEMY OF PERINATAL MEDICINE**

Mister President of the Royal Academy of Medicine of Catalonia Prof. Corbella, respected present authorities, distinguished audience.

First of all may I thank the three presidents, Prof. Asim Kurjak, Prof. Aris Antsaklis and Prof. Frank Chervenak very much for their initiatives and efforts to found and to establish the Academy and that they have nominated me as the president for the first 5 year period. Equally may I also thank Prof. José Carrera, our general secretary, who took over and performed the tremendous work of successfully preparing all the basic prerequisites in such detail for the foundation of our new academy.

Let me shortly emphasize the importance of our field in which we all are involved.

The generation alive today is privileged to live in a remarkable age. Not only has interstellar space been spectacularly opened up to human exploration but, through a continuing medical and technological development of no less importance, «intrauterine space», the world in which we spend our prenatal life from conception to birth, has become increasingly accessible to science.

As little as 45 years ago, the fetal heart sounds could be heard only with the aid of a primitive stethoscope. There was no other access to the unborn child.

Today a new great field of medicine –Prenatal Medicine– if we enclose the first week of life –the interdisciplinary Perinatal Medicine– has come into being on a scale that is entirely comparable to the progress made in aerospace science.

How huge it became in the meantime and how advanced Perinatal Medicine presently is, can be illustrated by the Textbook of Perinatal Medicine edited in 1998 by Prof. Asim Kurjak. This work contains about 2,000 pages with 187 contributions prepared by more than 290 experts.

Many colleagues and laymen are still not aware which breakthrough has been achieved in this new field. With the prenatal part –the main part of Perinatal Medicine– a new dimension of the entire human medicine has been created namely we brought forward the applied medicine for the first time in an earlier initially not accessible stage of the human life, the intrauterine period.

Some of you who are assembled here today are highly successful architects of this new original and very important part of medicine.

It is a great honour and challenge for all of us –I mean the regular and the associated fellows– to have now a new important forum in the form of the just founded International Academy. This gives us optimal preconditions to continue building up this outstanding and so fascinating science of perinatal medicine which should be achieved with mutual understanding and close interdisciplinary co-operation, particularly between obstetricians and neonatologists.

I will do my best in being your «primus inter pares».

I thank you for this order and for this high honour.

Speech of Prof. Asim Kurjak
VICE-PRESIDENT OF IAPM

Distinguished members of Academy, President of Royal Academy,

Ladies and gentlemen,

In his address to the 3rd Congress of Perinatal Medicine in Lausanne in 1972, the title of which was «Neonatology today, perinatology tomorrow», Clement Smith of Boston said: «... what we speak of as diseases of the newly born are actually in most cases the afflictions of the fetus». It is thus essential that every effort is made to cement perinatal teamwork and collaboration. To quote Erich Saling: «Only when the obstetrician and pediatrician work together as a team can a high standard of perinatal care be achieved».

Little in medicine is new and a knowledge of medical history confers a perspective of the future as well as of the past. The more I read from the work of our forefathers, the more I appreciate the truth of a remark made by Isaac Newton: «We progress by standing on the shoulders of those who come before us».

In this pursuit, we could follow no greater example than that offered by our distinguished president, professor Erich Saling, who, amongst many famous people at this ceremony has been particularly responsible for pioneering and teaching so many of us the beauty of Perinatal Medicine.

Members of Academy,

For an obstetrician, there is no more tragic event than a maternal death. To prevent it, over the last two decades, many international, governmental and non-governmental organizations have created programs aimed at promoting safe motherhood, both in terms of decreasing mortality and morbidity. Only one program however, was promoted and implemented by obstetrician-gynecologists, by FIGO.

With this initiative, perinatologists all over the world provided clear proof that they are part of the solution, rather than being part of the problem.

From our part, the World Association of Perinatal Medicine (WAPM) has introduced the bi-annual world congress of perinatal medicine in developing countries. Three congresses have already been held in Bosnia and Herzegovina, Turkey and Lebanon. The fourth one is planned for 2006 in India, the fifth one for 2008 in Colombia and the sixth one in Indonesia. The main topics are dedicated to specific perinatal problems in developing countries. However, the most significant work in this complex field has been done by Matres Mundi led by J. M. Carrera, and is now integrated under the umbrella of WAPM.

Dear colleagues,

I see globalization as a morally neutral but nonetheless inevitable force that poses both opportunities and threats. Globalization is a source of both hope and of apprehension. It is an accelerating process in flow of information, technology, goods and services as well as production means. Globalization has a

complex influence on health. In the modern world, bacteria and viruses travel almost as fast as money. With globalization, a single microbial sea washes all of humankind. Because, millions of people cross international borders every single day: almost a tenth of humanity each year. It is not only the infectious diseases that spread with globalization.

However, there is a growing concern that globalization increases marginalization of the world's poorest. Those living in absolute poverty are 5 times more likely to die before reaching 5 years of age than those in higher income groups. Recent reports showed that poor people have worse health, such as in several Sub-Saharan African countries, as many as 173 out of every 1,000 children born will die before their fifth birthday, while in Sweden; by contrast, under 5 mortality rate is 3 per 1,000 live births.

Indeed, global problems can be solved by global efforts. For example, developing and implementing research agenda at national and international level should investigate positive and negative health effects of globalization.

We see you, members of Academia, among this privileged group of people.

But there is something else. Apart from our justified enthusiasm and magnificent progress in Perinatal Medicine some of us do still have some concerns on present trends in perinatal medicine.

We all recognize the truth of aphorism that said that science is measurement. But although science is measurement not all measurement is science.

Finally, many of you know that our host city Barcelona is more than 2,000 years old. This location and this history have defined the city's characters. Many of the delegates here also share a bond of friendship born of respect. Friendship has long been the thread which in this old city, has woven together the past, the present and the future.

Undoubtedly, Barcelona, by that enduring stability which comes with age, provides just the right environment for permanent headquarters of International Academy of Perinatal Medicine. In a world where fortune now seems to change so rapidly, I believe we appreciate constancy more than ever before.

The City and Universities of Barcelona and Dexeus Institute are proud indeed to be host to so many men and women of international reputation. Our hearty congratulation to our friend and true visionary professor Carrera and numerous members of his committee for, what I am sure, will be historical and unforgettable meeting. Thank you.

Immediately after these two parliaments, the attendants were informed that the Board of Directors of the IAPM, as their first measure, had decided to nominate honorary fellows of the IAPM all the Honour Members of the three Scientific Societies, as well as professors José M. Dexeus (member of honour of the WAPM and fellow member of the Royal Academy) and Jacint Corbella (President of the Royal Academy). The relative diplomas were handed to them by the President of the IAPM.



Prof. José M. Dexeus received the Diploma of the honorary fellow of the IAPM.



Prof. E. Saling, delivers the Diploma of the honorary fellow of the IAPM to Prof. Jacint Corbella, president of the Royal Academy.

The President of The Royal Academy of Medicine of Catalonia gave closure to the act. To put an end to the ceremony the choir interpreted the «Gaudeamus Igitur» that all attendants heard in standing.

Closing the Foundational Ceremony
by the President of the Royal Academy.





Interpretation of the «Gaudeamus Igitur» that all attendants heard standing.

After the ceremony a cocktail was served in the courtyard of Institut d'Estudis Catalans.



Cocktail at the Courtyard of the Institut d'Estudis Calans.



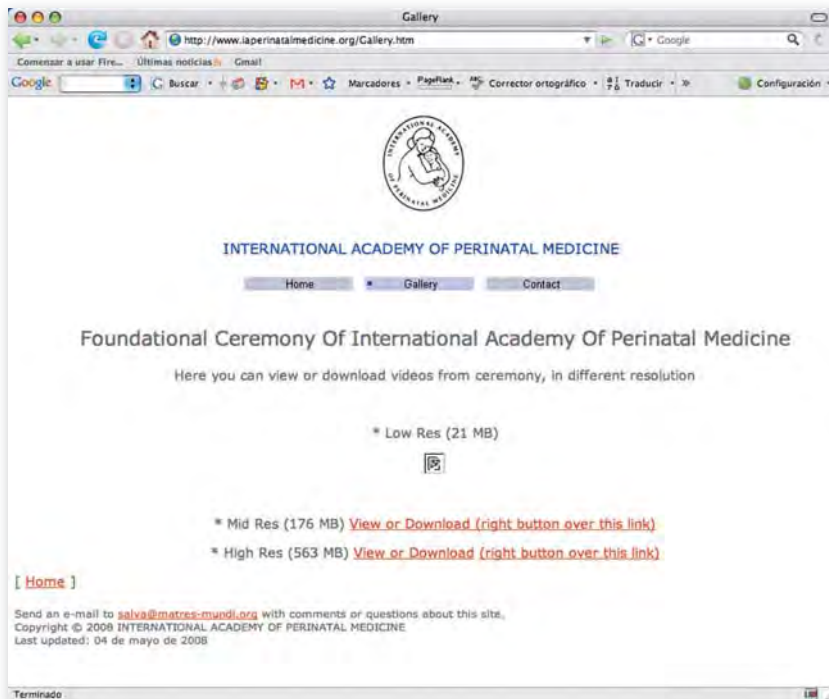
Aspect of the cocktail.



Several regular fellows with their families and the president of Royal Academy.



Regular fellows fraternizing with members of Spanish Societies of Perinatal Medicine.



Foundational Ceremony in the web-site of IAPM: www.iaperinatalmedicine.org.

chapter 5

CONSTITUTION OF IAPM AND BY-LAWS

CONSTITUTION OF THE INTERNATIONAL ACADEMY OF PERINATAL MEDICINE

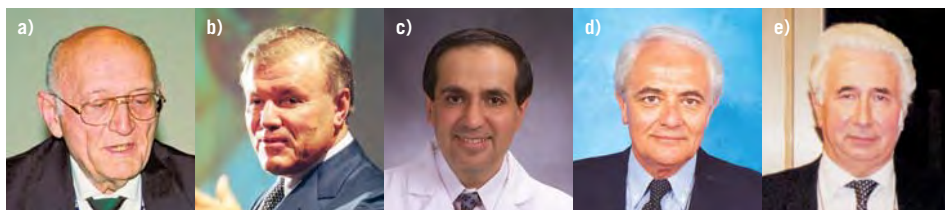
GENERAL PROVISIONS

ARTICLE 1 (IDENTITY)

The International Academy of Perinatal Medicine (abbreviated as IAPM) is a scientific, international and independent academic non-profit institution for the study, evaluation, dialogue and promotion of Perinatal Medicine across the world.

ARTICLE 2 (LEGAL STATUTES AND HEAD OFFICE)

The IAPM has been established and registered as a non-profit making association. The Academy shall be incorporated under the laws of the country of the General Secretariat where the head office shall be located.



Commission that wrote the draft of the Constitution of the IAPM. Profs. Erich Saling (a), Asim Kurjak (b), Frank A. Chervenak (c), Aris Antsaklis (d) and José M. Carrera (e).

OBJECTIVES AND ACTIVITIES

ARTICLE 3 (OBJECTIVES)

The objectives of the Academy shall be as follows:

a) To promote the study of scientific principles and practical applications in the area of Perinatal Medicine.

Perinatal Medicine not only encompasses all medical specialities associated with human reproduction (Reproduction Medicine, Obstetrics, Neonatology, Prenatal Diagnosis, etc.), but also the sociological and anthropological aspects affecting the human reproductive process.

b) To promote research and education in the field of Reproductive Health.

c) To develop and improve the exchange of information and ideas, dialogue as well as co-operation in research programmes aimed at acquiring knowledge in the area of Perinatal Medicine.

d) To promote the formation of working groups focused on Perinatal Medicine.

e) To maintain relationships with societies and institutions involved in Perinatal Medicine.

f) To provide expert's advice to governmental organisations and bodies involved in the field of Perinatal Medicine.

- g)* To foster international aid to developing countries which actively promote maternal and child health care across the world. This objective shall be achieved through «MATRES MUNDI INTERNATIONAL».

ARTICLE 4 (ACTIVITIES)

Below is a list of the activities of the Academy:

- a)* Preparing and issuing Statements about

specific issues related to Perinatal Medicine. These documents may be drawn up in collaboration with Scientific Societies and Associations whose objectives and activities are similar.

- b)* Organising scientific and educational meetings concerning Perinatal Medicine.
c) Publishing articles and books to further foster and promote Perinatal Medicine.

FELLOWSHIP

ARTICLE 5 (TYPES OF FELLOWSHIP)

There are three (3) types of fellowship at the Academy: *a)* Regular fellow, *b)* Associate fellow and *c)* Honorary fellow.

ARTICLE 6 (REGULAR FELLOWS)

The number of permanent or regular fellows allowed is limited to 30 (thirty). (See schedule for names). Numerous *clausus* should exist.

These members are all expert in Perinatal Medicine that have been selected based on their international prestige, country of origin and scientific productivity. The aim of this selection process is to represent most parts of the world.

All regular fellows sit on the International Council of the IAPM (Article 10).

GOVERNANCE

ARTICLE 9 (GOVERNANCE BODIES)

The IAPM shall be made up of the following governance bodies:

- 1) The International Council (abbreviated as IC).

ARTICLE 7 (ASSOCIATE FELLOWS)

Those experts put forward by the Board who are specialised in any of the branches of Perinatal Medicine and take an active part in the mission and activities of the IAPM may be appointed as associate members. They shall be appointed by resolution of the International Council (IC) provided a consensus of all present members is reached. The number is limited to thirty.

ARTICLE 8 (HONORARY FELLOWS)

Honorary fellows will be nominated and chosen by the International Council based on their internationally recognized contributions to Perinatal Medicine.

The International Council is responsible for appointing the honorary members put forward by the Board. Each nominee must be elected by a consensus of all voting members.

- 2) The Board of Directors (abbreviated as BD).

ARTICLE 10 (INTERNATIONAL COUNCIL)

The 30 permanent or regular fellows shall jointly form the International Council of the Academy.



International Council of IAPM.

ARTICLE 11

The International Council has the following duties:

- a) Setting the overall criteria to be used by the Board of Directors to achieve the objectives of IAPM. This shall be done on a yearly basis.
- b) Approving and, where appropriate, auditing and/or modifying the accounts for the previous period, as well as the budget for the next financial year.
- c) Overseeing and monitoring, the disclosure of Statements, etc., including the name and logo of the IAPM, is subject to approval by the Council.
- d) The IC may appoint committees and working groups to achieve specific objectives of the IAPM.
- e) According to Article 13, the IC alone has the capacity to appoint new, regular, associate or honorary fellows, as specified above.

- f) The IC may either amend these Statutes or dissolve the Academy pursuant to the provisions of Article 26.

ARTICLE 12

The fellows of the Council may resign and/ or be dismissed in any of the following cases: a) At the member's request, b) Due to proven misconduct which results in damage to the Academy. In this latter case, all the other members of the Council must reach a unanimous decision to effect such dismissal.

ARTICLE 13

Where one of the regular fellows dies, resigns or is discharged according to the provisions laid down in Article 12, the ensuing vacancy in the IC shall be filled following a decision by the Board.

Applicants shall be put forward by the Board, and they must be elected by a unanimous vote of the members of the Council. The voting shall be conducted in a se-

cret ballot if so requested by one or more fellows.

ARTICLE 14 (BOARD OF DIRECTORS)

The Board of Directors is a body responsible for governing, managing and representing the IAPM on a permanent basis. It must act according to the Constitution.

The Board of Directors of the IAPM is composed of seven (7) fellows who have specific duties to the Academy.

ARTICLE 15

The Board of Directors shall include the following officers:

- a) One President.
- b) Four Vice-Presidents.
- c) One General Secretary.
- d) One Treasurer.

ARTICLE 16

Each member of the Board of Directors is responsible for a number of tasks stipulated in Articles 17 to 21.

The members of the Board shall have the following responsibilities:

- a) The Board shall determine what action must be taken so as to achieve the objectives of the IAPM, in accordance with the criteria set out by the Council.
- b) The Board shall prepare the annual budget, the allotment of available funds and the acquisition of suitable premises for meeting the needs of the IAPM.

ARTICLE 17

The Directors of the Board shall be elected by the International Council for a pe-

riod of five years with the possibility of re-election.

ARTICLE 18

The President of the IAPM acts as the legal representative of the Academy and chairs the meetings of the International Council (IC) and the Board of Directors (BD).

The President is responsible for calling meetings for both governance bodies, whilst deciding upon the dates and items on each agenda.

In addition, the President shall be responsible for contacting the relevant national, international public authorities or scientific and social organisations, whether on his own initiative or in accordance with the resolutions adopted by the governance bodies, in order to achieve the purposes and objectives of the Academy.

Any decision taken by the President during his/her tenure must be subsequently subjected to review and approval by the governance bodies.

ARTICLE 19

The first, second, third, and fourth Vice-Presidents of the Association (always in this order) are specifically assigned to assist the President at all times and stand in for him/her in his/her absence, in which case he/she shall have the same duties as the President.

The four Vice-Presidents shall distribute their duties according to current needs and in agreement with the President.

In the event that the President leaves office, the first Vice-President or, in his absence, the second Vice-President shall step in as President with full powers, pending the appointment of a new President by the IC.

ARTICLE 20

The General Secretary shall conduct the administration of the IAPM and keep the records of the Academy. Moreover, he/she shall be responsible for the day-to-day affairs in consultation with the President and Vice-Presidents.

The General Secretary shall be in charge of drawing up both the agenda and the minutes of each meeting held by the Council or the Board, in consultation with the President.

In the absence of the General Secretary, the Vice-Presidents may take up the latter's post with the President's consent.

ARTICLE 21

The Treasurer shall be responsible for all financial matters of the Academy.

The Treasurer shall be in charge of managing the funds and financial documents of the Academy; checking the accounting balance of each financial year; and preparing the annual income/expenditure budget, which must be submitted to the approval of the Council. The members of the Council must receive a copy of the budget at least two months prior to the annual plenary meeting. The Treasurer will closely collaborate with General Secretary.

In the absence of the Treasurer, the General Secretary shall stand in his/her place.

MEETINGS

ARTICLE 22 (INTERNATIONAL COUNCIL)

The International Council of the IAPM (IC) shall hold an ordinary meeting with all its members present at least once a year. Furthermore, an extraordinary meeting shall be called on the initiative of the Board of Directors or at the request of three (3) or more regular fellows.



Plenary Meeting.

ARTICLE 23

A convening notice must be sent to all members of the IC at least one month prior to the ordinary, plenary meeting, stating the relevant location, date, time and agenda items. Whilst the President shall decide on the terms of the call for meeting, the General Secretary shall be responsible for drafting and signing it. Where an extraordinary meeting is to take place, notice must be given at least two weeks in advance.

ARTICLE 24

The agenda of the plenary meeting of the IC must include the following items: *a)* Reading and approving, if necessary, the minutes of the previous meeting; *b)* Report of the President; *c)* Report of the General Secretary; *d)* Report of the Treasurer (which must include the «balance of the financial year» if it is the first meeting being held in the financial period, or the «annual budget» if it is the last one; *e)* Any other business.

Any formal Statement or Declaration issued by the IAPM shall be subject to the approval of all IC members.

ARTICLE 25

The plenary meeting of the IC shall only adopt those resolutions that are related to the agenda items. Any proposal which is not duly set out in the call notice shall be included for discussion at the subsequent plenary meeting, unless all members unanimously agree for grounded reasons that it should be discussed immediately.

ARTICLE 26

The IC shall adopt resolutions by a simple majority of votes. The President shall exercise a casting vote in the event of a tie.

Members of the Council may delegate their right to vote to another member, pro-

viding that such delegation is stated in writing.

ARTICLE 27

The following resolutions may only be passed at an extraordinary meeting of the IC, providing that they are supported by two thirds of the votes of the permanent members, whether present or represented: *a)* Amending these Statutes; *b)* Moving the head office of the IAPM; *c)* Totally or partially revoking the appointments to the Board; *d)* Dissolving the Academy.

In the event that the issues which first caused an extraordinary meeting to be summoned were not included in any of the previous categories, the resolutions shall be adopted by a simple majority.

ARTICLE 28

The General Secretary of the IAPM shall report on the meetings and draft the minutes both for ordinary and extraordinary meetings. Said minutes shall make express mention of the resolutions adopted and the results of the votes, where appropriate.

ARTICLE 29 (BOARD OF DIRECTORS)

The Board of Directors shall convene two meetings a year, usually held at the same time as the various Scientific perinatal congresses. Notice (notification, date, agenda, etc.) must be given in the same manner as for any meeting of the Council.

ARTICLE 30

The BD shall be deemed validly constituted if at least four members thereof are present including the President. Non-attendance must be accounted for.

ARTICLE 31

The resolutions of the BD must be adopted by a simple majority of votes of the members present. The President may use a casting vote in the event of a tie.

ARTICLE 32

Minutes shall be taken of each meeting of the Board, and signed by the General Secretary, who shall attach a report on the

various discussions and contributions, as well as the resolutions adopted and the outcome of the vote, where appropriate.

FINANCE**ARTICLE 33**

The IAPM is a non-profit institution, and therefore it does not have any starting capital. As a result, all proceeds raised by the Academy shall be allocated to achieving the objectives laid down in this Constitution.

ARTICLE 34

The proceeds raised by IAPM shall result from:

- a) Any individual or society contribution, gift, donation or legacy, providing that it does not have a negative effect on the independence and freedom of the institution.
- b) Any subsidy from public or private funds subject to the same terms as the above paragraph.

ARTICLE 35

The costs to be borne by the IAPM are linked to:

- a) Establishing, administering, managing and maintaining the head office of the Academy (rent, furniture, administrative and operational costs, promoting the corporate image, etc.).
- b) Wages and social insurance for all hired staff.
- c) Costs of representing the IC members, providing that they are justified and included in a plan, when possible.

ARTICLE 36

The financial year shall start on January 1st and close on December 31st of the same year.

The annual budget must be approved by the Council at the last meeting of the previous year. It must be prepared on the basis of a reasonable estimate of the proceeds raised in the financial year in question.

The «balance of the financial year» must be approved by the IC at the first plenary meeting held in the following year. In the event that the balance shows a deficit or the organisation is forced to bear costs it cannot meet based on the budgetary provisions, the BD shall be required to put forward a suitable alternative.

At the BD's request, the IC may appoint an Audit Board composed of three permanent members who are not on the Board of Directors, with the aim of verifying the accounting situation of the Association at any given time.

Notwithstanding the provisions laid down in the previous article, the Board of Directors may also commission an external audit.

The President, the General Secretary and the Treasurer shall be authorised to sign cheques, transfer orders, agreements or the like.

AMENDMENTS AND DEVELOPMENT OF CONSTITUTION

ARTICLE 37

Any permanent or regular member may request that amendments be made to the Constitution following examination by the Board of Directors. If the Board approves any such amendments, an extraordinary meeting of the Council must be called pursuant to the provisions laid down in Article 27.

ARTICLE 38

Any amendments approved at the extraordinary meeting of the IC shall come into force after being submitted for regis-

tration by the General Secretary to the Official Register of Associations.

ARTICLE 39

In addition to this Constitution, the BD shall draft the by-laws regulating the internal affairs of the IAPM and other regulations concerning the relations of the Academy with other scientific societies.

Both sets of by-laws must be in keeping with the law and this Constitution, as they may not under any circumstances alter either the purposes or the credo of the Academy. The by-laws must be approved by the IC in an extraordinary meeting.

BY-LAWS

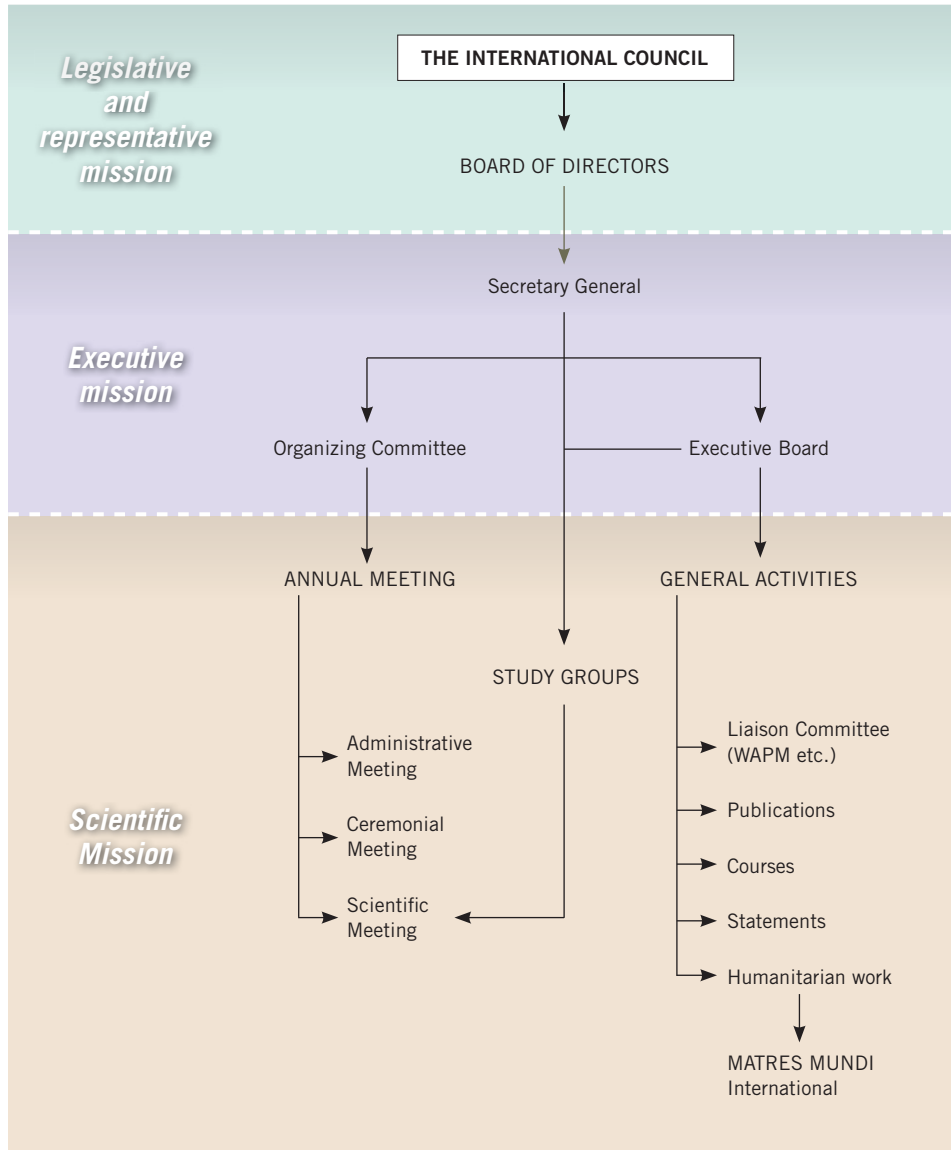
1. The criteria for election of «regular fellows», and also «associate fellows» are: Documented contributions to Perinatal Medicine and documented commitment to globalized Perinatal Medicine.
2. The obligations of the «regular fellows», apart from those assigned in the Constitution are: attend yearly meetings and actively participate in the activities of the Academy.
3. The International Council appoints regular and associate fellows, as well as honorary fellows Council. Such members in their annual meeting will study the proposal of the new regular and associate fellows made by the Board of Directors. This body of governance will choose the possible candidates suggested by any regular fellow, according to the criteria exposed in the point number 1. The corresponding documentation should be sent to Secretary General two months before annual meeting.
4. Regular membership, and also associate fellowship, ends when the circumstances foreseen in the article 12 of the Constitution, when the fellow does not attend two consecutive meetings without explanation, or the fellow does not attend three consecutive meetings with explanation.
5. In distinction of the regular fellows, the associate fellows do not take part in the International Council, and therefore they are not entitled to vote in the ordinary administrative meeting.
6. A member who is no longer a regular fellow may be appointed an honorary fellow. In that case he loses membership in the IAPM, but they continue to serve the mission of the Academy.

chapter 6

BASIC ORGANIZATION OF THE IAPM

INTRODUCTION

The organization of the IAPM is based essentially on the provisions of the Constitution and the IAPM, by-laws, together with the rules and regulations approved by the International Council at request of the Board of Directors. As the diagram shows, the IAPM has one organizational structure which allows it to develop a quadruple mission: legislative, representative, executive and scientific missions.



IAPM Organizational chart: Legislative, representative, executive and scientific missions.

GOVERNANCE

DECISION-MAKING STRUCTURE

The **International Council (IC)**, which includes the Academy's 30 permanent or regular fellows, is the institution's highest governing body. In accordance with article 11 of our Constitution, the IC «sets the overall criteria to be used by the Board of Directors to achieve the IAPM's objectives; approves, audits or amends the accounts; supervises and monitors; releases statements, etc». Additionally, «the IC alone has the capacity to appoint new regular, associate or honorary fellows, as specified above» (article 13).

The **Board of Directors (BD)** is the permanent body responsible for governing, managing and representing the IAPM. It must act in accordance with the Constitution (articles 14-16). The BD comprises seven fellows, with specific roles at the Academy: President, 4 Vice-Presidents, General Secretary and Treasurer. The members of the BD are elected by the IC for a period of five years, with the possibility of re-election.

ACTUAL BOARD OF DIRECTORS

President: Prof. Asim Kurjak (Croatia)

Vice-Presidents:

1. Prof. Serge Uzan (France)
2. Prof. Ritsuko Kimata Pooh (Japan)
3. Prof. Eberhard Merz (Germany)
4. Prof. Apostolos Papageorgiou (Greece)

General Secretary: Prof. Frank A. Chervenak (USA)

Treasurer: Prof. Vincenzo D'Addario (Italy)

The **President** runs the IAPM, acts as the Academy's legal representative and chairs meetings of the IC and BD. However, any decision taken by the President during his/her tenure must subsequently be submitted to the governing bodies for review and approval. The **Vice-Presidents** shall distribute their duties amongst themselves in accordance with current needs and with the President's agreement.

The **General Secretary** shall carry out the IAPM's administration and shall be responsible for its day-to-day affairs, in consultation with the President and Vice-Presidents. The General Secretary shall be in charge of drawing up both the agenda and the minutes of each meeting held by the Council or the Board.

The **Treasurer** shall be responsible for all the Academy's financial affairs.

MEETINGS

The IC shall hold an **ordinary plenary meeting** at least once a year. Additionally, an **extraordinary meeting** can be convened at the instigation of the BD, or on the request of three or more regular fellows. The agenda of the IC's plenary meeting must include the

following items: reading of the previous meeting's minutes and the President's, General Secretary's and Treasurer's reports. The IC shall adopt resolutions by simple majority vote, the President having a casting vote in the event of a tie. Regular fellows must be elected by unanimous vote of IC members; associate and honorary fellows can be elected by consensus among all current members. Certain matters, such as amending these Statutes, moving the IAPM's head office, totally or partially revoking appointments to the Board and dissolving the Academy, can only be taken at an extraordinary meeting of the IC, where motions shall be adopted by a simple majority vote.

The Board of Directors shall convene two meetings a year and a meeting shall be considered valid if at least four members thereof are present, including the President. Motions are adopted by the Board on simple majority vote of the members present.

In practice, the annual meeting of the IAPM comprises three very different meetings: the *administrative meeting*, which is no more than the plenary meeting of the IC described above; the *ceremonial meeting*, which is normally held at an appropriate location (the chapter house, amphitheatre or great hall of an academic institution) and where new fellows (both regular and associate) are sworn in, medals and diplomas are awarded and funeral orations are pronounced in honour of deceased academics; and finally, the *symposium*, which has a schedule of lectures and round tables generally devoted to a single subject.

In everyday practice, the International Council's function is legislative and representative, the Board of Director's is executive and the scientific function is shared between the regular fellows who make up the study groups and those who organise the annual scientific meetings in accordance with the BD's directives, along with the institutions that work together with the Academy to organise courses and symposiums (see chart pag. 171).



Meeting of a Study Group (Ch. Benedetto, J. M. Carrera and A. Kurjak).

STUDY GROUPS

As indicated in section (d), article 3 of the constitution of the IAPM, one of its objectives is «to promote the formation of working groups focussing on perinatal medicine». In order to fulfil this aim and as proposed by the Board of Directors, the International Council has established 7 study groups, whose main purpose is to study their chosen subjects in depth, in order to make recommendations concerning clinical matters, or aspects for investigation and to draw up statements for the health authorities, scientific societies etc., if that is thought to be desirable. These study group must activate interacademian activities of IAPM.

chapter 7

**THE INTERNATIONAL
COUNCIL: REGULAR
FELLOWS OF IAPM**

REGULAR FELLOWS

According to the art. 6 of the Constitution of the IAPM, the regular fellows «are all expert in Perinatal Medicine that have selected based on their international prestige, country of origin and scientific productivity. The aim of this selection process is to represent most parts of the world». The number of regular fellows allowed is limited to 30. All regular fellows sit on the International Council of the IAPM (art. 10).

INTERNATIONAL COUNCIL

The **International Council** includes the 30 permanent or **regular fellows** of the International Academy of Perinatal Medicine (IAPM).

The body responsible for governing, managing and representing the IAPM is the **Board of Directors**. The Board of Directors shall include the following officers: one President, four Vice-Presidents, one Secretary General and one Treasurer.

BOARD OF DIRECTORS	
President	Asim Kurjak, Croatia
Vice-Presidents	Serge Uzan, France
	Ritsuko K. Pooh, Japan
	Eberhard Merz, Germany
	Apostolos Papageorgiou, Canada
Secretary General	Frank A. Chervenak, USA
Treasurer	Vincenzo D'Addario, Italy

Life-long President	Erich Saling, Germany
Life-long Secretary General	José Maria Carrera, Spain

REGULAR FELLOWS	
1. Arnaldo Acosta, Paraguay	15. Pranav P. Pandya, UK
2. Badreldeen Ahmed, Qatar	16. Zoltan Papp, Hungary
3. Aris J. Antsaklis, Greece	17. Giuseppe Rizzo, Italy
4. Birgit Arabin, Germany	18. Manuel Sanchez Luna, Spain
5. Abdellatif Ashmaig, Sudan	19. Ola D. Saugstad, Norway
6. Chiara Benedetto, Italy	20. Joseph J. Schenker, Israel
7. Ana Bianchi, Uruguay	21. Cihat Şen, Turkey
8. Marina Degtyareva, Russia	22. Bernat Serra, Spain
9. Jan A.M. Deprest, Belgium	23. Milan Stanojević, Croatia
10. Joachim Dudenhausen, Germany	24. Gennady Sukhikh, Russia
11. Amos Grunebaum, USA	25. Radu Vladareanu, Romania
12. Mark Kurtser, Russia	26. Liliana Voto, Argentina
13. Giovanni Monni, Italy	27. Mirosław Wielgoś, Poland
14. Zehra Nese Kavak, Turkey	28. Ivica Zalud, USA



ASIM KURJAK

Affiliation: Medical School University of Zagreb (Croatia) and Sarajevo (Bosnia and Herzegovina); International University Sarajevo School of Science and Technology, Sarajevo, Bosnia and Herzegovina

Date and place of birth: September 13, 1942, Vranić, Bosnia and Herzegovina

Titles: MD, PhD, Professor, Academician

Short CV (Education and training, work experience):

1966 MD, Medical School University of Zagreb, Croatia

1971-1972 as a British scholar, research assistant at the Institute of Obstetrics and Gynecology, University of London, UK

1974 specialist in obstetrics and gynecology

1977 PhD degree

1979 Head of Ultrasonic Institute, University of Zagreb

1985 Head of World Health Organization Collaborating Centre for Ultrasound in Developing Countries

1985-2002 Head of the Department of Obstetrics and Gynecology Medical School University of Zagreb "Sveti Duh" General Hospital, Zagreb

Present position: professor of obstetrics and gynecology at Medical School Universities of Zagreb (Croatia) and Sarajevo (Bosnia and Herzegovina). Professor Emeritus at University Sarajevo School of Science and Technology.

Scientific International Society Memberships:

- International Academy of Perinatal Medicine, President
- World Association of Perinatal Medicine, Past President, President of Educational Committee
- International Society The Fetus as a Patient
- World Academy of Art and Science
- European Academy of Sciences and Art
- Ian Donald Inter-University School of Medical Ultrasound, founder and director
- International Academy for Human Reproduction
- Italian Academy of Science and Art of Reggio Puglia
- Academy of Medical Sciences of Catalonia
- American Institute of Ultrasound in Medicine and Biology (honorary member)
- Russian Academy of Medical Sciences (foreign fellow)
- Russian Academy of Science
- Academy of Science and Art of Bosnia and Herzegovina

Scientific National Society Memberships:

Croatian Academy of Medical Sciences

Croatian Medical Chamber

Recognitions:

- National Prize for Young Scientists (1971)
- Croatian national award “Rudjer Boskovic” for scientific work (1985)
- “Josip Juraj Strossmayer” Prize of Academy of Science and Arts of the Republic of Croatia for the scientific book (1990)
- The Prize of Academy of Science and Art of the Republic of Croatia for the achievements in medical science (1994)
- Prize “Europski krug” given by European Movement - Croatia (1996)
- Prize “William Liley” for the best scientific paper from fetal diagnostics and therapy (1998)
- “Maternity Prize” given by European Association of Perinatal Medicine (2000)
- Presidential decoration “The Order of the Croatian Starr with the Effigy of Rudjer Boskovic” (2001)
- “Pavao Culumovic” Prize of Croatian Medical Association (2003)
- Erich Saling Perinatal Prize (2011)
- Lifetime Achievement Award from International Academy of Perinatal Medicine (2015)

Doctor honoris causa from:

- University of Banja Luka, Bosnia and Herzegovina
- Autonomous University of Barcelona, Spain
- Semmelweis University in Budapest, Hungary
- University of Athens, Greece
- Carol Davila University of Medicine, Bucharest, Romania
- University of The Republic, Montevideo, Uruguay
- Siberian State University, Tomsk, Russia
- University of Buenos Aires, Argentina
- Ott Scientific Research University of Obstetrics and Gynecology, St Petersburg
- Pirogov Russian National Research Medical University, Moscow and Center for Obstetrics, Gynecology and Perinatology, Moscow
- University of Tirana, Albania
- University of Khartoum, Sudan.

Publications and scientific activities:

Papers: published 1175 papers; his papers have been cited 14.096 times, with h-index 64 (data from Google Scholar, 30 September 2021).

Books (written or edited): 121 (in English, Croatian, Italian, Japanese, German, Spanish, Portuguese and Polish)

Editor-in-chief of Donald School Journal of Ultrasound in Obstetrics and Gynecology.

Member of Editorial board or editor in chief of several international journals.



SERGE UZAN

Vice-President I

Affiliation: Sorbonne University, Paris , France

Date of birth: October 19, 1947

Titles: MD, Professor

Short CV (Education and training, work experience):

Honorary Dean

Serge Uzan is Professor Emeritus and Special Advisor to the President at Sorbonne University.

Surgeon of the Hospitals of Paris; main field of practice is oncology - in particular breast cancer

2002 – 2015 Dean Faculty of Medicine Sorbone University, Paris, France

2015 – 2017 Vice-President of Health at Sorbonne University, Paris, France

Since 2012 founder and chair Strategic Orientation Council of the University Institute of Cancerology (IUC) Pierre and Marie Curie

Founder of the UPMC University Institute of Health Engineering (IUIS)

2017 till now Chairman Steering Committee for the Recertification of Doctors

November 2018 submitted the Report which was used for the development of Article 3 of the Health Law, which will lead to the ordinance on the recertification of all health professions

Departmental Advisor of the Order of Physicians of Paris

National Advisor and Vice Chairman of the National Order of Physicians

Scientific International Society Memberships:

Founding Fellow and First Vice-President of the International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

Fellow of the French National Academy of Surgery

Recognitions:

Commander of the Legion of Honor

Publications and scientific activities:

He has 335 referenced publications in pubmed: <https://pubmed.ncbi.nlm.nih.gov/?term=uzan+s> Active in expansion of the training areas of the University increasing the education of paramedical professions to the university level.

Contributed to the emergence of the University of Patients and the establishment of patient trainers at the Faculty of Medicine.



RITSUKO KIMATA POOH

Vice-President II

Affiliation: Clinical Research Institute of Fetal Medicine (CRIFM) PMC, Fetal Diagnostic Center, Fetal Brain Center, Osaka, Japan

Date of birth: December 27, 1960, Osaka, Japan

Titles: MD, PhD, LL.B, MSc, CEO, Professor

Short CV (Education and training, work experience):

Graduated Law Department Keio University, Tokyo, Japan

1990 MD, Medical School Tokushima University, Tokyo, Japan

2020 MSc genetics, Chinese University Hong Kong

1996 dedicated to clinical research and investigation on small embryos/fetuses and fetal brain by perinatology, introduced the most sophisticated fetal neuroimaging using transvaginal sonography, three dimensional ultrasound and magnetic resonance imaging

2006 established CRIFM - Clinical Research Institute of Fetal Medicine in Osaka, Japan

Her sonogram of fetal brain morphology and vascularity is really scientific as well as artistic and they have been displayed at National Institute of Health Perinatal Research Branch in Detroit, USA

Recent study of medullary vein development and cortical development malformations of fetal brain are worthy to note. Her remarkable research on fetal brain has been internationally approved by perinatologists as well as neurologists and neurosurgeons.

Established the clinical genetic laboratory (Ritz Medical Co., Ltd.) for performing genetic examination by application of Next Generation Sequencing (NGS). However, she has emphasized the importance of observing fetuses in utero and 'fetus first!' as her motto.

She has been a truly one of the international executives in research as well as education in a field of perinatology. Her lectures are easily comprehensive for experts as well as beginners with beautiful slides and fluent English.

Scientific International Society Memberships:

World Association of Perinatal Medicine

International Society Fetus as a Patient

Regular Fellow of International Academy of Perinatal Medicine

International Society of Ultrasound in Obstetrics and Gynecology

Scientific National Society Memberships:

Japan society of Perinatal Neonatal Medicine

The Japanese Society of Child Neurology

The Japan Society of Human Genetics

Japanese Society for Genetic Counseling

The Japan Society of Obstetrical, Gynecological & Neonatal Hematology

Japan Society of Clinical Genetics in Obstetrics and Gynecology
 Japan Society of Obstetrics and Gynecology
 Japan Society of Maternal Fetal Medicine
 The Japan Society of Ultrasonics in Medicine

Recognitions:

2011 Alfred Kratochwil Award by International Society of Ultrasound in Obstetrics and Gynecology (ISUOG)

2015 Lifetime achievement award by World Association of Perinatal Medicine (WAPM)

2016 Sir William Liley Medal by International Society Fetus as a Patient

Publications and scientific activities:

She published more than 85 original scientific papers, 89 review articles and 4 books;

2003 Atlas of Fetal Central Nervous System, Diagnosis and Management

2009 Fetal Neurology

2015 Atlas of Advanced Ultrasound in Obstetrics and Gynecology.

Her early detection of fetal abnormalities in ‘Sonoembryology’ is really art of science in the uterus. Furthermore, she has been establishing a new field of ‘Sonogenetics’ and ‘Neurosonogenetics’, combining detailed sonogram with cytogenetics and molecular genetics.

From 2009 performing invasive genetic procedures including more than 1,300s Chorionic Villi Sampling and 200 amniocenteses per year.



EBERHARD MERZ

Vice-President III

Affiliation: Centre for Ultrasound and Prenatal Medicine in Frankfurt/ Main, Germany, Fetal Maternal Foundation, Germany

Date and place of birth: 1949, Baden-Wuerttemberg, Germany

Titles: MD, PhD, Professor, Head

Short CV (Education and training, work experience):

1976 MD Christian Albrechts-University of Kiel, Germany

1977 PhD Christian Albrechts-University of Kiel, Germany

1978-2000 Department of Obstetrics and Gynecology, University of Mainz, Germany

1985 specialist in Obstetrics and Gynecology University of Mainz, Germany

1988 habilitation, senior doctor and head of the Centre for Ultrasound and Prenatal Therapy University of Mainz, Germany

1995 professor of Obstetrics and Gynecology at the University of Mainz, Germany

2000 – 2013 Director, Department of Obstetrics and Gynecology, and Head of the Cen-

tre for Ultrasound and Prenatal Medicine, and Head of the Centre for Reproductive Medicine, Hospital Nordwest (affiliated Teaching Hospital of Johann Wolfgang Goethe University Frankfurt), Frankfurt/Main, Germany

Present position: Head of the Centre for Ultrasound and Prenatal Medicine in Frankfurt/Main, Germany

Scientific International Society Memberships:

Director of Ian Donald Inter-University School of Medical Ultrasound

Vice-President III International Academy of Perinatal Medicine (IAPM)

World Association of Perinatal Medicine (WAPM)

International Society "The Fetus as a Patient"

Scientific National Society Memberships:

2002 till now President Fetal Medicine Foundation Germany

2006-2008 President German Society for Ultrasound in Medicine (DEGUM)

Member German Society of Obstetrics and Gynecology

Member German Society for Perinatal Medicine

Member German Society for Senology

Recognitions:

1997 First funding price of DEGUM

1999 3D cube award

2008 William Liley Medal Fetus as a Patient

2010 Ian Donald Medal Ian Donald Inter-University School of Medical Ultrasound

2011 Ernest Moro medal

2012 Honorary Professor of the University of Buenos Aires, Argentina

2017 Erich Saling Perinatal Prize, Belgrade

Honorary member of the German Society for Ultrasound in Medicine

Honorary member of several international societies

Publications and scientific activities:

More than 240 peer reviewed papers. 8 books on Ultrasound in Obstetrics and Gynecology

More than 300 invited lectures at national and international meetings

1999 till now Editor of the European Journal of Ultrasound

2007 till now Co-Editor of Ian Donald School Journal of Ultrasound in Obstetrics and Gynecology

1989 pioneer of 3-dimensional ultrasonography in obstetrics and gynecology

2007 release of the first German Computer Program Prenatal Risk Calculation (PRC 1.0) for the detection of chromosomal defects

2011 release of PRC 2.0

2013 release of PRC 3.0. The latest program is now used in more than 30 countries and is available in German, English, Portuguese and Spanish

Organization of conferences: 25 international and national conferences

September 5-6, 1997: 1st World Congress on 3D Ultrasound in Obstetrics and Gynecology, Mainz, Germany

June 12-14, 2008: The Fetus as a Patient conference in Frankfurt Germany

March 21-24, 2019: 3rd World Congress on 3D/4D Ultrasound in Obstetrics and Gynecology (Eberhard Merz, Asim Kurjak), Dubrovnik, Croatia



APOSTOLOS PAPAGEORGIU

Vice-President IV

Affiliation: Department of Pediatrics and Neonatology at the Jewish General Hospital, McGill University Montreal, Canada

Place of birth: Volos, Greece

Titles: MD, Full professor of pediatrics, obstetrics and gynecology

Short CV (Education and training, work experience):

Medical education at The Sorbonne University, Paris, France

Postgraduate training in Pediatrics and Neonatology at McGill University, Montreal, Canada

Chief of Pediatrics and Neonatology at the Jewish General Hospital, a level III perinatal center in Montreal, Canada

Scientific International Society Memberships:

Fellow of the American Academy of Pediatrics

Elected Member of the American Society for Pediatric Research

Elected Member of the European Society for Pediatric Research

Member of the Hellenic Pediatric Society and Association of Doctors of the French Language Member of the New York Academy of Science

Vice President of the International Academy of Perinatal Medicine

Scientific National Society Memberships:

1992 – 2000 Past President of the Society of Neonatologists of the Province of Quebec

1993 – 1995 Past President of the Canadian Section of Neonatal/Perinatal Medicine of the Canadian Pediatric Society

Member of the Canadian Medical Association

Fellow of the Royal College of Physicians and Surgeons of Canada

Member of the Association of Neonatologists of the Province of Quebec

Recognitions:

Osler Award as outstanding teacher, McGill University Faculty of Medicine, Montreal, Canada

Kaplan Award as the best clinical teacher, Department of Pediatrics, McGill University, Montreal, Canada

Prix Letondal for the contribution to the health of infants in the province of the Quebec Association of Pediatricians

Prix d'Excellence of the Hellenic Scholarship Foundation

2003 he was featured in Canada at the Millennium 2000 among selected contributors to Canadian life in the previous century, named Greek of the Year by the Quebec Greek community

2019 Eric Saling Award for his contributions to neonatal/perinatal medicine, awarded by the World Association of Perinatal Medicine

Publications and scientific activities:

Published over 350 papers, book chapters and abstracts and has been invited to over 50 countries where he has delivered over 500 lectures

He is internationally recognized for his research and contributions, particularly in the management of extremely low birth weight infants

SECRETARY GENERAL



FRANK A. CHERVENAK

Affiliation: Lenox Hill Hospital, Zucker School of Medicine at Hofstra, Northwell, New York, USA

Titles: MD, Professor

Short CV (Education and training, work experience):

BSc Pennsylvania State University, New York, USA

MD Thomas Jefferson University, New York, USA

Internship in Internal Medicine at New York Medical College, USA

Residency in Obstetrics and Gynecology at New York Medical College in St. Luke's Roosevelt Hospital Center, USA

Fellowship in Maternal Fetal Medicine at Yale University School of Medicine, USA

Assistant Professor of Obstetrics and Gynecology at Mt. Sinai Medical Center, where he was also Director of Perinatal Research

1999-2018 Given Foundation Professor and Chairman of the Department of Obstetrics and Gynecology; Obstetrician and Gynecologist-in-Chief; the Director of Maternal Fetal Medicine at the New York Presbyterian Hospital, Weill Medical College of Cornell University, NY, USA

1987 appointed Associate Professor of Obstetrics and Gynecology and Director of Obstetric Ultrasound and Ethics at New York Hospital-Cornell Medical Center, NY, USA

1991 Director of Maternal Fetal Medicine and Director of Obstetrics, New York Hospital-Cornell Medical Center, NY, USA

1992 Full Professor with tenure at New York Hospital-Cornell Medical Center, NY, USA

1998 Vice Chairman of the Department of Obstetrics and Gynecology, New York Hospital-Cornell Medical Center, NY, USA

1999 Acting Chairman of that Department at New York Hospital-Cornell Medical Center, NY, USA

2000 Chairman and Obstetrician and Gynecologist-in-Chief New York Hospital-Cornell Medical Center, NY, USA

2001 Master in Medical Management degree from Carnegie Mellon University, USA

2008 earned fellowship status from the American College of Physician Executives

Currently serves as Chair of Obstetrics and Gynecology, Lenox Hill Hospital, New York, USA

Chair of Obstetrics and Gynecology and Associate Dean of International Medicine, Zucker School of Medicine at Hofstra/Northwell, New York, USA

Scientific International Society Memberships:

He has served as President of the World Association of Perinatal Medicine, International Fetal Medicine in Surgery Society

Serves as President of the International Society of the Fetus as a Patient

Vice-president of the International Academy of Perinatal Medicine

Co-director of the Ian Donald Inter-University School of Medicine and Ultrasound

Serves on the Ethics and Professionalism Committee of FIGO.

Admitted as a fellow ad eundem of the Royal College of Obstetricians and Gynaecologists of Great Britain

Foreign Fellow of the Russian Academy of Sciences

Honorary Member of the Mexican Academy of Pediatrics

“Knight of Medicine” University of Tbilisi, Georgia

Scientific National Society Memberships:

A member of The National Academy of Medicine of the National Academies

Served on the Board of Governors of the American Institute in Ultrasound and Medicine and the Society of Perinatal Obstetricians

He has served as President of the New York Perinatal Society and the New York Academy of Medicine Section of Obstetrics and Gynecology, and the New York Obstetrical Society

Recognitions:

Dr. Solomon Silver Award for application of advances in research to the practice of Clinical Medicine at Mt. Sinai Medical Center, NY, USA

He has been awarded doctor honoris causa from:

Semmelweis University Budapest, Hungary

University of Athens, Greece

Carol Davila University of Medicine, Bucharest, Romania

University of The Republic, Montevideo, Uruguay

Siberian State University, Tomsk, Russia

University of Buenos Aires, Argentina

Dubrovnik International University, Croatia
 Ott Scientific Research University of Obstetrics and Gynecology, St Petersburg, Russia
 Pirogov Russian National Research Medical University, Moscow, Russia
 Center for Obstetrics, Gynecology and Perinatology, Moscow, Russia
 Surgut University, Russia
 Kuban State University Krasnodar, Russia

Publications and scientific activities:

Published 342 papers in peer review literature and has co-authored or co-edited 43 textbooks. Research interests include ultrasound and ethics in obstetrics and gynecology and physician leadership.

TREASURER



VINCENZO D'ADDARIO

Affiliation: University of Bari, Italy

Date and place of birth: December 16, 1950, Bari, Italy

Titles: MD, Professor

Short CV (Education and training, work experience):

1975 MD, Faculty of Medicine University of Bari, Italy

1979 Board Certificate of Obstetrics and Gynecology Department of Obstetrics and Gynecology, Faculty of Medicine, University of

Bari, Italy

1979 Senior Lecturer Department of Obstetrics and Gynecology of the University Medical School of Bari, Italy

1992 Associate Professor of Obstetrics and Gynecology Department of Obstetrics and Gynecology of the University Medical School of Bari, Italy

Used to be a Dean of the Midwifery School at the Faculty of Medicine, University of Bari, Italy

Scientific International Society Memberships:

Regular Fellow of International Academy of Perinatal Medicine (IAPM)

Director of the Bari Italian Branch of Ian Donald School of Ultrasound in Obstetrics and Gynecology

Past President of Mediterranean Association of Ultrasound in Obstetrics and Gynecology (MEDUOG)

Honorary Member of:

Yugoslav Association of Societies of Ultrasound in Medicine and Biology

Hellenic Society of Ultrasound in Obstetrics and Gynecology

Spanish Society of Ultrasound in Obstetrics and Gynecology

Romanian Society of Ultrasound in Obstetrics and Gynecology

Romanian Society of Perinatal Medicine

Albanian Society of Perinatal Medicine

Scientific National Society Memberships:

Past President of Italian Society of Ultrasound in Obstetrics and Gynecology (SIEOG)

Recognitions:

Honorary Professor of the University of Buenos Aires, Argentina

Visiting Professor at the Cornell University, New York

Publications and scientific activities:

Published 85 papers in peer reviewed journals, 44 chapters in the books

Authored 4 books of Ultrasound in Obstetrics and Gynecology

He is Associate Editor of the Journal of Perinatal Medicine.



ERICH SALING

The father of perinatal medicine, Erich Saling, was born in Stanislaw (Galicia, Germany) July 21st 1925 as the son of Heinrich Saling, a forester and his wife, Emma. Immediately after World War II he studied medicine, starting in 1946 at the University of Jena and finishing at the Free University of Berlin. Between 1945 and 1958 he was trained in obstetrics and gynecology at the Women's Hospital in Berlin-Neukölln. After having qualified as a University Lecturer in 1963 he has offered a Professorship at the Free University of Berlin in 1968. In addition to his clinical practice he has been engaged in research in the field of obstetrics and perinatal medicine since 1958.

Since 1991 is Director of the charitable Institute of Perinatal Medicine Berlin-Neukoelln.

In 1952 he married Dr. Hella Saling, born Weymann, who supports him extensively; their two sons Peter and Michael were born in 1954 and 1955, respectively.

In 1961 he developed *fetal blood analysis* from the scalp of the fetus during labor. This was the first direct approach to the human fetus. It was the crystallization-point of perinatal medicine. The original publication «A new approach in examining the fetus during labour» *Arch Gynäkol* 1962; 197: 108 was classified as Citation Classic by the Institute of Scientific Information in 1984.

Before that he had done the first catheterization of the aorta of the newborn immediately after delivery in 1958, he had developed a method of rapid transfusion of placental blood in cases of early cord ligation and, in 1959, a two-catheter-technique of blood exchange in the newborn. In 1960, he performed the first blood gas analysis from the central circulation to determine the effectiveness of resuscitation methods in the newborn, and in 1961 he, together with Damschke, introduced a rapid method to measure the blood O₂ saturation in microsamples.

This was the beginning of an innovative and very fruitful phase with ever new developments in the field of perinatal medicine. The most important were:

1. *Amnioscopy* in 1962, a method for an optical examination of amniotic fluid with the membranes still intact.
2. *Belt expression* of the fetus in 1964 to support, when indicated, the bearing down efforts of the parturient during the second stage of labor.
3. *Combined clinical-biochemical assessment of the newborn* immediately after delivery by Apgar score and simultaneous measurement of blood pH in umbilical vessels in 1965.
4. *Newborn laryngoscope* in 1966 which is, according to recent recommendations in a text book of anesthesiology, particularly suitable for the intubation of very small premature newborns.
5. *Buffer therapy* for resuscitation of the newborn, in 1966.
6. *Combined monitoring of the fetus during labor* by use of cardiotocography and fetal blood analysis, in 1968.

7. *Endoscopic examination of the esophagus and stomach in the newborn*, in 1972.
8. *Device for measuring the traction forces applied on the infant during vacuum extraction*, in 1973.
9. *External cephalic version in cases of breech presentation by relaxing the uterus with the tocolytic substances with W. Müller-Holve*, in 1975.
10. *Modification of the vacuum extractor*, in 1978.
11. *Continuous disinfection of the vagina to prevent ascending infection after the rupture of the membranes during pregnancy and labor*, in 1978.
12. *Equipment for home-monitoring of uterine contractions in cases with premature labor together with U. Blücher* in 1978.
13. *Knee-bend test*, an easy to use stress-test for a cardiotocographic detection of imminent fetal distress, in 1979.
14. *Obstetric spoons*, a kind of modified forceps, in 1980.
15. *Operative early total cervix occlusion as a method to prevent bacterial ascension in cases with a history or recurrent late abortion and extreme Prematurity*, in 1981.
16. *Prenatal magneto-encephalogram in the human fetus together with T. Blum and R. Bauer*, in 1983.
17. *Recording of the acoustic milieu in the uterus during the labor together with U. Blücher and J. Rothe*, in 1984.
18. *Bell-test*, an acoustic stimulation test fort the fetus by means of a bicycle bell, in 1986.
19. *Prematurity prevention program*, an innovative concept to prevent ascending genital infections with all their deleterious consequences, in 1989.
20. *Diagnostic intracervical lavage for a bacteriological diagnosis at the lower pole of the membranes for an early detection of ascending infections in risk cases*, in 1990.
21. *Prenatal care self-examination for the very early detection of dysbacteriosis as a means to prevent Prematurity by the pregnant woman herself*, in 1993.
22. *Introduction of «Total Cervix Occlusion» for prevention of recurrent late abortion and early prematurity*.
23. *Creation of an efficient, simple and inexpensive program for prevention of very premature birth (prenatal care self-examination of vaginal pH)*.

In addition, he tried to improve the well-being of the fetus and mother by respiratory aids, by nutritional supplementation and by developing instruments with reduced traumatic potential, like noninvasive cardiotocograph electrodes. In 1966, he developed the concept of the so-called *oxygen conserving adaptation of the fetal circulation*. When Doppler sonography was directed on the fetal circulation, this principle was rediscovered and erroneously called «brain sparing effect».

E. Saling introduced the term «Perinatal Medicine» in 1967. In the same year the first national Society of Perinatal Medicine was founded by him in Germany. Until 1990, he was responsible for the organization of 14 national congresses in Berlin. In 1981, an international section was added. These biannual congresses have each attracted to more than 2,000 participants. In 1968, the first international society, the European Association of Perinatal Medicine, was founded and E. Saling was the Founder

President. In 1990, the German Society of Prenatal and Obstetrical Medicine was founded with E. Saling as the Founder President. He is honorary or corresponding member of 21 societies and has won several awards and honors. Under his charge as chairman more than 60,000 infants have been born.

Since 1991, he has been Emeritus of Perinatal Medicine. He continues to do research in a newly founded *Institute of Perinatal Medicine* under private law and still active as an obstetric consultant in his own private obstetrical practice.

In 2005 he was appointed president of the International Academy of Perinatal Medicine (IAPM).

We do not know what might have happened if E. Saling had not done his revolutionary research in the beginning of the sixties. He taught us to look into the black box womb and to surrender ideological walls. The fetus and the newborn were drawn out of the fatalistic dark of the past; diagnostic and therapeutic measures came into reach and E. Saling was the programmatic obstetrician for all of us, especially with his book, *The Child in Obstetrics*.

Up to now, he has published more than 550 publications.

HONORS AND DISTINCTIONS

- | | | |
|------|---|--|
| 1968 | Prix Quadriennal Fondation Internationale de Gynécologie et d'Obstétrique (Belgium). | fetus during labour» <i>Arch Gynäkol</i> 1962; 197: 108. |
| 1974 | Maternité Prize of the German Society of Perinatal Medicine. | 1988 Ernst Reuter Plaque —the highest award of the City of Berlin. |
| 1980 | Michaelis Plaque in gold from University of Kiel. | 1991 Gold Medal of the Haakert Foundation. |
| 1982 | Maternité Prize of the European Association of Perinatal Medicine. | 1997 First winner of the A. William Liley Prize of the International Society «The Fetus as a Patient». |
| 1984 | «Citation Classic» from the Institute of Scientific Information, Philadelphia, for the article «A new approach in examining the | 2001 Honorary President of 5 th World Congress of Perinatal Medicine. |
| | | 2005 President of the international Academy of Perinatal Medicine. |

HONORARY OR CORRESPONDING MEMBERSHIPS

Honorary member of 20 and corresponding member of 4 medical societies.

- | | | |
|------|---|---|
| 1972 | Jugoslavian Society of Obstetrics and Gynecology. | 1973 Cuban Society of Pediatrics (corresponding). |
| 1973 | Royal Society of Medicine, London. | 1974 Swiss Society of Gynecology and Obstetrics. |

- 1979 Italian Society of Gynecology and Obstetrics.
- 1980 Yugoslavian Association of Societies for Ultrasound in Medicine and Biology.
- 1982 Society of Obstetrics and Gynecology in Berlin.
- 1983 Greek society of Perinatal Medicine.
- 1983 German Society of Pediatrics (co-responding).
- 1986 Foundation of an «Erich Saling Inter-University School» for the study of the pathophysiology of pregnancy in Dubrovnik. Initiator and Director: Prof. Asim Kurjak, University of Zagreb.
- 1987 Fellowship *ad eundm* of the Royal College of Obstetricians and gynaecologists, London.
- 1987 Italian Society of Perinatal Medicine.
- 1989 Society of Perinatal Obstetricians, USA.
- 1990 Society of Perinatal Medicine of the German Democratic Republic.
- 1991 Order of the Yugoslavian flag with gold star ribbon in high recognition by the Yugoslavian Government for outstanding services to perinatal medicine in that country.
- 1991 First honorary member of the International Society «The Fetus as a Patient».
- 1992 German Society of Gynecology and Obstetrics.
- 1994 Society of Obstetrics and Gynecology in Thuringia.
- 1995 Finnish Perinatal Society.
- 1995 Slovakian Society of Obstetrics and Gynecology.
- 2006 Honorary Member of Matres Mundi International.
- 2006 Honorary Fellow of The Royal Academy of Medicine (Catalonia, Spain).

SPECIAL SCIENTIFIC ACHIEVEMENTS AND NEW DEVELOPMENTS

- 1958 First catheterization of the aorta of the newborn immediately after delivery.
- 1958 Development of a new method of rapid placenta blood transfusion in cases of early cord ligation.
- 1959 Development of a new technique of blood exchange in the newborn.
- 1960 Examination of the circulation of the newborn immediately after delivery.
- 1960 First blood gas analysis from central circulation to determine effectiveness of resuscitation methods in the newborn.
- 1961 Development of a rapid method to measure the blood O₂ saturation in microsamples (together with K. Damaschke).
- 1961 Development of fetal blood analysis, the first direct approach to the human fetus.
- 1962 First concept of a heart-lung machine for the use in very small prematures with severe disturbance of lung function.
- 1962 Development of amnioscopy, a method for examining amniotic fluid with the membranes still intact.
- 1964 Introduction of belt expression of the fetus to support the bea-

- ring down efforts of the parturient during the second stage of labor.
- 1965 Introduction of combined clinical-biochemical assessment of the newborn immediately after delivery by Apgar score and simultaneous measurement of blood pH in umbilical vessels.
- 1966 Development of a newborn laryngoscope which has since become widespread. This instrument is particularly suitable for the intubation of very small prematures
- 1966 Introduction of buffer therapy for resuscitation of the newborn.
- 1966 Development of the concept of the so-called oxygen conserving adaptation of the fetal circulation (Later by other authors, erroneously, called «brain sparing effect».
- 1968 Introduction of modern monitoring of the fetus during labor by combined use of cardiotocography and fetal blood analysis.
- 1972 First endoscopic examination of the esophagus and stomach in the newborn shortly after delivery.
- 1972 First injections of amino acids into amniotic fluid as compensatory nutrition for malnourished fetuses (together with P. Salchow and J. W. Dudenhausen).
- 1972 First attempts to use a «mesh stocking cap» to extract the fetus for vaginal termination of labor.
- 1973 Development of a device for measure the tractive forces applied on the infant during vacuum extraction.
- 1975 Introduction of a new method of external cephalic version in cases of breech presentation by relaxing the uterus with tocolytic substances (together with Müller-Holve).
- 1978 Modification of vacuum extractor.
- 1978 Introduction of methods for continuous disinfecting of the vagina to prevent ascending infection during pregnancy and labor after rupture of the membranes.
- 1978 Development of equipment for transmitting premature contractions per telephone from the patients' home to the hospital (together with U. Blücher).
- 1979 Development of the knee-bend test for cardiotocographic detection of imminent fetal distress.
- 1980 Development of obstetric spoons (modified forceps).
- 1981 Introduction of the operative early total cervix occlusion, a new method for preventing recurrent late abortion and prematurity.
- 1982 Development of a new atraumatic electrode concept for registration of fetal cardiotocogram during labor (in cooperation with S. Schmidt, K. Langner and J. Rothe).
- 1983 Development of a device for the inductive measurement of the width of the os uteri during labor (together with U. Blücher).
- 1983 First successful use of special blood transfusions (buffy-coat) for the prevention of fetal growth retardation (together with R. Malchus and I. Hoppe).
- 1983 First performance of a prenatal magnetoencephalogram in the human fetus (together with U. Blücher and R. Bauer).
- 1984 Microphonic recording of the acoustic milieu in the uterus du-

- ring labor (together with U. Blücher and J. Rothe).
- 1986 Development of an acoustic bell-test (bicycle-bell) as a new diagnostic parameter in antepartum cardiotocographic monitoring.
- 1986 First compensatory supply of essentially important substances by infusion into the abdominal cavity of the malnourished fetus.
- 1987 Development of a new Apgar score, adapted umbilical-acidity score, for better assessment of the newborn immediately after delivery.
- 1989 Development of a Prematurity-prevention program suitable for routine usage.
- 1990 Development of an egg-pole lavage for bacteriological diagnostics of ascending infections in the genital tract of the pregnant patients.
- 1993 Development of a project of a prenatal care self-examination by the patient herself for the prevention of prematurity.

From: «Erich Saling: father of Perinatal Medicine». Published in «Textbook of Perinatal Medicine» (Editor in chief: A. Kurjak), Vol. I, pp 3-7, The Parthenon Publishing Group LT., 1998.

K. Vetter

LIFE-LONG SECRETARY GENERAL



JOSÉ M. CARRERA

Senior Member of the Dexeus University Institute, Barcelona, Spain.

During his 40 year clinical and academic career, José M. Carrera chaired several Scientific Societies (Spanish Association of Prenatal Diagnosis, Ibero-American Society of Prenatal Diagnosis, Catalan Society of Obstetrics and Gynaecology, etc.) and headed a number of specialized sections within the SEGO (Spanish Society of Gynaecology and Obstetrics), including the Ultrasonography Section and the Perinatal Medicine Section, etc. He was also Chairman of the European Committee on Doppler Technology, the European Committee on Prenatal Diagnosis and the European Diploma of Prenatal Diagnosis and Obstetric Ultrasonography. He presided over ten International Symposia and ran more than 100 courses on Perinatal Medicine. In addition, he chaired the 6th Spanish Congress of Perinatal Medicine (Barcelona, 1984) and the 5th World Congress of Perinatal Medicine (Barcelona, 2001), amongst others. His publications include 42 books, 102 book chapters and 232 scientific articles published in national and international journals alike. He is President of the «Matres Mundi International» and founder of «Matres Mundi-Spain».

Amongst the positions held, he was appointed Professor («Catedrático visitante») of the Faculty of Medicine at the University of Coimbra (1987), which later awarded him the degree of Doctor Honoris Causa in 1995. He is also Honorary Member of various international Scientific Societies and a visiting Professor of Cornell University, New York, USA. Former Secretary General of the World Association of Perinatal Medicine (WAPM).



ARNALDO ACOSTA

Affiliation: National University of Asunción, Paraguay

Titles: MD, Professor Emeritus

Short CV (Education and training, work experience):

1965 MD Faculty of Medical Science National University of Asuncion, Paraguay

1966 Rotating Internship National University of Asuncion, Paraguay

1967 Resident in obstetrics and gynecology, National University of Asuncion, Paraguay

1968 Rotating Internship, Danbury Hospital, Danbury Connecticut, USA

1969 Resident in Obstetrics and Gynecology, Millard Fillmore Hospital, New York State University at Buffalo, Buffalo, New York, USA

1970 – 1973 Resident in Obstetrics and Gynecology, Baylor College of Medicine, Houston, Texas, USA

1973 – 1974 Fellow, Reproductive Endocrinology, Baylor College of Medicine, Houston, Texas, USA

1974 – 1979 Assistant Professor of Obstetrics and Gynecology, National University of Asuncion, Paraguay

1980 – 1990 Associate Professor of Obstetrics and Gynecology, National University of Asuncion, Paraguay

1990 – 2004 Professor of Obstetrics and Gynecology, National University of Asuncion, Paraguay

1974 – 2004 Associate Professor of Obstetrics and Gynecology, Baylor College of Medicine, Houston, Texas, USA

1998 – 2004 Professor and Chairman, Department of Obstetrics and Gynecology, National University of Asunción, Paraguay

1998 – 2004 Director, Post-Graduated School of Obstetrics and Gynecology, National University of Asunción, Paraguay

2000 – 2004 Director, Hospital for Women, National University of Asunción, Paraguay,

2012 Professor Emeritus, National University of Asunción, Paraguay

Scientific International Society Memberships:

1971 – 1972 President, Junior Fellows Division, American College of Obstetricians and Gynecologists, ACOG, USA

1989 – 1998 President, Latin-American Chapter, The American Fertility Society (AFS) and American Society of Reproductive Medicine (ASRM) USA

1993 – 1996 President, Latin-American Federation of Fertility and Sterility (FLASEF)

1996 – 1999 President, Latin-American Federation of Obstetrics and Gynecology (FLASOG)

1998 – 2001 President, Latin-American Federation of Perinatal Medicine (FLAMP)

2003 – 2006 President, International Federation of Obstetrics and Gynecology (FIGO)

2012 – 2014 President, Latinamerica, Spain and Portugal Association of Academy of Medicine, ALANAM

1997 – 2000 Member, Scientific Committee, International Federation of Gynecology and Obstetrics (FIGO)

1997 – 2000 Member, Executive Board (Observer), International Federation of Gynecology and Obstetrics (FIGO)

1995 – 1998 Member, Scientific Committee, International Federation of Fertility Society (IFFS)

1998 – 2004 Member, Executive Board, International Federation of Fertility Society (IFFS)

1993 – 2001 Member, International Affairs Committee, American Society for Reproductive Medicine (ASRM) USA

1997 – 2004 Member, International Affairs Committee, The American College of Obstetrician and Gynecology (ACOG) USA

2006 – 2009 Chairman, WHO-FIGO Alliance Committee

2009 – 2015 Member, Executive Board Committee, FIGO

2012 Member, Scientific Committee, FIGO, Rome

Fellow, American College of Obstetrics and Gynecology (ACOG)

Fellow, International Academy of Human Reproduction

Fellow, International College of Surgeons

Member, American Society of Reproductive Medicine (ASRM)

Member, American Medical Association (AMA)

Member, American Society of Reproductive Surgeons

Member, Royal Society of Medicine, London – England

Scientific National Society Memberships:

1987 – 1990 President, Paraguayan Fertility Society

1990 – 1992 President, Paraguayan Society of Obstetrics and Gynecology

1998 – 2000 President, Paraguayan Society of Perinatal Medicine

1995 – 1998 President, Paraguayan society of Menopause

2007 – 2009 President, National Academy of Medicine of Paraguay

2011 – 2013 President, National Academy of Medicine of Paraguay

Recognitions:

Honorary Fellow, International Federation of Fertility Society (IFFS)

Honorary Fellow, Royal College of Obstetricians and Gynecologists (RCGO) London, England

Honorary Member, Spanish Society of Obstetrics and Gynecology, SEGO

Honorary Member, Iberoamerican Society of Prenatal Diagnosis, SIADP

Honorary Member, World Association of Perinatal Medicine, WAPM

Honorary Member Uruguayan Society of Gynecology and Obstetrics

Honorary Member Uruguayan Society of Fertility

Honorary Member Argentinean Society of Fertility

Honorary Member Chilean Society of Gynecology and Obstetrics
Honorary Member Chilean Society of Fertility
Honorary Member Brazilian Society of Gynecology and Obstetrics
Honorary Member Brazilian Society of Fertility
Honorary Member Peruvian Society of Gynecology and Obstetrics
Honorary Member Peruvian Society of Fertility
Honorary Member Bolivian Society of Gynecology and Obstetrics
Honorary Member Ecuadorian Society of Gynecology and Obstetrics
Honorary Member Colombian Society of Gynecology and Obstetrics
Honorary Member Venezuelan Society of Gynecology and Obstetrics
Honorary Member Cuban Society of Gynecology and Obstetrics
Honorary Member Dominican Society of Gynecology and Obstetrics
1995 Guest of Honor, City of Santa Cruz, Bolivia
1997 Guest of Honor, City of la Paz, Bolivia
1997 Guest of Honor, Guatemala City
2004 Cavaliere Di Grazia Magistrale Sovereign Order of Malta
2014 Decoration issued by the Latinamerican, Spain and Portugal Academy of Medicines ALANAM
2015 Appointed Honorary Professor of the University of Buenos Aires U.B.A. Buenos Aires, Argentina
2016 Decoration Honor of Merit of the Republic of Paraguay in gratitude for services rendered to the public health of the country and outstanding activities all over the world, granted by the President of the Republic of Paraguay and the Foreign Affairs Minister of the Republic of Paraguay

Publications and scientific activities:

Editor and author of 13 books

Member of editorial boards:

1975 – 1977 Director, Journal of Paraguayan Medical Society

1987 – 1989 Member, Editorial Board, Journal of the Ibero-American Society of Gynecologic Endoscopy, Madrid, Spain

1997 – 2000 Member, Editorial Board, Journal of Gynecologic Techniques, Los Angeles, California, USA

2000 – 2004 Member, Editorial Board, Journal of the Ibero-American Society of Menopause, Spain

1987 President, First Latin-American Congress on Endometriosis, Asunción, Paraguay

1990 President, Second Paraguayan Congress of Fertility and Sterility, Asunción, Paraguay

1996 President, VII Paraguayan Congress of Obstetrics and Gynecology, Asunción, Paraguay

1998 President, 4th Paraguayan Congress of Perinatal Medicine, Asunción, Paraguay

1996 President, Latin-American Congress in Obstetrics and Gynecology, Paraguay

1998 President, Latin-American Congress of Perinatal Medicine, Rio de Janeiro, Brazil

1998 President, Scientific Committee World Congress on Endometriosis, Recife, Brazil
 2004 President, International Congress, Advances in Human Reproduction, Barcelona, Spain
 2006 President, World Congress of Obstetrics and Gynecology, Kuala Lumpur, Malaysia
 2016 President, 9th World Congress of Perinatal Medicine in Developed Countries, Asunción, Paraguay

Other

1990 – 2002 Honorary Consul of Guatemala in Paraguay
 1992 – 2000 Charge d' affairs of Guatemala in Paraguay
 2011 Minister, Embassy of the Sovereign Order of Malta in Paraguay



BADRELDEEN AHMED

Affiliation: Feto-Maternal Medicine Centre, Doha, Qatar; Weill Cornell Medical College, Doha, Qatar; Medical school, Qatar University, Doha, Qatar

Titles: MD, Professor, FRCOG, MBCHB, MFFP, CCST, FAcadEd., Director

Short CV (Education and training, work experience):

1981 MBCHB Ainshams University, Egypt

1988 Master Khartoum University, Sudan

1994 MRCOG

1997 Diploma in advanced obstetrics ultrasound, Royal College of Obstetricians and Gynecologists/Royal College of Radiologists, Sunderland, UK

2000 MD Newcastle University, UK

2006 Diploma in Foetal Medicine, Fetal Medicine Foundation, London, UK

2007 FRCOG

Consultant obstetrician and gynecologist Dorset County Hospital, Dorchester, Wessex Region, UK

Director of Fetomaternal Medicine Centre, Doha, Qatar

Professor of obstetrics at Weill Cornell Medical College, Doha, Qatar

Interim director of Obstetrics and Gynecology, Clerkship

Professor of obstetrics and gynecology at Medical School Qatar University, Doha, Qatar

Ex-chairman of Department of Obstetrics and Gynecology, Women's Hospital Hamad Medical Corporation, Doha, Qatar (for 10 years)

Founder of Fetal Maternal Medicine unit at Hamad Medical Corporation, Doha, Qatar

Scientific International Society Memberships:

Founding member of the international society of Ultrasound in Obstetrics and Gynecology (ISUOG)

Board member of the World Association of Prenatal Medicine
 Founder and president of the African Association of Perinatal Medicine
 Board member of the Fetus as the Patient Society
 Founding member of the Academy of Medical Educators
 Regional Director of the Ian Donald School of Medical Ultrasound
 Regular Fellow of International Academy of Perinatal Medicine

Publications and scientific activities:

Published over 50 papers in peer-reviewed journals and is editor of the 'Basic book of Ultrasound in Obstetrics and Gynecology' and the textbook Diabetic Pregnancy and Ultrasound. He has written many chapters in several books.
 Acts as a reviewer for many international journals.
 Gets invited to speak at many international meetings.
 Founder of the fellowship program in advanced training in obstetrics and gynecology.
 Special interest in perinatal medicine and high-risk pregnancy.



ARIS ANTSAKLIS

Affiliation: Medical School University of Athens, Greece

Place of birth: Kalamata, Greece

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

MD, Medical School, Athens University, Greece

Trained as an Obstetrician Gynecologist at the University of Athens, Greece

1975 Council of Europe research fellow and honorary lecturer at the Department of Obstetrics and Gynecology at the University College Hospital, and at Yale Medical School University of London, UK

1977 senior registrar of Obstetrics and Gynecology

2002 Professor of Obstetrics and Gynecology, University of Athens, Greece

Director of the Maternal Fetal Medicine Division, University of Athens, Greece

Scientific International Society Memberships:

2013 – 2015 Past President of the World Association of Perinatal Medicine (WAPM)

1990 till today Member of the Board of the International Society the Fetus as a Patient

1980 – today Member and one of the Founders of the Fetoscopy Working Group

2004 – 2006 President of European Association of Perinatal Medicine (EAPM)

2000 – 2004 President elect EAPM

2006 – 2008 Past President of EAPM

2005 – 2015 Vice-president of the International Academy of Perinatal Medicine

2003 – 2015 President and Vice President of the Mediterranean Society of Obstetrics and Gynecology (MEDUOG)

1998 – till today Director of the Greek Branch of the Ian Donald International School of Ultrasound in Obstetrics and Gynecology

President of the Southeast Society of Perinatal Medicine

Scientific National Society Memberships:

A Founding Member, Executive Board Member and President of several organizations in the field of Obstetrics and Gynecology, Perinatal Medicine, Ultrasounds and Fetal Medicine in Greece

Former President, General Secretary and member of the Executive Board of Hellenic Society of Obstetrics and Gynecology

Founder and President of the Hellenic Society of Ultrasound in Prenatal Diagnosis and Fetal Therapy and the Hellenic Society of Ultrasound in Obstetrics and Gynecology

Former President Hellenic Society Perinatal Medicine

Former President Hellenic Society of Ultrasound in Medicine and Biology

Recognitions:

2003 SORANOS Science Award for contribution in the field in perinatal medicine and prenatal diagnosis

2005 Sir William Liley Award, International Society “The Fetus as a Patient”

2005 Award for the Popularization of Perinatal Medicine, Serbian and Montenegro Association of Perinatal Medicine

2009 Honorary Member, Croatian Association of Perinatal Medicine

2010 Maternity Prize, European Association of Perinatal Medicine (EAPM)

2011 Honorary Fellow of the Royal College of Obstetrics and Gynecology

2011 George Papanicolaou Award, Hellenic Medical Society of New York

2011 Honorary Member of the Russian Association of the Perinatal Medicine

2011 Honorary Member of the Society of Perinatal Medicine of Republic of Moldova

2013 Erich Saling Perinatal Prize by World Association of Perinatal Medicine

Publications and scientific activities:

Author and co-author of 650 publications in the International and Hellenic pre-reviewed journals as well as of more than 400 articles in PubMed.

He has written 25 chapters in the International and 15 chapters in Greek medical books.

1998-2005 Advisory Committee member that advised the Central Council of Health on the importance of Obstetric Ultrasound

Organized the National Program for Prenatal Diagnosis of Hereditary Hemoglobinopathies

Co-editor of the Ian Donald School Journal of Ultrasound in Obstetrics and Gynecology, and editor of the Greek journals Perinatal Medicine and Neonatology and Ultrasonography

Congresses organized:

Athens, May 28-29, 1988 The 4th International Conference of Chorionic Villus Sampling and Early Prenatal Diagnosis

Athens, October 13-16, 2004 The 19th European Congress of Perinatal Medicine
 Athens, October 21-23, 2013 The 16th Hellenic Congress of Perinatal Medicine
 since 2005 The Ian Donald School every second year
 since 2000 every second year The National Congress of Ultrasound in Obstetrics and Gynecology
 since 1990 every second year National Congress of Perinatal Medicine
 2015 President of the 12th World Congress of Perinatal Medicine in Madrid, Spain



BIRGIT ARABIN

Affiliation: University-Hospital Charite Humboldt University Berlin, Germany and Clara Angela Foundation

Place of birth: Siegen, Germany

Titles: Professor Dr.med. Prof. h.c. Dr.h.c.

Short CV (Education and training, work experience):

1971-75 Albert Ludwig University Freiburg, Germany

1975 – 1978 Free University Berlin, Germany

1978 – 1979 Research Fellow University Brussels (Belgium) and Berlin (Germany)

1979 – 1985 Residency OBGYN Ruprecht Karl University Heidelberg, Germany

1985 – 1988 Assistant Professor Institute for Perinatal Medicine Berlin, Germany

1988 – 1993 Assistant Professor Free University Berlin, Germany

1992 – 1993 Lecturer/Studies School of Public Health Hannover, Germany

1993 – 2008 Consultant Subspecialty High Risk Perinatal Centre Zwolle, Nederland

2000 – 2016 Lecturer Private University Witten-Herdecke/Humboldt University Berlin, Germany

2008-18 Head of Prenatal Medicine & Academic Board Philipps University Marburg, Germany

2019 onwards: Extraordinary Professor Charite Humboldt University Berlin, Germany

Sabbaticals: 1988 Harris Birthright Center (Prof. Nicolaidis) London, UK

1991 Department of Prenatal Medicine Bonn (Prof. Hansmann), Germany

2008 Centre for Prenatal Therapy Poissy (Prof. Ville), Paris, France

Scientific International Society Memberships:

Member/Board of Societies of Perinatal Medicine such as

World Association of Perinatal Medicine, The Society for Maternal-Fetal Medicine,

International Society of Ultrasound in Obstetrics and Gynecology,

International Academy of Perinatal Medicine,

Scientific National Society Memberships:

Nederlandse Vereniging voor Obstetrie en Gynaecologie (NVOG),

Deutsche Gesellschaft für Gynäkologie und Geburtshilfe (DGGG),

Deutsche Gesellschaft für Perinatale Medizin (DGPM),
Deutsche Gesellschaft für Pränatal- und Geburtsmedizin (DGPGM)

Recognitions:

1988 Staude Pfannestiel Price
2005 Ambroise Pare Medal International Academy of Perinatal Medicine
2008 Award World Association Perinatal Medicine
2009 Hackett Price Prenatal Medicine
2010 Level III DEGUM Ultrasound/Germany
2013 Pschyrembel Medal
2014-2019 TOP Medical Specialists Focus
Since 2014 German Ambassador Society of Maternal Fetal Medicine USA
2015 Dexeus Medal
2016 Honorable Membership Society of Obstetrics & Gynecology Cuba
2016 Dr. honoris causa Sorbonne, Paris, France
2018 Prof. honoris causa Moscow University, National Medical Research Center

Publications and scientific activities:

Approximately 50 books/ book chapters, > 150 peer reviewed papers, > 500 international lectures preferably on topics of Perinatal medicine.

Medical interests: prevention of preterm birth, fetal growth, prenatal diagnosis and programming, twin pregnancy, public health, (inter)national education, health literacy, partnerships in medicine.

Reviewer German Research Funding and numerous international journals

Other

1997 Founder Clara Angela Foundation <http://.clara-angela.info> based on Dr. Arabin GmbH Witten/Berlin (CEO) www.dr-arabin.de to design and produce medical products and to create original projects in maternal, fetal, neonatal medicine.

Special interest in music, literature, arts and poetry, humanity in health concepts, arts in medicine, to organize smaller meetings, to stimulate young researchers for projects in maternal fetal medicine.



ABDAL-LATIF ASHMAIG KHALIFA

Affiliation: National Ribat University, Khartoum, Sudan
Police Central Hospital, Soba University Hospital, Khartoum, Sudan

Titles: MD, Professor, Director, President

Short CV (Education and training, work experience):

1979 Bachelor of Medicine and Bachelor of Surgery (MBBS) Faculty of Medicine, University of Khartoum, Sudan

1987 Medical Defense Union (MDU) obstetrics and gynaecology Faculty of Medicine, University Khartoum, Sudan

1990 Diploma in Diagnostic Ultrasound, Zagreb, Croatia

1997 Fellowship of Sudan Medical Specialization Board (honorary)

2000 Professorship, the National Ribat University, Khartoum, Sudan

2008 Fellowship of Sudan Medical Specialization Board

2009 Fellowship of Royal College of Obstetricians and Gynecologists, UK

Diploma in Police Sciences and Law, Faculty of Police Science and Law, National Ribat University, Khartoum, Sudan

2008-till now President of the National Ribat University, Khartoum, Sudan.

Vice President of the National Ribat University, Khartoum, Sudan

Director of the Police Medical Services Administration in the Sudan

Director of the Police Central Hospital, Khartoum, Sudan

Chairman of trustees' Council of Marawi Medical Hospitals, Al-Sheikh Specialized Hospital, Al-Baraha Specialized Hospital and Dream Specialized Hospital

1979 – 1980 House officer, Khartoum Hospital and Soba University Hospital, Khartoum, Sudan

1982 – 1984 Physician, outpatient, Central Police Hospital, Khartoum, Sudan

1980 – 1984 general practitioner in obstetrics and gynecology, Khartoum, Sudan

1984 – 1987 Registrar, obstetrics and gynecology

1990 Head of the ultrasound unit at the Central Police Hospital, Khartoum, Sudan

Co-operative Professor, Faculty of Medicine, University of Khartoum, Sudan

1987-1995 Head of the Department of Obstetrics and Gynecology Central Police Hospital, Khartoum, Sudan

Scientific International Society Memberships:

1989 – till now Member International Society of Ultrasound in Obstetrics and Gynaecology

2007 – till now President Pan-Arab Society of the Obstetrics and Gynaecology

Member Department of Obstetrics and Gynaecology Sudan Medical Council

2009 Regular Fellow International Academy of Prenatal Medicine

Vice-President International Police Academies (INTERPA)

Scientific National Society Memberships:

2015 – till now President of the Sudanese Medical Union

Founding member of Sudan Medical Specialization Board

Reporter and vice-President of Obstetrics and Gynecological Council Sudan Medical Specialization Board

Member of the Supreme Council of Naif University for Security Sciences

Member of the Advisory Board of the Minister of the Interior

Member Administrative Board Minister of Interior and Director General of Police

Chairman Consultative Committee of the Federal Minister of Health

Member Sudan Medical Council

1990 – 2006 General Secretary of the Sudanese Association of Obstetrics and Gynaecology
 1991 till now Member Postgraduate Medical Board, University of Khartoum, Sudan
 1993 Providing the Norplant planting for family planning in Sudan
 Deputy Specialty Council of Obstetrics and Gynaecology, Sudan Medical Specialization Board
 Head of the Medical Committee and member of the Sudan Family Planning Association, which is affiliating from the International Federation of family Planning (IPPF)
 Treasurer and member of the Executive Committee of the Sudan Fertility Care Association
 Member of experiments procedures on human and animals, Sudan
 Establishment of the Sudan Central Police Hospital
 Establishment of the Department of Obstetrics and Gynaecology at the Central Police Hospital
 Establishment of the Diagnostic Ultrasound Unit at the Central Police Hospital
 Establishment of many Primary Health Care Units in the Central Police Hospital at different regions and states in the Sudan
 Use of ultrasound in the diagnostic and management of complicated obstetric cases (Fetal Medicine).
 The usage of surgical modern techniques in skin grafts and repair
 Establishment the first center of IVF in Sudan

Publications and scientific activities:

Published many papers in domestic and international peer review journals, edited and authored books and textbooks
 Attended many conferences and congresses in Sudan and abroad. Organized many national and international conferences
 Participate in health education programs through television, radio, newspapers and public meetings
 Writing and editing newsletters and brochures used in teaching and training of family planning sessions
 Supervision of the authored textbooks at The National Ribat University, Sudan
 Participant in training committees of police officers and College of Police Science and Law students

Other

Convert a police medical services from smaller institutions to a large corporation consists of hospitals and diagnostic centers.
 Establishment of Sahiron Hospital, the best private hospital in Sudan
 Establishment of The National Ribat University, Khartoum, Sudan
 Founding and establishing Police Hospitals branches and Medical Centers all-over the country.
 Updating the syllabus of the faculty of police sciences and law.



CHIARA BENEDETTO

Affiliation: University Division 1 of Gynaecology and Obstetrics, Sant'Anna Hospital, Torino, Italy

Date and place of birth: February 17, 1954, Torino, Italy

Titles: MD, PhD, Full Professor, Director, Head

Short CV (Education and training, work experience):

1978 MD, Medical School University of Torino, Italy

1982 Specialization in Gynaecology and Obstetrics University of Torino, Italy

1989 PhD in Science Brunel University, Uxbridge, Middlesex, UK

Full Professor in Gynaecology and Obstetrics, University of Torino, Italy

Director of the Post-graduate Speciality School in Gynaecology and Obstetrics, President of the School of Midwifery and Obstetric Sciences of the University of Torino, Italy

Head of the University Division 1 of Gynaecology and Obstetrics, Sant'Anna Hospital, Torino, Italy

Scientific International Society Memberships:

2011 – 2014 President European Board and College of Obstetrics and Gynecology (EBCOG)

2014 – 2017 Chair Surgical Group of the Union Européen des Médecins Spécialistes (UEMS)

2016 – 2018 Chair Women's Health and Human Rights Committee of FIGO

2018 Executive Board Member International Federation of Gynaecology and Obstetrics (FIGO)

Board and Chair of the FIGO Subcommittee on Refugees of the FIGO Committee for Human Rights, Refugees and Violence against Women

Regular Fellow of the International Academy of Perinatal Medicine

Regular Fellow World Academy of Art and Science

During her tenure as President of EBCOG, she worked on and launched at the European Parliament, the two documents "Standards of Care for Women's Health in Europe" aimed at promoting and improving the quality of obstetrics and gynecology care across Europe.

She also began the EBCOG Simulation Consortium of Hospitals and Institutions, aimed at validating simulators in training programmes and at promoting and assisting in the broad implementation of simulation-based training in the field of obstetrics and gynecology throughout Europe and was invited by the American College of Obstetricians and Gynaecologists (ACOG) to join their "Well Woman Task Force", a collaborative effort to ensure women receive consistent, high quality healthcare to the full extent.

As Chair of the FIGO Women's Health and Human Rights Committee (2015-2018), she promoted worldwide Workshops, aimed at stimulating professionals towards a thinking approach where women's health and human rights are wholly integrated. Under her guidance, the Committee also prepared and disseminated a Communica-

tion Campaign (WELL! – Women Empowerment Learning Links), to share important information on health and educate girls, women and the general population to actively participate in the process of their “own care”. She also organised Focus Groups with migrants/refugees to get feedback on their needs so as to tailor Educational Meetings for them.

Scientific National Society Memberships:

Regular Fellow Academy of Medicine of Torino

Recognitions:

Fellow ad Eundem of the Royal College of Obstetricians and Gynecologists

Honorary Fellow of the French National College of Obstetricians and Gynecologists

Honorary Fellow European Board and College of Obstetrics and Gynaecology (EB-COG)

Honorary Fellow American College of Obstetrics and Gynecology (ACOG)

Publications and scientific activities:

Published about 770 scientific papers, 3 textbooks in obstetrics and gynecology, 3 monographs on Gynaecological Endocrinology, around one hundred book chapters

Principal Investigator in more than 100 Clinical Trials

Chaired and Organised 4 European Congresses on Gynaecology and Obstetrics for EBCOG: Torino (2006 and 2016), Tallinn-Estonia (2012), Glasgow-UK (2014)

Invited speaker/chair at more than 1,000 national and international congresses and has organised several International and national congresses in the field of obstetrics and gynecology

As Head of her Department, she opened a Training Center (REC - Research and Educational Center for Gynaecology and Obstetrics), where permanent national and international hands-on training and updating courses in the field of gynaecological surgery and intrapartum emergencies are organised with state-of-the-art and innovative simulation equipment

Other

Her dedication to Women’s Health has led her, and other professional women, to set-up a non-profit organization, to improve women’s safety and wellbeing in places of care and cure, named Fondazione Medicina a Misura di Donna (Medicine Tailored to the Woman Foundation).



ANA B. BIANCHI

Affiliation: Perinatal Department of the Pereira Rossell Hospital, Montevideo, Uruguay

Place of birth: Montevideo, Uruguay

Titles: MD, Director, Head of Department

Short CV (Education and training, work experience):

1980 MD, Faculty of Medicine Montevideo Uruguay and Diploma

of Obstetrics and Gynecology University of Montevideo

Neonatal training in the Latin American Centre of Perinatology OPS/OMS under the Direction of Prof R. Caldeyro Barcia, Montevideo, Uruguay

1981-1986 resident in obstetrics and gynecology (mentorship prof. Emile Papiernik), Hospital Antoine Beclere Clamart, Paris, France

Diploma of Medical Doctor, Paris University, France

1988 fellowship in echocardiography (mentorship prof. Laurent Fermont), Necker Hospital, Paris, France

1999 fellowship in fetal medicine (mentorship Kypros Nicolaidis), Kings College London, UK

2007 till now head of Perinatal Medicine Department, Pereira Rossell Hospital, Montevideo, Uruguay

Scientific International Society Memberships:

Director of Ian Donald School for Latin America and Uruguay

Honorary member, Brazilian Ultrasound Society.

Honorary member, Paraguayan Perinatal Society.

Honorary member, Society of Obstetricians and Gynecologist of Dominican Republic

2019 – 2021 Member of FIGO Committee of Preterm Birth

Scientific National Society Memberships:

2013 – 2017 president of Caldeyro Barcia Foundation

2014 – 2016 president of the Uruguayan Society of Perinatal Medicine

Recognitions:

2008 Silver medal of scientific achievements of the year, Montevideo Uruguay

The key of Guayaquil City Equator by the Federation of Perinatal Medicine of Latin America

William Liley medal by the International Society Fetus as a Patient

Publications and scientific activities:

She published numerous papers in national and international journal, edited several books. She is a member of editorial board of several journals and editor of the Perinatal Journal of the Latin America Federation of Perinatology



MARINA VASILIEVNA DEGTYAREVA

Affiliation: Department of Neonatology at Pirogov Russian National Research Medical University in Moscow, Russia

Date of birth: September 15, 1963, Moscow, USSR

Titles: MD, PhD, DSci, Professor

Short CV (Education and training, work experience):

1986 graduated from Paediatric Faculty, 2nd Moscow Medical In-

stitute named after N. I. Pirogov, Ministry of Health of the Russian Federation
 1986 – 1989 postgraduate training in paediatrics, 2nd Moscow Medical Institute named after N. I. Pirogov, Ministry of Health of the Russian Federation
 1990 – 1994 doctoral research, Russian State Medical University, Ministry of Health of the Russian Federation
 1995 PhD, Russian State Medical University, Ministry of Health of the Russian Federation
 1994 Assistant Professor, Department of Neonatology, Faculty of Postgraduate Professional Training, Russian State Medical University, Russian Federation
 1994 till now neonatal intensive care unit at Moscow Municipal Paediatric Hospital named after N. Filatov, Moscow, Russian Federation
 1998 Educational Grant of the Open Society Institute / American Austrian Foundation, Medical Seminars in Neonatology (Director of the Course – Prof. Richard Polin (USA), Salzburg, Austria)
 2000 DSci in Paediatrics and Immunology, Russian State Medical University, Ministry of Health of the Russian Federation
 2002 Position of Full time Professor, Department of Neonatology, Faculty of Postgraduate Professional Training, Russian State Medical University, Moscow, Russian Federation
 2008 till now Academic title – Professor, Higher Attestation Commission, Moscow, Russian Federation
 2010 Head of the Department of Neonatology, Faculty of Postgraduate Professional Training, Pirogov Russian National Research Medical University, Moscow, Russian Federation

Scientific International Society Memberships:

Director Russian Branch of Ian Donald Inter-University School of Medical Ultrasound in Obstetrics and Gynecology
 Vice-President Union of European Neonatal and Perinatal Societies (UENPS)
 2016 – 2019 Secretary General World Association of Perinatal Medicine (WAPM)
 2019 President Elect of the WAPM
 National Representative of the Russian Society for Neonatology (UENPS)
 Member European Society of Paediatric Research, Section: Infection, Inflammation, Immunology and Immunization
 Board Member Fetus as a Patient International Society
 Director Erich Saling World School of Perinatal Medicine

Scientific National Society Memberships:

Board Member, Russian Society for Neonatology,
 Executive Committee Member, Russian Society of Perinatal Medicine

Recognitions:

2002 and 2012 Diplomas of the Ministry of Health of the Russian Federation
 2011 Best Trainer of the Year in Postgraduate Education, Board of Rectors of Russian Medical Higher Education Institutions
 2012 Governmental Prize for the development and implementation of new technologies in perinatal medicine, Government of the Russian Federation

2015 Diploma of Honors of Moscow Duma

Honorable Professor of Surgut State University (Surgut, Russia)

Honorable Professor of Dubrovnik International University (Croatia)

2013 Special Achievement Award the Best National Director, Ian Donald Inter-University School of Medical Ultrasound (Dubrovnik, Croatia)

2015 William Liley Medal International Society Fetus as a Patient

2019 Certificate of Appreciation for development of Donald Schools in Russia Ian Donald Inter-University School of Medical Ultrasound

Publications and scientific activities:

Published more than 150 papers and chapters in books

Co-author of the Russian National Guidelines in Neonatology, textbooks and clinical guidelines in Neonatology, Russian guidelines on respiratory distress-syndrome, on neonatal care, stabilisation and neonatal resuscitation at the delivery room (2020)

Dedicated to the development of postgraduate education and cooperation in perinatal medicine

Organized international educational seminars and programs in Russia

Supervisor of 7 PhD thesis and 1 doctoral research which were successfully defended

Member of Editorial Board:

The Journal Neonatology: News, Opinions, Training (Russian)

Donald School Journal of Ultrasound in Obstetrics and Gynecology

Reviewer in Peer Reviewed Journals:

Pediatrics, the Journal named after G.N. Speransky (Russian)

Journal of Perinatal Medicine.



JAN A. M. DEPREST

Affiliation: Obstetrics and Gynaecology, University Hospitals Leuven, Belgium

Date of birth: February 15th, 1960, Brugge, Belgium

Titles: MD, PhD, FRCOG, Professor

Short CV (Education and training, work experience):

1981 – 1985 MD Catholic University Leuven, Campus Leuven, Belgium

1984 – 1986 Candidate in Dentistry Catholic University Leuven, Campus Leuven, Belgium

1986 – 1991 Special License in Gynecology and Obstetrics Catholic University Leuven, Campus Leuven, Belgium

1997 – 1999 PhD in Medical Sciences Catholic University Leuven, Campus Leuven, Belgium

1996 – 1997 Urogynaecology St George’s Hospital, London, UK

1996 – 1997 Urogynaecology Princess Anne’s Hospital, Southampton, UK

1999 – 2000 Diplôme de Chirurgie Vaginale Université de Lille, Faculté de Médecine, France

1999 – 2000 Invasive prenatal diagnosis Leids Universitair Medisch Centrum, The Netherlands

1991 – current Consultant Obstetrics and Gynaecology University Hospitals Leuven, Belgium

1999 – current Professor in Obstetrics and Gynaecology, Faculty of Medicine, Katholieke Universiteit Leuven, Belgium

2003 – current Director with Prof P. Herijgers, MD, PhD Department of Surgery, Center for Surgical Technologies, Faculty of Medicine, K U Leuven, Belgium

2015 – 2020 Appointment as Honorary Professor of UCL, University College London, UK

Scientific International Society Memberships:

1993 – 2000 Member of the International Federation of Gynecology and Obstetrics (FIGO) – subcommittee on “Assessment of New Technologies”

1998 – 2002 Board Member of the International Society of Gynaecological Endoscopy

1998 – current World Health Organisation. Teaching team on Endoscopic Surgery (Gynaecology)

1998 – current Member of the International Educational Board for Certification in Fetal Medicine

1998 – current “Expert Adviser” at the Council of Belgian Medical Specialists (VBS-UDS) on the European Guideline 93/42/CEE on the use of disposable materials in medicine

2003 – current International Member of the Society of Maternal-Fetal Medicine

2004 – 2009 Full member of the Society of Gynecologic Investigation

2004 Member of the Executive Board of The European Urogynaecological Association (EUGA). A subspecialty section within the European Board and College of Obstetricians and Gynaecologists

2005 – 2008 Member of the Scientific Committee of the International Urogynaecological Association (IUGA)

2005 Member of the Fetal MRI focus group of the International society of Ultrasound in Obstetrics and Gynecology (ISUOG)

Member American Association Gynecological Laparoscopists

Member Club Francophone de Médecine Foetale

Member International Fetal Medicine and Surgery Society (IFMSS)

Member International Fetoscopy Group

Member International Urogynecological Association (IUGA)

Member and Board Member 4 years International Society Gynecological Endoscopy (ISGE)

Member International Society of Ultrasound in Obstetrics and Gynaecology

Member International Continence Society (ICS)

Member European Society Gynecological Endoscopists (ESGE)
Member South African Society for Obstetrics & Gynaecology (SASOG)
Member European Society Engineering and Medicine
Member Society for the Study of Twins
Member Society for Laparoendoscopic Surgeons (SLS)
Affiliate Member 1996, International Member 2003-2014 Society for Maternal Fetal Medicine (SMFM)
2004 Full Member Society for Gynecological Investigation (SGI)
Member European Urogynaecological Association (EUGA)
Member European Urologic Association (EUA)
Member of the Executive Committee of the International Fetal Medicine and Surgery Society, Incoming President (2015).

Scientific National Society Memberships:

National Society for Gynecology and Obstetrics Flemish Association for Obstetrics and Gynecology
Member Professional Association of Belgian Gynecologists and Midwives
Member Belcohyst
Member of the scientific committee EUGA
Extraordinary member of BELAPS (Belgian Association of Paediatric Surgery – 2017)

Recognitions:

2001 – 2003 Honorary Consultant King's College Hospital, Harris Birthright Centre for Fetal Medicine and Research
2014 Honorary Professor of the Research Center for Obstetrics, Gynaecology and Perinatology of the Ministry of Health of the Russian Federation
2015 Honorary Member of the Club of Urologists Alumni KU Leuven (Leuvense Urologen Club)
Many recognitions and awards at national and international meetings for the quality of presented papers

Publications and scientific activities:

Published almost 650 papers in peer reviewed journals and more than 70 in other journals. Published more than 100 chapters in the books. He was invited speaker at more than 600 meetings.
2001 – 2004 Editorial Board Gunaïkeia – Official Journal of VVOG Flemish Society of Obstetrics and Gynecology
2001 – 2008 Editorial Board of The Journal of Gynaecological Investigation (Publisher Karger)
2001 – 2007 Editorial Board of The European Journal of Obstetrics, Gynaecology and Reproductive Medicine (Publisher Elsevier)
2003 – current Editorial Board of The British Journal of Obstetrics and Gynaecology
2003 – current International Member of the Society of Maternal-Fetal Medicine
2003 Editorial Board of The Journal of Maternal-Fetal and Neonatal Medicine (Publisher Parthenon Publishing Group Ltd.)

2004 – 2008 Editorial Board of Fetal Diagnosis and therapy. Journal of the International Fetal Medicine and Surgery Society (Publisher Karger)

2004 International Advisory Board of the British Journal of Obstetrics and Gynaecology

2008 Editorial board Gynaecologic Surgery

2008 – current Editor Prenatal Diagnosis – sections fetal imaging and obstetrics

Referee of 23 scientific journals

Investigator and director of more than 20 research national and international projects

Promotor and co-promotor of more than 60 PhD theses



JOACHIM W. DUDENHAUSEN

Affiliation: Faculty of Health Sciences Brandenburg of the University Potsdam, BTU and MHB, Germany School of Medicine, Hoffstra University, Hempstead, New York, USA

Date of birth: February 28, 1943 Werdohl, Germany

Titles: MD, Dr. habil., Professor

Short CV (Education and training, work experience):

1962 – 1969 MD Faculty of Medicine, Johannes Gutenberg University Mainz, Germany and Faculty of Medicine, Free University

Berlin, Germany

1970 – 1977 Institute of Perinatal Medicine, Free University of Berlin, Germany

1974 Board Certificate of Obstetrics and Gynecology

1977 – 1982 Chief staff member, Department of Obstetrics, Woman´s Hospital Berlin-Neukölln, Germany

1982 associate Professor at the Free University of Berlin, Germany

1982 – 1987 Deputy Head of the Department of Obstetrics, Women´s Hospital Berlin-Neukölln, Germany

1987 – 1989 Deputy Director of the Department of Obstetrics, University Hospital, Zürich, Switzerland

1989 – 2010 Professor and Director of the Departments of Obstetrics, Charité, Campus Virchow Klinikum, Campus Benjamin Franklin and Campus Mitte, Germany

2001-2004 Dean of the Charité, Berlin, Germany

2010 -2011 Visiting fellow of the Department of Obstetrics and Gynecology Medical College of Cornell University, New York, USA

2011 - 2014 Deputy Chief Medical Officer, Sidra Clinical and Research Center, Doha, State of Qatar

2011 – 2014 Professor of Weill Cornell Medical College, Doha, State of Qatar

2015 – 2019 Clinical Professor of Obstetrics and Gynecology, Weill Cornell Medicine New York, USA

2017 – till now Founding Dean of the Faculty of Health Sciences Brandenburg of the University Potsdam, BTU and MHB, Germany

2019 – till now Adjunct Clinical Professor of Obstetrics and Gynecology at the School of Medicine, Hoffstra University, Hempstead, New York, USA

Scientific International Society Memberships:

1991 – 1999 Secretary General of the World Association of Perinatal Medicine (WAPM)

2003 – 2006 President of the German-Polish Society of Gynecology and Obstetrics

2004 – till now Regular Fellow of the International Academy of Perinatal Medicine

Scientific National Society Memberships:

1983 – 2018 President of the German Foundation for Disabled Children

1991 – 1995 President of the German Society of Perinatal Medicine

Recognitions:

1981 Maternité Award of the German Society of Perinatal Medicine

1997 Gold Medal of the Foundation of Prenatal Medicine

1998 Honorary Professor Tongji Medical University Wuhan, China

2004 Honorary Professor Medical University Havana, Cuba

2005 Honorary Award of the Charité, Berlin, Germany

2006 Honorary Professor Medical Academy Taschkent, Usbekistan

2007 Honorary President of the German Society of Perinatal Medicine

2007 Margherita-von-Brentano Award of the Free University Berlin, Germany

2008 Pschyrembel Award

2008 William Liley Award of the Society “The Fetus as a Patient”

2009 Fellow ad eundem of the Royal College of Obstetricians and Gynaecologists

2009 Erich Saling Award of the World Association of Perinatal Medicine (WAPM)

2010 Honorary Member of the Society of Obstetrics and Gynecology of Berlin

2010 Order of Merit of the Federal Republic of Germany

2011 Visiting Professor of the Dubrovnik International University

2014 Honorary Member of the German Society of Gynecology and Obstetrics

2015 Presidential Lifetime Achievement Award by the WAPM

2017 Honorary professor Medical Institution of Surgut State University, Russia

2018 Carl-Kaufmann-Medal of the German Society of Obstetrics and Gynecology

Publications and scientific activities:

More than 500 publications and books, author of the textbook “Praktische Geburtshilfe” („Practical Obstetrics“)

1983- Editor in Chief of the Journal of Perinatal Medicine

2007- till now Member of the International Board of Advisors American Journal of Obstetrics and Gynecology

2009 Congress President of the 9th World Congress of Perinatal Medicine in Berlin, Germany.



AMOS GRUNEBAUM

Affiliation: Department of Obstetrics and Gynecology, Zucker Medical School in New York, USA

Date of birth: January 27, 1950, Haifa, Israel

Titles: MD, Professor of Obstetrics and Gynecology

Short CV (Education and training, work experience):

1974 MD, Faculty of Medicine from the University of Cologne, Germany (established in the year 1388)

Residencies in anesthesia and pathology

1982 residency in Obstetrics and Gynecology, New York, USA

1984 Fellowship in Maternal-Fetal Medicine at Downstate Medical Center and Kings County Hospital in Brooklyn New York, USA

1987 – 2001 Director of Maternal-Fetal Medicine and Director of the Department of Obstetrics and Gynecology at St. Luke's-Roosevelt Medical Center in Manhattan, New York, USA

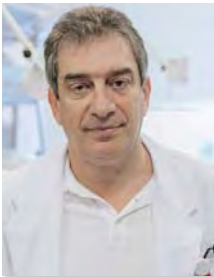
2001 – 2018 Director of Obstetrics and Labor & Delivery and Director of Patient Safety and Professor of Obstetrics and Gynecology at Weill Cornell Medicine, New York, USA

2018 Professor at Zucker Medical School in New York, USA

Publications and scientific activities:

Published over 80 peer-reviewed publications and book chapters

Main interest is patient safety and home births.



MARK KURTSE

Affiliation: Public health of Moscow, Russian Federation

Date of birth: June 30, 1957, Moscow, Russia

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

1980 MD, Russian State Medical University, Moscow, Russia

Assistant Department of Obstetrics and Gynaecology, Pirogov Medical University, Moscow, Russia

2002 PhD, Pirogov Medical University, Moscow, Russia

2003 Professor, Department of Obstetrics and Gynecology, Russian Pirogov National Research Medical University, Moscow, Russia

1994 – 2012 Head of the Center of Family Planning and Reproduction, Moscow, Russia

2003 – 2013 Head of Department of Obstetrics and Gynecology, Moscow Healthcare Department

2017 – present Head, Department of Obstetrician and Gynaecology, Faculty of Pediatrics, Pirogov Medical University, Moscow, Russia

2012 Founder and Chairman of MD Medical Group

2016 Chief Executive Officer and Member of the Board of Directors MD Medical Group

Scientific International Society Memberships:

2017 Regular Fellow International Academy of Perinatal Medicine

Scientific National Society Memberships:

2011 Fellow of the Russian Academy of Sciences

Publications and scientific activities:

More than 300 publications in the fields of obstetrics, gynecology and perinatology, pregnancy management after IVF, pre-implantation diagnosis, issues of antenatal and intra-natal fetal surgery, obstetric hemorrhage, treatment of uterine myoma, organization of obstetrics and gynecology services in Moscow.

Has contributed to developing of organ-saving operations for obstetric hemorrhage, peritonitis, treatment of uterine myoma with uterine artery embolization and MR guided Focused Ultrasound Surgery, fetal medicine (intrauterine correction of myelomeningocele).

Remains actively involved in the group's healthcare practice and day-to-day operations.



GIOVANNI MONNI

Affiliation: Director of Obstetrics and Gynecology Department, Prenatal and Preimplantation Genetic Diagnosis, Fetal Therapy, Microcitemico and Pediatric Hospital "A. Cao", Cagliari, Sardinia, Italy

Date of birth: January 27, 1951, Sardinia, Italy

Titles: Professor at the Post-Graduate Pediatric School, University of Cagliari

Professor for Specialist Postgraduate Study Program – School of Health Sciences of Dubrovnik Inter-University

Honorary Professor at Public University of Buenos Aires

Visiting professor in several Universities

Short CV (Education and training, work experience):

Research interest: pregnancies at high genetic risk, invasive prenatal diagnostic techniques and maternal-fetal surgical therapy, assisted reproduction techniques (ART) and preimplantation genetic diagnosis (PGD)

Due to the achievements in prevention and prenatal diagnosis of thalassemia, the Microcitemico Hospital of Cagliari has been nominated by the World Health Organization (WHO), as WHO Referral Collaborative Center for community control of hereditary diseases.

Numerous researchers and Ob/Gyn fellows from the whole world have visited and visit regularly for training in Ultrasound and invasive prenatal diagnostic techniques such as CVS and amniocentesis, pre-implantation, and fetal therapy.

He has mentored for hands-on technique of prenatal diagnosis of more than 300 obstetrician fellows from all over the world

Scientific International Society Memberships:

2002 – 2006 Member of Executive Board of European Association of Perinatal Medicine (EAPM)

Member of the Executive Board of International Fetoscopy Working Group

Vice President International Society “The Fetus as a Patient”

Regular Fellow of International Academy of Perinatal Medicine (IAPM)

Vice President World Association of Perinatal Medicine (WAPM)

International Expert for operators’ evaluation on the Fetal Nuchal Translucency Practice

Honorary Member of several Ultrasound and Perinatal and Ob/Gyn International Societies

Director of Ian Donald School International University of Dubrovnik, Italian Branch

Director of Ian Donald Inter-University School of Invasive Prenatal Procedures

Regional Director for Europe of Ian Donald Inter-University Ultrasound School

Member of FIGO Committee for the Ethical and Professional Aspects of Human Reproduction and Women’s Health

Scientific National Society Memberships:

Former President SIEOG – Società Italiana di Ecografia Ostetrica-Ginecologica

Former President AOGOI – Associazione Ostetrici e Ginecologi Ospedalieri Italiani

Recognitions:

Award of William Liley Medal of the International Society “The Fetus as a Patient”

2006 Scientific Committee Member of International XX FIGO World Congress, Rome

2012 Gold Medal and Honorary President of AOGOI – Associazione Ostetrici e Ginecologi Ospedalieri Italiani

Publications and scientific activities:

More than 500 scientific national and international papers.

Organized more than 100 national and international courses and congresses and has taken part of numerous scientific and organizing committees

Other

He is also an Honorary Member of many National and International Scientific Societies and Member of the Editorial Board of more than 50 National and International Journals.

**ZEHRA NEŞE KAVAK**

Affiliation: Chair of the Board, Academic Hospital, Founding President of Istanbul Kent University, Istanbul, Turkey

Place of birth: Istanbul, Turkey

Titles: MD, Professor

Short CV (Education and training, work experience):

1986 MD, Cerrahpaşa School of Medicine, Istanbul, Turkey

1990 – 1991 fellowship St. Thomas's Hospital, London, UK
1996 Associate Professor, School of Medicine Marmara University, Istanbul, Turkey
2004 Fetal Diploma, King's College Hospital, London, UK
2001 founded Perinatology Unit Hospital of School of Medicine, Marmara University, Istanbul, Turkey
2001 – 2005 Professor and Head Physician, School of Medicine, Marmara University, Istanbul, Turkey
2002 – 2011 Chair of the Department of Obstetrics and Gynecology, School of Medicine Marmara University, Istanbul, Turkey
Has 23 post-specialty overseas education certificates on Perinatology
2017 Recep Tayyip Erdoğan, President of Turkey, assigned Prof. M.D. Zehra Nese Kavak to the Founding Rectorate of Istanbul Kent University
Currently Professor of Obstetrics, Gynecology and Perinatology, Chair of the Board of Academic Hospital, Founding President of Istanbul Kent University, Istanbul, Turkey

Scientific International Society Memberships:

2004 member of the World Academy of Arts and Science (WAAS)
2009 member of the Board of Trustees of WAAS as the first Turkish person elected to these positions
2005 Board of World Association of Perinatal Medicine
2006 Board Member of Fetus as a Patient Society
2007 Associate Fellow International Academy of Perinatal Medicine (IAPM)
2018 Regular Fellow IAPM

Scientific National Society Memberships:

Vice President, Turkish Businesswomen Association (TIKAD)
Member, Turkish Medical Association

Recognitions:

2006 Award of Excellence of the Turkish Grand National Assembly, TIKAD
2006 Melvin Jones Award
2007 Election of Honorary Member to Romanian Perinatology Society
2008 100 pioneer women in Turkey award
2008 Excellence Award in Medicine
2008 Excellence Award in Medicine by Lyons Clubs
2013 Woman Scientist of the Year Award by Chamber of Commerce
2013 Honorary Award by Istanbul Lyons Clubs and Samsun Chamber of Commerce
2015 Woman Scientist of the Year Istanbul
2016 Best Hospital and Best Hospital Manager Awards in London
2017 European Quality Award in Switzerland
2017 Social Awareness Honor Award in Istanbul
2017 Woman Super Achiever Award at 4th World Women Leadership Congress and Summit in India
2017 Public Service Architecture and Public Service Interior Awards in London

2018 Best Quality Leadership Award USA

2019 Bravest Woman of the Year Award in Istanbul

2019 Jury Special Award, TUMBIFED (All Bureaucrats and Businessmen Federation)

2019 Top 10 women of Turkey Award

2019 Most Successful International Management of the Year Award in Cyprus

Publications and scientific activities:

Main field of research on the use of 3D-4D ultrasonography and invasive procedures during pregnancy.

Published 69 articles in international refereed journals, 83 articles in national refereed journals, in total 152 articles. Co-authored 13 international and national books, 8 of which are in English, 3 in Spanish and 1 in Turkish. Published 2 books in English and Spanish and 1 in Turkish. Number of citations 1237. Has published in proceedings 120 papers/presentations at national and international scientific meetings. She has been invited to speak at 112 international meetings. She also holds seats on the editorial boards of national and international scientific journals. Mentored 11 assistant's dissertation theses.

2007 Lecturer Professor Cornell University, New York, USA.



PRANAV P. PANDYA

Affiliation: Institute for Women's Health, University College London Hospitals (UCLH)

Foundation Trust and Consultant in Fetal Medicine

Titles: BSc, MBBS, MD, FRCOG

Short CV (Education and training, work experience):

Associate Professor of Fetal Medicine University College London and has worked in world renowned centres including St Mary's London, Kings College London, Mount Sinai Toronto, Hospital for

Sick Kids Toronto and UCLH. He was trained in fetal medicine by Professor Kypros Nicolaides, Professor Greg Ryan and Professor Charles Rodeck

Director and Clinical Lead of Fetal Medicine services at UCLH

Chair of the Fetal Anomaly Screening Programme at the UK National Screening Committee, and Down's Syndrome Screening Programme Advisory Group at the National Screening Committee (NSC)

Director and Clinical Lead for Fetal Medicine services at UCLH. Responsible for all high risk and routine pregnancy ultrasound

Scientific International Society Memberships:

Fetoscopy Society

Scientific National Society Memberships:

Regular Fellow of International Academy of Perinatal Medicine

Chair of the Fetal Anomaly Screening Programme UK

Member of the Fetal Maternal Child Health Board UK

Recognitions:

1997 Awarded the RCOG Gold Medal

2017 Awarded the prestigious Sims Black Travelling Professorship by the Royal College of Obstetrics and Gynecology (RCOG)

Publications and scientific activities:

2019 Editor in Chief of Fetal Medicine Basic Science and Clinical Practice.

Over 40 publications in peer reviewed journals

Invited speaker to national and international conferences

Executive Editor Donald School Journal of Ultrasound in Obstetrics and Gynecology.

**ZOLTAN PAPP**

Affiliation: Department of Obstetrics and Gynecology, Semmelweis University and Director of the Private Maternity Department of Obstetrics, Clinical Genetics and Gynecology, Budapest, Hungary

Date of birth: February 3, 1942, Mezőkövesd, Hungary

Titles: MD, PhD, DSc, Professor

Short CV (Education and training, work experience):

1966 MD Debrecen University Medical School, Hungary

1970 qualified in Obstetrics and Gynecology, Budapest, Hungary

1974 qualified in Human Genetics, Budapest, Hungary

1972 PhD Hungarian Academy of Sciences

1981 DSc Hungarian Academy of Sciences

1985 Professor Debrecen University Medical School

1990 – 2007 Chairman Semmelweis Department of Obstetrics and Gynecology, Semmelweis University, Budapest, Hungary

1995 – 2003 President College of Hungarian Obstetricians and Gynecologists

2000 – 2012 Chairman of the National Ethical Committee for Medical Research.

Scientific International Society Memberships:

Professor Papp is a board member of more than 10 international societies and international journals.

Scientific National Society Memberships:

He has established six scientific societies (for assisted reproduction, gynecological endocrinology, perinatal medicine, obstetric anesthesiology, psychosomatics) including the Hungarian Society on Ultrasound in Obstetrics and Gynecology in 1992, in Hungary

Recognitions:

1998 San Francisco 30th Anniversary Recognition Award of International Federation of Fertility Societies (IFFS)

2000 Zagreb 10th Anniversary Recognition Award of International Society of Ultrasound in Obstetrics and Gynecology

2003 New Orleans Honorary Fellowship of the American College of Obstetricians and Gynecologists (ACOG)

2002 Budapest William Liley Award of the International Society of The Fetus as a Patient

2007 Florence Recognition Award of the World Association of Perinatal Medicine

2010 Barcelona the Caldeyro-Barcia Award

Publications and scientific activities:

Published more than 400 papers in English, and more than 600 in Hungarian. Author and/or editor of more than 40 textbooks mainly in Hungarian.

His books in English: „Obstetric Genetics” (1990), „Atlas of Fetal Diagnosis” (1991), „The Fetus as a Patient. The Evolving Challenge” with Frank A. Chervenak and Asim Kurjak (2002).

Special interests are: genetic counseling, prenatal molecular and cytogenetic diagnosis, fetal diagnosis, prenatal dysmorphism, syndromology and ultrasound, perinatal (fetal neonatal maternal) medicine (postpartum hemorrhage controlled by hypogastric artery ligation), and gynecologic operative oncology.

In 1971 he was the first to diagnose G/G translocation prenatally by amniotic fluid cells obtained by transabdominal amniocentesis.

Editor-in-Chief of the Hungarian Postgraduate Periodical for Obstetricians and Gynecologists and Hungarian Weekly Medical Journal.

The member of the International Editorial Board of the American Journal of Obstetrics and Gynecology.

Organized many international meetings in Budapest:

1994 4th World Congress on Ultrasound in Obstetrics and Gynecology (ISUOG)

2002 The 18th International Congress of the Society of The Fetus as a Patient

2004 The 12th International Conference on Prenatal Diagnosis and Therapy

2007 The host chairman of the 3rd Annual Meeting of the International Academy of Perinatal Medicine.



GIUSEPPE RIZZO

Affiliation: Obstetrics and Gynecology at the Università di Roma Tor Vergata, Rome, Italy and the First Sechenov First Moscow State Medical University, Moscow, Russian Federation

Department of Obstetrics and Gynecology Ospedale Cristo Re, Roma, Italy

Date and place of birth: 1st June 1958, Cagliari Italy

Titles: MD, PhD, Professor, Director

Short CV (Education and training, work experience):

Graduated and performed residency in gynecology and obstetrics Università Cattolica S. Cuore Rome, Italy

1986 faculty of obstetrics and gynecology Università Cattolica S Cuore, Rome, Italy

1992 Professor Department of Obstetrics and Gynecology Università Roma Tor Vergata, Rome, Italy

Director of Department of Maternal Fetal medicine Ospedale Cristo Re Roma, Italy

2018 full professor of obstetrics and gynecology First Sechenov First Moscow State Medical University, Moscow Russian Federation

Scientific International Society Memberships:

Founding member of the International Society of Ultrasound in Obstetrics and Gynecology (ISUOG). Founding member Mediterranean Society of Ultrasound in Obstetrics and Gynecology (MEDUOG).. Founding member of the working group on Ultrasound in the mismanagement of obstetric emergencies (EGEO)

Scientific National Society Memberships:

2015 – 2017 President Italian Society of Ultrasound in Obstetrics and Gynecology (SIEOG)

Chairman of the committee for the creation of the national biometric fetal customized curves in singleton and twin pregnancies

Chairman of the committee for the creation of the national guidelines on the use of ultrasound in obstetrics and gynecology on behalf of SIEOG

Recognitions:

Has been the recipient of numerous awards including several research awards from the Society for Maternal Fetal Medicine, International Society of Ultrasound in Obstetrics and Gynecology and the Italian Society of Obstetrics and Gynecology.

Honorary member Sociedad Chilena de Ultrasonografía en Medicina & Biología

Honorary member Spanish Society of Ultrasound in Obstetrics and Gynecology

Honorary member Russian Academy of Perinatal Medicine

Publications and scientific activities:

Author of over 270 peer reviewed articles, has published as editor 16 books on ultrasound and fetal growth restriction. His H index is 43 with 5476 citations according to Scopus (10/10/2020)

Fields of interest have included prenatal diagnosis of congenital anomalies, imaging of the fetus, fetal echocardiography, Doppler ultrasonography, fetal growth restriction, invasive and non-invasive prenatal diagnosis preterm labor, ultrasound in delivery. Serves as Deputy Editor of Prenatal Cardiology and is member of the Editorial Board of 14 medical journals.



MANUEL SANCHEZ LUNA

Affiliation: Hospital General Universitario Gregorio Marañón, Madrid, Spain

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

MD Complutense University, Madrid, Spain

PhD Complutense University, Madrid, Spain

Pediatrics and Neonatology Complutense University, Madrid, Spain
 1989 employed Fulltime at National University Hospital, Madrid, Spain
 2020 Medical Director, Neonatology Division and NICU Level IIIc, Hospital General Universitario Gregorio Marañón
 2020 Professor of Pediatrics Complutense University, Madrid, Spain
 Master Business Administration (MBA) in Medical Governance and Hospital Administration
 2005 Invited Short Term Scholar at the Colorado University, Denver
 2013 Invited Professor at the Toronto University, Toronto

Scientific International Society Memberships:

Ex-President of the Union of European Neonatal and Perinatal Societies (UENPS)
 Ex- President of the International Neonatology Association (INA)
 Ex-VicePresident of the World Association Of Perinatal Medicine (WAPM)
 Regular Fellow of the International Academy of Perinatal Medicine

Scientific National Society Memberships:

2019 President of the Spanish National Society of Neonatology from October

Publications and scientific activities:

Publications in National and International scientific journals and books over 200, conferences, Chairs, at international and national Congress and workshops: more than 250
 International advisor for Neonatal Nutrition, group of growth and anthropometric neonatal study, INTERGROWTH 21. WHO. Anthropometry group.
 Advisor at the WHO program “Small and Sick babies” and Every Newborn Results Framework 2020-2022
 Areas of Interest: Bronchopulmonary Dysplasia, Respiratory physiology, Sepsis, Shock, personalized nutrition.



OLA DIDRIK SAUGSTAD

Affiliation: Oslo University Hospital, Norway

Date and place of birth: 5 March 1947, Oslo, Norway

Titles: MD PhD

Short CV (Education and training, work experience):

1973 MD from University of Oslo

1973 – 1974, PhD fellow at the Perinatal Research Unit at Uppsala University Hospital

1977 PhD

1979 – 1984 He trained as paediatrician at Oslo University Hospital (Board certified 1984)

1980 – 1981 Post doc (NIH) at Division of Perinatal/Neonatal Medicine at University of San Diego, California,

1986 Visiting Research Associate at Cardiovascular Research Institute at University of California San Francisco .

1986- – 2019 Consultant of Neonatology, Oslo University Hospital, Rikshospitalet
1991 – 2010 Director of the Norwegian Newborn Screening program
1991 – 2018 Professor 1 of Paediatrics and Director of Department of Paediatric Research, University of Oslo
2013 – 2016 Head of Department of Women and Child Health, Oslo University Hospital
October 1st 2018 Adjunct Professor at Ann and Robert H. Lurie Children's Hospital of Chicago/Northwestern University Feinberg School of Medicine
April 1st, 2019, as professor emeritus he was employed as Researcher at Oslo University Hospital, Norway.

Scientific National Society Memberships:

Honorary memberships in: Hungarian Association of Pediatricians (2000), Norwegian Society for Perinatal Medicine (2002), Finnish Society for Perinatal Medicine (2003), European Association of Perinatal Medicine (EAPM) (2004), American Pediatric Society (2011),

German Society for Perinatal Medicine (2011).

He was board Member 1996 – 2002 and President and past President of European Association of Perinatal Medicine 2002-4, 2004-6

He is Honorary Doctor at University of Athens

2013 Honorary Professor at Moscow University.

Recognitions:

Laerdal's Acute Medicine Award (University of Oslo) 1995,

The Arvo Yllpä Medal (University of Helsinki) 1997,

Elected Fellow at Royal College of Physicians, Edinburgh 1996,

Virginia Apgar Prize (World Association of Perinatal Medicine) 2001,

Medinnova's Idea Award (Rikshospitalet) 2002,

Elected Fellow International Academy of Perinatal Medicine (Barcelona) 2005,

The Human Protection Award (Oslo) 2007,

The Maternité Prize (European Association of Perinatal Medicine) 2008,

"Recent Advances in Neonatology", International meeting Honoring Ola D Saugstad, Würzburg 2008,

Märta Philipson's Award for Progress in Paediatrics (Karolinska Institutet, Stockholm) 2010,

Knighted by the Norwegian King (St. Olav's order) for paediatric research 2010,

The Landmark Award, American Academy of Pediatrics 2011,

The Bjoernson Award (for free speech) Norwegian 2011,

ME Award (Norwegian ME association) 2012,

The Nordic Medical Award (Stockholm) 2012,

Life Long Achievement in Neonatology. World congress of Perinatal Medicine (Madrid) 2015,

The Golden Amnioscope, IAPM 2016,

The Saling Award WAPM 2017,

The Chiesi prize in Neonatology 2017

Publications and scientific activities:

He has published 510 articles, of these 39 reviews, recorded in Pubmed, > 12 500 citations, and a series of book chapters in international books in Perinatal/Neonatal medicine H index: (Web of Knowledge) 57, (Google scholar) 77. RG score 50 (> 97,5 percentile).

Orcid: <https://orcid.org/0000-0002-3166-5254>.



JOSEPH SCHENKER

Affiliation: Hebrew University of Jerusalem, Israel

Place of birth: Krakow, Poland

Titles: MD, FACOG, FRCOG, Professor

Short CV (Education and training, work experience):

Professor of Obstetrics and Gynecology Hadassah University, Jerusalem, Israel

Chairman (Emeritus) Department of Obstetrics and Gynecology, Hadassah-University Hospital, Jerusalem, Israel

Scientific International Society Memberships:

President of International Academy of Human Reproduction

President of the Society of Gestosis

Founder Fellow International Academy of Perinatal Medicine

Past Deputy President World Association Perinatal Medicine

Founder member European Society of Human Reproduction

Founding member International Society of the Fetus as a Patient

Founding member International Society of Gynecological Endocrinology

Founding member European society for Gynecological and Obstetric Investigation

Founding member International Society for the Study of Pathophysiology of Pregnancy

Chaired the Committee of European Examination for Excellency in Obstetrics and Gynecology

President of the Extended European Board of Obstetrics and Gynecology

Vice-president of the European Association of Gynecology and Obstetrics

Scientific National Society Memberships:

Chairman of the National Committee for Residency Training

Vice President of the Israel Medical Council

President Israel Medical Association

Chairman Board of Examination for Medical License, State of Israel

President Israel Society of Obstetrics and Gynecology

Member of the FIGO Executive Board
 Chaired FIGO Committee for the Study of Ethical Aspects on Human Reproduction
 Chaired Ethical Committee of IFFS
 Judge District Court of Appeals, Ministry of Justice of Israel

Recognitions:

Honorary Fellow of the American College of Obstetrics and Gynecology
 Fellow ad Eundem of the Royal College of Obstetrics and Gynecology
 Honorary fellowships of the German, Polish, Romanian, Hungarian, Macedonian, Slovak Republic, Brazilian, and Israeli Societies of Obstetrics and Gynecology
 Honorary fellow of the Fertility and Sterility Society of Peru, the Implantation Society of Japan, the Romanian Society of Assisted Reproduction, the European Association of Perinatal Medicine and Medical Association of Croatia.
 Doctor Honoris Causa of the University of Medicine and Pharmacy of Craiova, Romania

Publications and scientific activities:

Produced more than 450 publications in medical journals, chapters in the books and several books in the field of obstetrics and gynecology and human reproduction.
 A member of the editorial boards of various national and international medical journals.
 Presided over several international congresses in the field of obstetrics and gynecology.
 Interested in the ethical aspects of reproduction and gynecological and obstetric practice.
 His research has involved experimental and clinical studies in the endocrinology of human reproduction, development of methods for contraception, and development of technologies in practice of assisted reproduction.
 He has also carried out research on pathological conditions in pregnancy.

Other

He was elected Honorary Citizen of the City of Jerusalem
 He was elected by State of Israel to Light Torch Independence Day on Behalf of Medicine and Science.



CIHAT ŞEN

Affiliation: Cerrahpaşa Medical School, University of Istanbul, Turkey
 Perinatal Medicine Foundation, Istanbul, Turkey

Titles: MD, Professor

Short CV (Education and training, work experience):

1973 Kabataş High School, Istanbul, Turkey

1979 MD, Cerrahpaşa Medical School, University of Istanbul, Turkey

1986 Specialist in Obstetrics and Gynecology, Cerrahpaşa Medical School, University of Istanbul, Turkey

1986 Lecturer at the Department of Obstetrics and Gynecology, Cerrahpaşa Medical School University of Istanbul, Turkey

1989 Charter Member of the Department of Perinatology (The first Perinatology Department in Turkey)

1989 – 1990 Harris Birthright Research Center for Fetal Medicine King's College Hospital, School of Medicine, London, UK

1990 Lecturer at the Department of Perinatology, Obstetrics/ Gynecology, Cerrahpaşa Medical School, University of Istanbul, Turkey

1992 Associate Professor at the Department of Perinatology, Obstetrics/ Gynecology, Cerrahpaşa Medical School, University of Istanbul, Turkey

2001 Professor at the Department of Perinatology, Obstetrics and Gynecology, Cerrahpaşa Medical School, University of Istanbul, Turkey

2002 Fetal Medicine Diploma, London, UK

Scientific International Society Memberships:

2019 – 2021 President of World Association of Perinatal Medicine

2019 President of World Congress of Perinatal Medicine, Istanbul, Turkey

Director of Perinatal Medicine Foundation

Regular Fellow of International Academy of Perinatal Medicine

Board Member of The International Society Fetus as a Patient

Director of Ian Donald Ultrasound School-Turkey Branch

Scientific National Society Memberships:

Former President of Turkish Perinatology Society

Former President of Turkish Society of Ultrasound in Obstetrics and Gynecology

Publications and scientific activities:

Editor of Turkish Journal of Perinatology

Editor of Perinatal Journal

Member of Editorial Board, Journal of Perinatal Medicine



BERNAT SERRA

Affiliation: Institute Universitari Dexeus Department of Obstetrics, Gynecology and Reproduction, Barcelona, Spain

Date and place of birth: November 10, 1966, Barcelona, Spain

Titles: MD

Short CV (Education and training, work experience):

1991 MD Faculty of Medicine of Autonomous University of Barcelona, Spain

1995 Specialization in obstetrics and gynaecology, Barcelona, Spain

1990 30 days stage Abu Dhabi Teaching Hospital, Zaria, Nigeria

1991 3 months stage Grosshadern Universitätsklinikum, Munich, Germany

1994 45 days stage Medical Genetics Institute, Wisconsin, USA

2006 – 2018 Head of Obstetrics Department at Hospital Universitario Quirón Dexeus, Barcelona, Spain

2019 Obstetrics Consultant in obstetrics Institute Universitari Dexeus Department of Obstetrics, Gynecology and Reproduction, Barcelona, Spain

Scientific International Society Memberships:

2019 Regular Fellow International Academy of Perinatal Medicine (IAPM)

2005 – 2011 and 2013 – 2017 Treasurer of the World Association of Perinatal Medicine (WAPM)

2012 Visiting Professor Dubrovnik International University

2010 – 2019 Associated Fellow IAPM

2008 till now Secretary Ian Donald School of Ultrasound, Spanish Branch

Scientific National Society Memberships:

2005 – 2015 Coordinator Section of Materno-Fetal Medicine of the Catalan Society of Obstetrics and Gynecology

2005 – 2007 Secretary of the Catalan Society of Obstetrics and Gynecology

2006 till now Member of the Experts Committee of the Perinatal Medicine Section of Spanish Society of Obstetrics and Gynecology

Member Spanish Society of Obstetrics and Gynecology (Section of Ultrasound)

Member Catalan Society of Obstetrics and Gynecology (Section of Materno-Fetal Medicine)

Recognitions:

Publications and scientific activities:

Published 22 papers in national and international peer review journals. Invited speaker at 66 national and international meetings. Published 26 chapters in national and international books and textbooks.

Executive director and director of several national and international symposiums

Invited speaker at 51 national and international courses/workshops, being chairman or co-chairman at 13.



MILAN STANOJEVIĆ

Affiliation: Ginekos Outpatient Clinic for Maternal and Child Health, Zagreb, Croatia

UNICEF Office Croatia, Zagreb, Croatia

Date and place of birth: November 13, 1953, Sisak, Croatia

Titles: MD, PhD

Short CV (Education and training, work experience):

- 1979 MD, Medical Academy, Warsaw, Poland
- 1986 – 1988 postgraduate course Clinical Pediatrics, Medical School University of Zagreb, Croatia
- 1987 – 1989 postgraduate course Perinatology and Neonatology, Medical School University of Zagreb, Croatia
- 1987 pediatrician Ministry of Health, Zagreb, Croatia
- 1988 postgraduate course Head Ultrasound in Children, Medical School University of Zagreb, Croatia
- 1989 postgraduate course Ultrasound of Infant Hips, Medical School University of Zagreb, Croatia
- 1991 MSc, Medical School University of Zagreb, Croatia
- 1997 – 1998 Soros Foundation Fellowship, Allegheny General Hospital, Pittsburgh, Philadelphia Childrens Hospital, Philadelphia, USA
- 2001 fetal echocardiography, Center of Polish Mother Health, Lodz, Poland
- 2004 fetal behavior, Dexeus Institute, Barcelona, Catalonia, Spain
- 2005 General Movements, General Movement Trust, Graz, Austria
- 2006 PhD, Medical School University of Zagreb, Croatia
- 2007 neonatologist, Ministry of Health, Zagreb, Croatia
- 2011 Research Associate, National Council for Science, Zagreb, Croatia
- 2013 Senior Research Associate, National Council for Science, Zagreb, Croatia
- 2011 Associate Professor Libertas Dubrovnik University, Croatia
- 2013 Assistant Professor, Faculty of Teacher's Education, Zagreb University, Croatia
- 1980 – 2000 Head of Neonatal Unit, General Hospital Koprivnica, Croatia
- 2000 – 2006 pediatrician General Hospital "Sv. Duh", Zagreb, Croatia
- 2006 – 2018 Head of Neonatal Unit, Department of Obstetrics and Gynecology Medical School University of Zagreb, Sveti Duh Clinical Hospital, Zagreb, Croatia
- 2018-present pediatrician neonatologist Ginekos, Private Outpatient Clinic for Maternal and Child Health, Zagreb, Croatia

Actively participating in the teaching of graduate and postgraduate medical students of Medical School University of Zagreb: Obstetrics and Gynecology, Neonatology, Pediatrics, Basic Course on Ultrasonography in Croatian and English, Fetal and neonatal neurophysiology, fetal behavior

Scientific International Society Memberships:

- 2007 – 2011 Secretary General of the World Association of Perinatal Medicine (WAPM)
- 2008 Board member of the Fetus as the Patient Society
- 2008 associate fellow of the International Academy of Perinatal Medicine (IAPM)
- 2011 vice-president WAPM
- 2013 president elect WAPM
- 2014 regular fellow IAPM
- 2014 Fellow European Academy of Sciences and Arts
- 2015 – 2019 president of WAPM

2019 – 2021 past President of WAPM

Scientific National Society Memberships:

Member of the Board of Croatian Perinatal Association

Member Croatian Pediatric Association of the Croatian Medical Association

Member Croatian Society of Preventive and Social Pediatrics of the Croatian Medical Association

Vice-president Section of Neonatology Croatian Perinatal Association and Croatian Pediatric Association

Recognitions:

1997 Medal of the City of Koprivnica, Croatia for outstanding scientific contribution in the field of medicine

1999 Diploma of the Croatian medical Association for the promotion of the tradition of the CMJ and improvement of medical science and public health

1999 Acknowledgment of Appreciation of CMJ for long lasting scientific and professional activities in the protection of maternal health

2002 Diploma of the Main Board of the CMA for the promotion of professional, scientific an ethical principles and improvement of public health

2005 Charter of the CMA for outstanding contribution to the CMA, medical science and healthcare in the Republic of Croatia

2008 Ladislav Rakovac Award by CMA for achievements in the development of healthcare, medical science and in particular for the activities within the CMA

2011 William Liley Medal by Fetus as a Patient Society

2019 Global Maternity Prize International Academy of Perinatal Medicine

Visiting professor at the Weill Cornell Medical University, New York, USA

Honorary professor of the Pirogov Russian National Research Medical University, Moscow, Russia

Honorary professor Medical Institute of State University in Surgut, Russia

Honorary professor Kuban State Medical University, Russia

Publications and scientific activities:

Published 314 papers (140 journal and 174 conference papers), more than 40 conference papers without publication as invited speaker, with more than 1800 citations and H index 19. Wrote 59 chapters in the books and edited 7 books. Member of editorial board of two journals and reviewer in ten. Participating in several research scientific projects.

Member of the organizing committees, vice – president and member of scientific committees of national and international meetings

Other

National coordinator for education at the UNICEF Office for Croatia involved already twenty five years in the project “Baby Friendly Hospital Initiative”



GENNADY T. SUKHIKH

Affiliation: National Medical Research Center of Obstetrics, Gynecology and Perinatology named after Academician V.I. Kulakov of the Ministry of Healthcare of Russia – the leading institution in the Russian Federation

Date and place of birth: 1947, Orenbourg, Russia

Titles: MD, DSci, Professor, Chair, Academician

Short CV (Education and training, work experience):

1971 – Graduated with honors from the Orenbourg State Medical Institute, Russia

Postgraduate education at the Department of General Surgery, Orenbourg State Medical Institute, Russia

Assistant, Orenbourg State Medical Institute, Russia

1976 – Senior Researcher, Laboratory of Natural Immunology, Orenbourg State Medical Institute, Russia

1978 – Head, Laboratory of Natural Immunology, Orenbourg State Medical Institute, Russia

1980 – Invited to work at the Research Institute of General Pathology and Pathophysiology in Moscow

1985 – DSci thesis, Doctor of medical sciences in specialties “Allergology and Immunology” and “Pathological Physiology”

1986 – Head, Laboratory of Clinical Immunology of the Research Center of Obstetrics, Gynecology and Perinatology, Moscow, Russia

2007 till now - Director of the National Medical Research Center for Obstetrics, Gynecology and Perinatology named after Academician V.I. Kulakov of the Ministry of Healthcare of Russia – the leading institution in the Russian Federation, carrying out extensive research, clinical, educational and coordinating work, and the headquarters of the Russian Society of Obstetricians and Gynecologists and of the major national Journal Obstetrics and Gynecology

Chair of the Department of Obstetrics, Gynecology, Perinatology and Reproduction, of the I.M. Sechenov First Moscow State Medical University, Russia

Scientific International Society Memberships:

Member of the European Association for Immunology of Reproduction and Development (EAIR)

Regular Fellow of International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

1997 – Elected Fellow Russian Academy of Medical Sciences (which in 2016 has joined the Russian Academy of Sciences) and became a Faculty of the Academy in 2005

Board Officer of the Department of Medical Sciences of the Russian Academy of Sciences
Faculty of the Supreme Attestation Commission under the Ministry of Education and Science of Russia

Member of the Working group of the Ministry of Industry and Technology in the field of research and possible clinical applications of stem cells

Vice-President of the Russian Society of Obstetricians and Gynecologists

Recognitions:

2011 – Honorary Diploma of the State Duma of the Federal Assembly of the Russian Federation

2012 and 2014 Order for Services to the Fatherland of the 4th and 3rd Degree

2017 Order of Aleksander Nevsky for an outstanding contribution to the development of healthcare and medical science

Publications and scientific activities:

Author of more than 900 papers, 7 original books and 19 patents

Editor-in-Chief of the Journals Obstetrics and Gynecology, Cell Technologies in Biology and Medicine

The main research interests: reproduction and reproductive medicine, molecular-genetic mechanisms of development of gynecologic diseases and great obstetrical syndromes, perinatal medicine, cell biology and therapy, male health and aging.

One of the pioneers of the research of the immunobiological features of human stem cells, their cultivation and long-term storage. The main purpose of these studies is the development of new technologies aimed at restoration of deficient body functions and tissue regeneration.

Leader of a scientific school, working to combine the fundamentals of scientific research and their clinical focus in following areas: obstetrics and gynecology, reproductive immunity, cell biology. Supervised qualification theses in more than 90 researchers.

2013 President of the 9th World Congress on Perinatal Medicine, Moscow.

**RADU VLADAREANU**

Affiliation: Chair of Department of Obstetrics and Gynecology, Carol Davila University of Medicine and Pharmacy, ELIAS University Emergency Hospital, Bucharest, Romania

Date and place of birth: December 1, 1962, Cimpulung, Romania

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

1987 MD Carol Davila University of Medicine and Pharmacy, Bucharest, Romania

1992 University Assistant in obstetrics and gynecology Carol Davila University of Medicine and Pharmacy, Bucharest, Romania

PhD in Obstetrics and Gynecology, Carol Davila Medical University, Bucharest, Romania
2003 Head of Obstetrics and Gynecology Department of Elias University Emergency Hospital, Romania

2007 Professor Carol Davila University of Medicine and Pharmacy, Bucharest, Romania

Scientific International Society Memberships:

Vice-President, International Society Fetus as a Patient

Vice-President, South-East European Society for Endometriosis and Infertility

Council Member (representing Romania) European Board and College of Obstetrics and Gynecology

Regular Fellow of International Academy of Perinatal Medicine (IAPM)

Director Ian Donald Inter-University School of Ultrasonography in Obstetrics and Gynecology, Romania

Former Member of the Educational Committee of World Association of Perinatal Medicine

Former Member of the Board of World Association of Perinatal Medicine

Scientific National Society Memberships:

2018 till now President Romanian Society of Obstetrics and Gynecology

President Obstetrics and Gynecology Committee of Romanian College of Physicians

President Romanian Society of Ultrasound in Obstetrics and Gynecology

President Romanian Society for HPV

President Romanian Association for Human Reproduction

Recognitions:

Sir William Lilley Award, International Society Fetus as a Patient, 2012

Publications and scientific activities:

Edited 15 books, authored 28 chapters in textbooks (11 of them in international textbooks)

Editor of 5 translation of major international textbooks in Romanian language

Author of 61 ISI published papers, 210 peer-reviewed papers, 184 congress proceedings and abstracts, H-Index 10 (Web of Knowledge)

Invited speaker to 67 international congresses

President of many major Romanian national congresses and 2 international congresses

Editor in Chief Ginecologia.Ro

Co-Editor Donald School Journal of Ultrasound in Obstetrics and Gynecology

Deputy Editor of Obstetrica & Ginecologia.



LILIANA S. VOTO

Affiliation: School of Medicine, Buenos Aires University, Argentina

Place of birth: Buenos Aires, Argentina

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

1973 MD, School of Medicine, University of Buenos Aires, Argentina

1979 residency in obstetrics and gynecology School of Medicine, University of Buenos Aires, Argentina

1984 PhD School of Medicine University of Buenos Aires, Argentina

1984 Assistant Professor School of Medicine University of Buenos Aires, Argentina

1989 fellow and co-investigator at the Department of Obstetrics and Gynecology, Queen's Medical Centre, University of Nottingham, England, UK

1991 Associate Professor of Obstetrics at Buenos Aires University, Argentina
1992 specialist in Public Health at Salvador University and recertified as Specialist in Obstetrics and Gynecology, Buenos Aires Obstetrics and Gynecology Society, Argentina
1996 Full Professor of Obstetrics at Barceló University in Buenos Aires, Argentina
2009 Research Faculty, Health Sciences University Institute, School of Medicine of Barceló Foundation, Argentina
2012 recertification, Argentine Society of Hypertension
Director and Council member, Department of obstetrics and Gynecology, School of Medicine of Buenos Aires University, Argentina
Instructor Rotation Internship of the obstetrics and gynecology rotation at the School of Medicine, Health Sciences University Institute Barceló Foundation
Director of Juan A. Fernández Hospital, Buenos Aires City, Argentina
President of Miguel Margulies Foundation for Perinatal Studies
Head of the Institute of Fetal Medicine and High-Risk Pregnancy (named after her), Buenos Aires, Argentina

Scientific International Society Memberships:

2006 Honorary member of the Ibero-American Society of Prenatal Diagnosis and Treatment (SIADTP), Malaga, Spain
2007 Honorary member of the Ibero-American Society of Prenatal Diagnosis and Treatment (SIADTP)
2008 Associate Fellow International Academy of Perinatal Medicine (IAPM)
2019 Secretary of the International Affairs, School of Medicine, University of Buenos Aires, Argentina
2019 Regular Fellow of IAPM

Scientific National Society Memberships:

2012 founder of the Prof. Dr. Liliana S. Voto Foundation for the prevention, promotion, and protection of maternal and infant health in Buenos Aires, Argentina

Recognitions:

2002 Award of the Argentine Society of Occupational Medicine for her work as Director of Juan A. Fernández Hospital during the deep socio-economic crisis
2003 Quality Management in Health Award, Secretariat of Health, Government of the City of Buenos Aires, Argentina
Doctor in Health Sciences, Health Sciences University Institute of Barcelo University, Argentina
2005 Distinction for her Academic Career, Argentine Society of Ultrasound (SAEU) Buenos Aires, Argentina
2005 Special Mention for the scientific paper Strategies for Prevention of Group B Streptococcal Disease: our Experience the Fetus as a Patient, Buenos Aires, Argentina
2007 Award granted by the Radio Program "Atrevidas" of Mrs Juana Patiño, declared of cultural interest by resolution N° 1838 of August 16, 1998. Buenos Aires, Argentina
2007 Award granted by the Legislative Staff Association of the National Parliament
2007 Distinction to the Woman Specialist on Obstetrics and Gynaecology for her assis-

tance and research work that has contributed to women health granted by FIGO (International Federation of Gynecology and Obstetrics) at the FIGO World Congress in Kuala Lumpur, Malaysia

2007 Rosa de Plata Award for active work in maternal and fetal health, Argentinian National Parliament

2008 Award granted at the conference “The Fetus as a Patient” by the European Accreditation Council for Continuing Medical Education

2008 Award for participation, dedication and contribution, Continuous Education Program Innovation and Updating in Ob/Gyn Across the America organized by CLIER, University of Chicago American, USA College of Obstetricians and Gynaecologist – Buenos Aires Section, Argentina

2018 William Liley Medal Award, Fetus as a Patient Society, Bucarest, Romania

Publications and scientific activities:

Main contributions have been in the field of Rh isoimmunization, hypertension in pregnancy, fetal therapy, high risk pregnancy, antiphospholipid syndrome, and early pregnancy losses. She has been author or co-author in over 40 books and scientific publications, and over 280 scientific papers.

She has lectured extensively at both local and international meetings. Organized meetings and congresses: ISUOG (1999); WAMP (1999), the 21st Fetus as a Patient Congress (2005), the III Global Congress of Maternal and Infant Health, Ian Donald School of Ultrasound in Buenos Aires, Argentina (2013), the 10th International Meeting of the International Academy of Perinatal Medicine (2014)

2016 Member of the International Editorial Board, American Journal Obstetrics and Gynecology

Editor The International Journal of Childbirth

1992 – 1993 coordinator in Argentina of the collaborative project Collaborative Low-Dose Aspirin Study in Pregnancy for the Prevention and Treatment of Pre-eclampsia and Intrauterine Growth Retardation (CLASP), organized by Oxford University, England, UK

1993 – 1995 Director of the Argentina-England collaborative project Prevention and promotion of maternal and perinatal health in critically impoverished populations, Miguel Margulies Foundation for Perinatal Research, the British Council and the British Embassy in Argentina

1995 Clinical Investigator for the National Council for Research in Science and Technology (CONICET).



MIROŚLAW WIELGOŚ

Affiliation: Professor of medicine, Chairman and Head the 1st Chair, Department of Obstetrics and Gynecology, Medical University of Warsaw, Poland

Date and place of birth: April 12, 1965, Zamość, Poland

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

1990 MD 2nd Faculty of Medicine of the Medical University of Warsaw, Poland

1997 PhD

1998 specialist in obstetrics and gynecology

2004 assistant professor in medical sciences

2009 Full Professor

2013 specialist in perinatology Medical University of Warsaw, Poland

2013 National Consultant in Perinatal Medicine

2008 – 2016 Dean of the 1st Faculty of Medicine, Medical University of Warsaw

2016 – 2020 Rector of Medical University of Warsaw

Scientific International Society Memberships:

Regional Director of the Ian Donald School for Eastern Europe

Vice President of the World Association of Perinatal Medicine

Secretary General of the European Association of Perinatal Medicine

Executive Board Member of the European Association of Perinatal Medicine

Executive Board Member Society of The Fetus as a Patient

Scientific National Society Memberships:

President of Polish Society of Gynecologists and Obstetricians, 2015-2018

Recognitions:

Honorary Member of The Polish American Medical Society from 2015

2016 Prime Minister's Award for technical innovations in medicine

2018 1st position on the list of the most influent people in Polish medicine

Publications and scientific activities:

He published more than 300 peer review articles and promoted more than 10 completed doctoral dissertations

He is also a member of editorial board or editor in chief of the following journals:

Donald School Journal of Ultrasound in Obstetrics and Gynecology; Archives of Medical Science; International Journal of Prenatal and Perinatal Psychology and Medicine; Neuroendocrinology Letters; Clinical and Experimental Medical Letters; Medycyna, Dydaktyka, Wychowanie; Położna – Nauka i Praktyka; Ginekologia Polska; Ultrasonografia w Ginekologii i Położnictwie

Played a key role in popularizing modern diagnostics and treatment of hemolytic disease of the newborn in Poland

Implemented the method of laser ablation of placental anastomoses in twin-to-twin transfusion syndrome (TTTS) in the Mazowsze region

Introduced the Fetoscopic Endoluminal Tracheal Occlusion (FETO) procedure in fetuses with congenital diaphragmatic hernia as well as fetoscopic repair of spina bifida to clinical practice in Poland

Founder of the "Alliance for Safe Labour"

Co-author of the specialization programme in perinatology, standard medical procedures in selected pregnancy pathologies, and numerous clinical guidelines in obstetrics, gynecology, perinatology and ultrasound.



IVICA ZALUD

Affiliation: Professor and Kosasa Endowed Chair, Department of Obstetrics, Gynecology, and Women's Health, John A. Burns School of Medicine, University of Hawai'i, Honolulu, USA

Date and place of birth: August 9, 1961, Lekenik, Croatia

Titles: MD, PhD, FACOG, FAIUM

Short CV (Education and training, work experience):

1986 MD University of Zagreb School of Medicine, Croatia

1992 PhD University of Zagreb School of Medicine, Croatia

1993 – 1997 Residency in obstetrics and gynecology, Winthrop University Hospital in Mineola, New York, USA

1997 – 2000 Fellowship in Maternal Fetal Medicine (MFM) at the Georgetown University in Washington, District of Columbia, USA

Certified by the American Board of Obstetrics and Gynecology (ABOG) in General obstetrics and gynecology and Maternal fetal medicine

2000 Associate Professor of Obstetrics and Gynecology, John A. Burns School of Medicine, University of Hawai'i, Honolulu, USA

2008 – Professor of Obstetrics and Gynecology, John A Burns School of Medicine, University of Hawai'i

2008 Founder and Director of MFM fellowship program, John A. Burns School of Medicine, University of Hawai'i, Honolulu, USA

2009 Chief of the MFM Division, John A. Burns School of Medicine, University of Hawai'i, Honolulu, USA

2012 Chair of the Obstetrics, Gynecology, and Women's Health, Department at the University of Hawaii, Honolulu, USA (he has brought over 11 million dollars in philanthropy to his department: 3 endowed chairs, 5 endowed professors, 3 endowed programs; expanded clinical, educational and research enterprises to become the strongest and largest clinical department at the John A. Burns School of Medicine)

Scientific International Society Memberships:

Regular Fellow of International Academy of Perinatal Medicine

Vice-Director of the Ian Donald Inter-University School of Medical Ultrasound

Vice-President of International Society the Fetus as a Patient

Former Secretary General and Vice-President of the World Association of Perinatal Medicine

Scientific National Society Memberships:

Fellow of the American College of Obstetricians and Gynecologists

Fellow of the American Institute for Ultrasound in Medicine

Fellow of the American Gynecological and Obstetrical Society

Recognitions:

Sir William Liley award from the Fetus as a Patient International Society

Fellowship award, the Council of University Chairs in Obstetrics and Gynecology

Publications and scientific activities:

He has published over 250 peer-reviewed papers, book chapters and abstracts.

He co-edited a textbook on Doppler in OB/GYN in 2005.

His clinical and research interests include Doppler ultrasound, prenatal diagnosis and ultrasound applications in postmenopausal patients

Associate Editor and Reviews Editor of the Journal of Perinatal Medicine

Executive Editor of the Donald School Journal of Ultrasound in OB/GYN

chapter 8

**HONORARY FELLOWS,
ASSOCIATE FELLOWS
OF IAPM
AND YOUNG SCIENTISTS
UNIT**

HONORARY FELLOWS

According to the article 8 of the current Constitution of the IAPM «the HONORARY FELLOWS will be nominated and chosen for the International Council based on the internationally recognized contributions to Perinatal Medicine» and the aims of IAPM.

The Board of Directors of IAPM, with the acquiescence of the International Council, decided to appoint following Honorary Fellows of the IAPM:

During Foundation Ceremony

Prof. Jacint Corbella (Spain)

Prof. José M. Dexeus (Spain)

At the IAPM meeting in Istanbul in 2013

Prof. Samuel Karchmer (Mexico)

At the IAPM meeting in Madrid in 2015

Prof. Robert Brent (USA)

Prof. Tsuyomu Ikenoue (Japan)

Prof. Kazuo Maeda (Japan)

Prof. Giampaolo Mandruzzato (Italy)

At the IAPM meeting in Tirana 2016

Prof. Galina Savelyeva (Russia)

Prof. Alexander Strizhakov (Russia)

ASSOCIATE FELLOWS

The ASSOCIATE FELLOWS are according to article 7 of our Constitution «experts put forward by the Board who are specialized in any of the branches of Perinatal Medicine and take an active part in the mission and activities of the IAPM».

The first associate fellows of the IAPM were appointed at the meeting in Budapest (November 23, 2007).

Current list of associate fellows:

ASSOCIATE FELLOWS	
1.	Sami Mahmoud AbdelKhair, Sudan
2.	Abdulfetah Abdulkhadir, Ethiopia
3.	Gordana Adamova, Macedonia
4.	Abdallah Adra, Lebanon
5.	Panos Antsaklis, Greece
6.	Olus Api, Turkey
7.	Hesham Arab, Saudi Arabia
8.	Apostolos Athanasiadis, Greece
9.	Raphael Avidime Attah, Nigeria
10.	Rodrigo Ayala, Mexico
11.	Elena Baybarina, Russia
12.	Larisa Belotserkovtseva, Russia
13.	Victoria Bitsadze, Russia
14.	Dorota Agata Bomba-Opon, Poland
15.	Naima Lamdouar Bouazzaoui, Morocco
16.	Thorsten Braun, Germany
17.	Roberto Cassis Martinez, Ecuador
18.	Snežana Crnogorac, Montenegro
19.	Alaa Ebrashy, Egypt
20.	Eisa Osman El-Amin, Sudan
21.	Masayuki Endo, Japan
22.	Sertac Esin, Turkey

23. Boris Filipović-Grčić, Croatia
24. Orion Gliozheni, Albania
25. Olga Grebennikova, Russia
26. Irina Vladimirovna Ignatko, Russia
27. Pramod Jog, India
28. Josip Juras, Croatia
29. Gwang-Jun Kim, Korea
30. Esin Koc, Turkey
31. Lilijana Kornhauser Cerar, Slovenia
32. Aliyu Labaran Dayyabu, Nigeria
33. Aleksandar Ljubić, Serbia
34. Alexander Makatsariya, Russia
35. Narendra Malhotra, India
36. Javier Mancilla, Mexico
37. Alexandra Matias, Portugal
38. Ratko Matijević, Croatia
39. Anton Mikhailov, Russia
40. Sonal Panchal, India
41. Nikolaos Papantoniou, Greece
42. Sonila Pashaj, Germany
43. Selma Porović, Bosnia & Herzegovina
44. Tanja Premru-Sršen, Slovenia
45. Miguel Ruoti Cosp, Paraguay
46. Renato Sa, Brazil
47. Aida Salihagić Kadić, Croatia
48. Florin Stamatian, Romania
49. Vedran Stefanović, Finland
50. Ali Sungkar, Indonesia
51. Ebru Tarim, Turkey
52. Sabina Terzić, Bosnia & Herzegovina
53. Tuangsit Wataganara, Thailand
54. Jun Yoshimatsu, Japan



SAMI MAHMOUD ABDELKHAIR

Affiliation: Fetal Medicine Department, Reproductive Health Care Centre, Khartoum, Sudan

Date and place of birth: November 29, 1970, Khartoum, Sudan

Titles: MBBS, MD, Consultant of Obstetrics and Gynaecology, Director

Short CV (Education and training, work experience):

1989 – 1995 Bachelor of Medicine-Bachelor of Surgery (MBBS)
Faculty of Medicine University of Gezira, Sudan

2001 MD obstetrics and gynecology, University of Khartoum, Sudan

2005 – 2007 Labour room administrator Doctors Hospital, Khartoum, Sudan

2006 Federation International of Obstetricians and Gynecologists (FIGO) International Fellowship in Maternal Health, Kuala Lumpur, Malaysia

2009 Ian Donald School for advanced ultrasound training, Zagreb, Croatia

2010 Master of Ultrasound in Obstetrics and Gynaecology University of Medical Sciences and Technology, Sudan

2012 Diploma of invasive prenatal procedures at Ospedale Regionale per Le Microcitemico, Cagliari, Italy

2001 – 2003 Part-time Specialist of obstetrics and gynaecology Ribat University Hospital Khartoum, Sudan

2001 – till now Specialist of obstetrics and gynaecology, current medical director Reproductive Health Care Centre, Khartoum, Sudan

Lecturer Afro-Asian Institute for Medical Training National Ribat University

Scientific International Society Memberships:

Member of the Core Group and Founding Member Wight Ribbon Alliance (WRA) for Maternal Mortality in Sudan

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

1993 – 1994 President of Kassala Province Student Union, University of Gezira

2002 – 2016 Member of the Executive Committee Sudan Obstetrics and Gynaecology Society

Member of the Sudanese Family Planning Association

2009 – 2015 President of the Advanced Life Support in Obstetrics (ALSO) Sudan Advisory Faculty

Publications and scientific activities:

Published more than 30 papers in national and international journals, several chapters in the books, and attended more than 40 national and international conferences.

Actively involved in teaching of obstetrics, gynecology, and ultrasound in obstetrics and gynecology.

Participated in the organization of the annual courses of Laparoscopy, Royal College

of Obstetrics and Gynaecology, Colposcopy and Urogynaecology Sudan Obstetrics and Gynaecology Society.

Advanced Life Support in Obstetrics (ALSO) Course senior instructor.

2006 -2016 Trainer, Basic Annual Ultrasound Course, Omdurman Maternity Hospital, Sudan.



ABDULFETAH ABDULKADIR ABDOSH

Affiliation: Department of Obstetrics and Gynecology in St. Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia

Date and place of birth: August 8, 1968, Addis Ababa, Ethiopia

Titles: Assistant professor and Fellowship Coordinator of Obstetrics and Gynecology, Maternal-Fetal Medicine and Genetics

Short CV (Education and training, work experience):

1995 graduated as a general practitioner from Faculty of Medicine, Belgrade University, Ex-Yugoslavia (now Serbia)

1997 joined residency in Obstetrics and Gynecology

2002 graduated as Obstetrician and Gynecologist from Faculty of Medicine, Belgrade University

2003 joined fellowship program in perinatology

2005 graduated fellowship program in Perinatology (Maternal Fetal Medicine and Genetics) with successful defense of fellowship thesis on modern management of Rh-alloimmunization at Faculty of Medicine, Belgrade University

2003 completed a one-year course in early detection and management of premalignant and malignant conditions in the lower female genital tract at Faculty of Medicine, Belgrade University

2005 employed at St. Paul's Hospital, Addis Ababa, Ethiopia

2007 – 2012 served as chairperson of the department

2008 employed as assistant professor of Obstetrics and Gynecology at Addis Ababa University for St Paul's Hospital Millennium Medical College

2008 served as a member of the steering committee for the construction and internal design of the new Maternal and Children Health Hospital, student dormitory and guest house

Actively involved in the initiation of undergraduate, residency and fellowship programs in the college

2008 – 2012 Served as a member of staff recruitment, appointment and promotion committee of the college

Scientific International Society Memberships:

Since 2012 director of Ian Donald Inter-University School of Medical Ultrasound, Ethiopian Branch

Since 2017 Associate Fellow of International Academy of Perinatal Medicine

Since 2018 a member of Global Health Committee of Society of Maternal Fetal Medicine

Scientific National Society Memberships:

2012 – 2016 a member of the executive board of Ethiopian Society of Obstetricians and Gynecologists

2015 – 2017 a member of a founding committee of Ethiopian College of Obstetricians and Gynecologists in collaboration with American College of Obstetrics and Gynecology

Since 2017 a chairperson of Continuing Medical Education Committee of Ethiopian Society of Obstetricians and Gynecologists

Recognitions:

2016 award by the First Batch of graduate residents of SPHMMC as best senior

2016 certificate award for serving ESOG executive board

2012 certificate award for serving as chairperson of the OBGYN department

2020 website recognition for Safe Motherhood Month for his contribution to the improvement of maternal health care services

Vice-president of African Association of Perinatal Medicine

Publications and scientific activities:

Published six publications

Ethiopian Principal Investigator for Tranexamic acid for the treatment of postpartum hemorrhage: An international, randomized, double blind, placebo-controlled trial in collaboration with London School of Hygiene & Tropical Medicine.

National Coordinator for Ethiopia in the WOMAN trial,

A member of the International Advisory Committee and member of the Writing Committee for the results publication of the trial in the Lancet Journal in 2017.

Ethiopian Principal Investigator for Global Maternal Sepsis (GLOSS) Study which was conducted in ten facilities in Addis Ababa in collaboration with World Health Organization (WHO).

He contributed as being National Coordinator and PI at SPHMMC in the GLOSS study - the results were published in the Lancet Journal in 2020.

Other

Served as member of health committee for Woreda 9, Addis Ketema sub-city, Addis Ababa.



GORDANA ADAMOVA

Affiliation: Sante Plus Hospital, Skopje, Macedonia

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

1970 MD Medical School University of Saint Cyril and Methodius in Skopje, Republic of Macedonia

1990 PhD Medical School University of Saint Cyril and Methodius in Skopje, Republic of Macedonia

1976 Department of High-Risk Pregnancy, Department of Obstetrics and Gynecology, University of Skopje, Republic of Macedonia

1981 – 1984 Department of Obstetrics and Gynecology, Charite University, Berlin, Germany
 1988 – 2012 Head of the Delivery Ward and Coordinator for Perinatology, Department of Obstetrics and Gynecology University of Skopje, Republic of Macedonia
 2015 till now private hospital Sante Plus in Skopje, Republic of Macedonia

Scientific International Society Memberships:

2011 till now Director of the Macedonian branch of Ian Donald School
 Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

2002 till now President of the Macedonian Association of Perinatal Medicine
 2004 – 2012 Consultant for the Center for Continued Medical Education
 2014 till now President of the National Committee of Perinatal and Maternal Mortality
 2018 Member of National Committee of Safety of Motherhood

Recognitions:

2011 Medal for outstanding results in the promotion of medical science and practice and the development of health care in the Republic of Macedonia

Publications and scientific activities:

Author of over 160 publications, among them 20 journal papers
 1989 – 2001 Member of the Editorial Board of the Macedonian Journal of Medical Review
 2002 – 2006 Secretary of Macedonian Journal of Medical Review
 2007 – 2015 Member of the Editorial Board of the Macedonian Journal of Medical Review
 2015 Member of the Editorial Board of the Ian Donald School Journal of Ultrasound in Obstetrics and Gynecology



ABDALLAH ADRA

Affiliation: Department of Obstetrics and Gynecology, Division of Maternal Fetal Medicine, American University of Beirut, Lebanon

Date and place of birth: 14 June 1963 Tripoli, Lebanon

Titles: MD

Short CV (Education and training, work experience):

1987 MD American University of Beirut (AUB), Lebanon

1988 – 1992 Residency in Obstetrics & Gynecology, American University of Beirut

1992 – 1995 Fellowship Maternal Fetal Medicine, University of Miami, Jackson Memorial Hospital, Florida, USA

1995 – 1998 Assistant Professor of Obstetrics & Gynecology, University of Miami, Jackson Memorial Hospital, Florida, USA

2011 – present- Chairperson, Department of Obstetrics & Gynecology & Head of the OB GYN residency training program, Nini Hospital, Tripoli-Lebanon

1998 – present- Clinical Associate Faculty, Division of Maternal Fetal Medicine and Prenatal Diagnosis Unit, Department of Obstetrics and Gynecology, American University of Beirut, Lebanon

Scientific International Society Memberships:

2014 – 2017 President Federation Arab Gynecology Obstetrics Societies (FAGOS)

2010 Director of the Lebanon branch of the Ian Donald Inter-University School of Medical Ultrasound

2014 Regional Director for Arab Countries Ian Donald Inter-University School of Medical Ultrasound

2008 – 2014 Chair of the Arab Maternal Fetal Medicine Expert Group (AMFMEG) for two consecutive terms

2005 – 2008 Executive Board World Association of Perinatal Medicine (WAPM)

2009 – 2012 Executive Board Federation International Gynecology and Obstetrics (FIGO)

2016 Executive Board Fetus as a Patient Society

2017 Associate Fellow International Academy of Perinatal Medicine (IAPM)

Past President Mediterranean Association of Ultrasound in Obstetrics & Gynecology (MEDUOG)

Scientific National Society Memberships:

2008 – 2010 President Lebanese Society of Obstetrics and Gynecology (LSOG)

Recognitions:

Honorary membership in regional and international obstetrics and gynecology societies and is the recipient of many awards

Excellence in Teaching award from the University of Miami, USA

2016 Visiting Professor Weill Cornell University New York, USA

Publications and scientific activities:

Author of over 60 peer-reviewed articles and abstracts and written multiple book chapters

Co-editor of the first edition of the Donald School Basic Textbook of Ultrasound in Obstetrics and Gynecology.

Section Editor: The Challenge Facing Developing Countries Textbook of Perinatal Medicine, Second Edition (edited by Asim Kurjak & Frank Chervenak)

Member of Editorial Board Donald School Journal of Ultrasound in Obstetrics and Gynecology.

Reviewer for many international obstetrics and gynecology journals.

More than 200 presentations at both national, regional, and international meetings, in the field of high-risk obstetrics, fetal medicine and prenatal diagnosis.

Over the past 20 years, he has participated in organization and leadership of national and regional CME-approved courses in high-risk obstetrics, and workshops for basic and advanced ultrasound training in Lebanon, Italy, Greece, Turkey, Serbia, Croatia, Russia, Albania, Romania, Syria, Jordan, Egypt, Saudi Arabia, UAE, Tunisia, India, Morocco, and Sudan.

Other

2018 Head of the Medical Alumni Chapter, American University of Beirut, Lebanon.



PANOS ANTSAKLIS

Affiliation: Alexandra Maternity Hospital, Medical School University of Athens, Greece

Titles: MD, PhD

Short CV (Education and training, work experience):

2002 MD, Medical School University of Athens, Greece.

2009 PhD thesis in the Medical School, University of Athens, Greece

2004 – 2005 served as an officer in the Greek Navy

2005 – 2010 Residency in obstetrics and Gynaecology John Radcliffe Hospital, Oxford, UK

2020 certified from the European Association of Perinatal Medicine (EAPM) with the Subspecialty in Fetal and Perinatal Medicine

Scientific International Society Memberships:

2009 – present: Member International Society of Ultrasound in Obstetrics and Gynecology

2012 – present: Executive Board, Ian Donald School

Associate Member of International Academy of Perinatal Medicine

Member of Steering Committee of International Organization Gestosis

Co-Director Greek Branch Ian Donald School

Scientific National Society Memberships:

2008 – present Member of the Board Hellenic Society of Perinatal Medicine

2014 – present: Member of the Board, Hellenic Society of Ultrasound in Obstetrics and Gynecology

2016 – present: Member of the Board (treasurer), Hellenic Society for Ultrasound in Medicine and Biology

Recognitions:

Honorary Member of the Romanian Society of Ultrasound in Obstetrics & Gynecology

Publications and scientific activities:

More than 100 publications in international and Greek journals and has written more than 15 book chapters. He has been very actively involved in Greek and international conferences with numerous lectures and abstract presentations.

Executive Editor Donald School Journal of Ultrasound in Obstetrics & Gynecology.



OLUS API

Affiliation: Department of Obstetrics and Gynecology and Perinatology Department Vehbi Koc Foundation American Hospital, Istanbul, Turkey

Date and place of birth: January 15, 1974, Istanbul, Turkey

Titles: MD, Professor

Short CV (Education and training, work experience):

1997 MD Faculty of Medicine, Marmara University, Istanbul, Turkey
 1997 – 2002 Physician Dr. Lutfi Kirdar Teaching Hospital Istanbul, Turkey
 2002 Chief Assistant Department of Gynecology and Obstetrics and Department of Perinatology Dr. Lutfi Kirdar Teaching Hospital, Istanbul, Turkey
 2010 Associate Professor Department of Gynecology and Obstetrics and Department of Perinatology Dr. Lutfi Kirdar Teaching Hospital, Istanbul, Turkey
 2010 Royal Brompton Fetal Cardiology Clinic, London, UK
 2010 – 2017 Perinatologist and lecturer at Obstetrics and Gynecology and Perinatology Department at Yeditepe University Hospital, Istanbul, Turkey
 2017 – 2019 Perinatologist and lecturer at Obstetrics and Gynecology and Perinatology Department at Medipol University Hospital, Istanbul, Turkey
 2019 Perinatologist at Obstetrics and Gynecology and Perinatology Department Vehbi Koc Foundation American Hospital, Istanbul, Turkey

Scientific International Society Memberships:

Member of Perinatal Medicine Foundation
 Past Board Member World Association of Perinatal Medicine (WAPM)
 Present Member World Association of Perinatal Medicine (WAPM)
 Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

2015 – 2017 past president of Turkish Perinatology Society
 Present Board Member of Turkish Perinatology Society
 2017 – 2020 President of Turkish Obstetric and Gynecological Ultrasound Society

Publications and scientific activities:

She has over 100 scientific publications and she is actively taking part in editorial and advisory boards of many national and international medical journals.

Main interest: fetal cardiology, prenatal diagnosis, and maternal anemia.



HISHAM AHMAD ARAB

Affiliation: Women and Fetal Program, DHAC, Jeddah, Saudi Arabia

Date and place of birth: February 23, 1955, Jeddah, Saudi Arabia

Titles: MD, Director, Head, Professor

Short CV (Education and training, work experience):

1972-1979 MD King Saud (Riyadh) University Riyadh, Saudi Arabia

1982- – 1986 fellowship obstetrics and gynecology, University of Manitoba Winnipeg, Canada

1986 – 1987 subspecialty in maternal fetal medicine, University of Manitoba, Winnipeg, Canada

1987 – 1988 subspecialty in maternal and fetal medicine, University of Toronto, Toronto, Canada

1994 Fellowship in Obstetrics and Gynecology, American college of obstetricians and gynecologists (FACOG)

1988 – 1997 consultant and head of the department, King Fahad Armed Forces Hospital Jeddah, Saudi Arabia

1994 – present Busy Private Practice in Assisted Reproduction at many centers

1997 – 2003 consultant and head of the department, King Khaled National Guard Hospital Jeddah, Saudi Arabia

2003 – 2007 consultant and perinatologist, United Doctors Hospital Jeddah, Saudi Arabia

2008 – present consultant, perinatologist, Director of Fetal and Women Health Program, Dr Arab Medical Center Al-Hayat Plaza, Al-Rawda Street, Jeddah, Saudi Arabia

Scientific International Society Memberships:

Deputy Secretary General, World Association of Perinatal Medicine

Associate Fellow International Academy of Perinatal Medicine

Chairman, Arab Maternal Fetal Medicine Expert Group (across the Arab World)

Director, Ian Donald School of Ultrasound, Jeddah Branch, KSA

1983 American Association of Gynecologic Laparoscopists, USA

1987 Society of Obstetricians and Gynecologists of Canada

1988 American Society of Human Genetics, USA

1991 International Society of Perinatal Obstetricians, USA

1994 Society for Maternal Fetal Medicine, USA

1996 Society for Gynecologic Investigation, USA

1997 American Institute of Ultrasound in Medicine, USA

1999 The international Society of Ultrasound in Obstetrics and Gynecology, UK

2002 The International Menopause Society, UK

2002 The International Pelvic Pain Society, USA

2004 European Society of Human Reproduction and Embryology, Belgium

2006 Council member, Asia Oceana Federation of Obstetrics and Gynecology, Philippine

2008 – present Council Member of Asian Oceanic Federation Of Obstetrics and Gynecology

Dec.2009 - present Chairman, Advisory Board on Female Genital Hygiene in the Middle East and Central Asia (MECA) region

2013 – 2017 Board member of the International Society of Gynecology Endoscopy (ISGE)

2013 Board member, International Society of Gynecologic Endoscopy, Italy

2013 Middle East Society of Gynecologic Endoscopy (MESGE), Egypt

2014 Middle East Fertility Society (MEFS) Lebanon

2014 – present Chairman, Arab Maternal Fetal Medicine Expert Group

Scientific National Society Memberships:

1989 secretary general Saudi Obstetrics and Gynecological Society, Saudi Arabia

Founding member & Former Secretary General of Saudi Obstetrics and Gynecology Society

2007 Founder of the Saudi Maternal Fetal Medicine Society

Chairman, Saudi Endometriosis Group

2013 – present Chairman, Advisory Committee on Management Guidelines of Miscarriages in Saudi Arabia

2013 – present Chairman, Saudi Endometriosis Group

Recognitions:

1980 Silver Medal 6th Saudi Annual Medical Conference Radiological assessment of the Saudi Female pelvis Jeddah, Saudi Arabia

1991 Silver Prize Poster Award, 1st International Congress of Perinatal Medicine, A Reproductive Risk of consecutive abortions, Tokyo, Japan

Publications and scientific activities:

Published more than 30 papers in the journals, edited one book, presented more than 70 papers as invited speaker and participant at many national and international meetings.

1988 – 2003 Heavily involved in postgraduate training during this period

1994 – present Editor of the Saudi Journal of Obstetrics and Gynecology

1994 – present External Examiner for final year medical students at 2 Universities: King Abdulaziz University (Jeddah), and Om Alqura University (Makkah)

2011 and 2012 Visiting Professor at Weil Cornell Medical College, New York, USA

Chair of 3 national and 1 international Task Forces for developing guidelines in the field of OB/GYN, and all published.



APOSTOLOS ATHANASIADIS

Affiliation: Surgical Section of the Medical School, Aristotle University of Thessaloniki, Greece

Date and place of birth: September 29, 1956, Thessaloniki, Greece

Titles: MD, Professor in Obstetrics Gynecology Maternal Fetal Medicine, Chairman, Director

Short CV (Education and training, work experience):

1980 MD Aristotle University, Thessaloniki, Greece

1998 – 1999 Fellowship in maternal and fetal medicine, Maternal Fetal Medicine Unit, Department of Obstetrics and Gynecology, Yale University, USA

2016 – now Chairman of the 3rd Department Obstetrics and Gynecology Medical School, Aristotle University of Thessaloniki, Greece

2019 – 2021 Director of the Surgical Section of the Medical School of Aristotle University of Thessaloniki, Greece

Scientific International Society Memberships:

Founding member Southeast European Society of Perinatal Medicine (SEEPM)

2013 – 2015 President SEEPM

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Executive Board European Association of Perinatal Medicine (EAPM)

Scientific National Society Memberships:

2020 – 2022 President Obstetrics and Gynecology Society of Thessaloniki, Greece

2018 – 2020 Immediate past President Hellenic Society on Ultrasound in Obstetrics and Gynecology

2002 – 2004 President Hellenic Society of Perinatal Medicine

2019 – 2021 Member of the Executive Board Hellenic Society of Obstetrics and Gynecology

Recognitions:

2009 Ayash Saban Sifai Scientific Award

2011 Soranos Scientific Award

2016 Grand Dr Papanicolaou award, New York, USA

2020 Hippocratic award, New York, USA

Honorary Member Romanian Society of Perinatal Medicine

Honorary Member Romanian Society of Ultrasound in Obstetrics and Gynecology

Visiting Professor at the Weill Cornell Medical College USA

Visiting Professor European University Cyprus

Visiting Professor Zucker School of Medicine at Hofstra Northwell New York, USA

Publications and scientific activities:

Published more than 200 scientific papers, presentations, articles and chapters.

Have been cited more than 1800 times in the Science Citation Index.

Invited speaker with more than 350 lectures at international and Greek congresses and meetings.

Successfully contributed to organizing many congresses and courses in Europe as president, member of the organizing committees and scientific coordinator.

Main scientific interests are fetal medicine, prenatal diagnosis, 3D and 4D ultrasonography and metabolomics in pregnancy.



RAPHAEL AVIDIME ATTAH

Affiliation: Department of Obstetrics and Gynecology Kano Aminu Teaching Hospital, Bayero University, Kano, Nigeria

Date and place of birth: December 14, 1978, Kano, Nigeria

Titles: MD, FMCOG, Associate Professor

Short CV (Education and training, work experience):

2002 MD, Faculty of Medicine, Ahmadu Bello University Zaria, Nigeria

2012 Graduated from the National Postgraduate Medical College of Nigeria

Faculty of Obstetrics and Gynaecology (FMCOG equivalent to PhD)

2003 house officer Ahmadu Bello University Teaching Hospital, Kaduna, Nigeria

2007 – 2012 Residency Training Department of Obstetrics and Gynecology Aminu

Kano Teaching Hospital, Kano, Nigeria

2013 Lecturer Department of Obstetrics and Gynecology Aminu Kano Teaching Hospital, Kano, Nigeria

2019 Associate Professor Department of Obstetrics and Gynecology, Bayero University Kano, Nigeria

2017 – 2019 Deputy Coordinator of Masters in Human Reproduction (MHR) Department of Obstetrics and Gynaecology Bayero University Kano, Nigeria

2018 – till now Examination Officer Department of Obstetrics and Gynaecology Bayero University, Kano, Nigeria

Scientific International Society Memberships:

Associate Fellow International Academy of Perinatal medicine (IAPM)

2017 till now Secretary General African Perinatal Society

Scientific National Society Memberships:

Deputy Director Ian Donald School of Ultrasound in Obstetrics & Gynecology (IDS) in Nigeria

Member Association of Gynaecological Endoscopic Surgeons of Nigeria

Member Medical and Dental Consultants of Nigeria (MDCAN)

Member Society of Gynaecologists and Obstetricians of Nigeria

Recognitions:

Internal quality auditor Population service international (PSI) Nigeria

Publications and scientific activities:

Published more than 30 publications in both local and international journals and co-author of two textbooks.

He is a reviewer to many journals including National Postgraduate Medical Journal of Nigeria since 2014.



RODRIGO AYALA

Affiliation: ABC Medical Center, Mexico City, Mexico

Health Science Faculty, Anahuac University, Mexico City, Mexico

Date and place of birth: 1972, Mexico City, Mexico

Titles: MD, Professor

Short CV (Education and training, work experience):

2000 MD, Anahuac University, Mexico City, Mexico

2005 specialized in Obstetrics and Gynecology, National Institute of Perinatology (Instituto Nacional de Perinatología), Mexico City, Mexico

2008 Reproductive Endocrinology and a Postdoc Research Fellow, Oregon Health and Science University, USA

2013 training in laparoscopic surgery at the Instituto Nacional de Perinatología, Mexico City, Mexico

2013 a postgraduate degree on medical research at the Instituto Nacional de Perinatología, Mexico City, Mexico

Subdirector of Academic Programs, Instituto Nacional de Perinatología, Mexico City, Mexico

Director of Education Instituto Nacional de Perinatología, Mexico City, Mexico

Head Director of Asociación Hispano Mexicana Foundation and Hospital

Scientific International Society Memberships:

Director of Mexican Branch of the Ian Donald International School of Ultrasound, Mexico

Member of the Endocrine Society

American College of Obstetrics and Gynecology

American Association of Endoscopic Gynecology

Associate Fellow of the International Academy of Perinatal Medicine

Scientific National Society Memberships:

Member of The Mexican College of Obstetrics and Gynecology

Member of The Mexican Association of Gynecological Laparoscopy

Member of Ginecólogos Asociados Santa Fe

Member of the Distinguished Graduate Committee of the Anahuac University, Mexico City, Mexico

Recognitions:

1st Place as Member Researcher in Ob/Gyn Mexican Ob/Gyb Society

2017 Distinguished Alumni, Anahuac University Award

2018 Special Recognition, ABC Medical Center BRIMEX Clinical Center

Publications and scientific activities:

Published more than 50 papers in journals, more than 10 chapters in various textbooks of gynecology and obstetrics, author and editor of the two books.

Other

Enjoys his weekends with his wife and 2 children in outdoors activities, travelling as well as watching movies.



ELENA N. BAYBARINA

Affiliation: Department of Mother and Child Care, Ministry of Health of the Russian Federation

Date and place of birth: September 14th, 1953, Moscow, USSR

Titles: MD, PhD, DSci, Professor, Director

Short CV (Education and training, work experience):

1971-1977 MD; 2nd Moscow State Medical Institute named after N. I. Pirogov, Ministry of Health of the Russian Federation, Moscow (at present – Pirogov Russian National Research Medical University, Moscow, Russia)

1983 PhD 2nd Moscow State Medical Institute named after N. I. Pirogov, Ministry of

Health of the Russian Federation, Moscow, Russia

1999 DSci

2003 Professor in Pediatrics and Neonatology

1982 – 1986 Junior Researcher; NICU; Research Center for Obstetrics, Gynecology and Perinatology (at present – Kulakov Federal National Perinatal Center, Moscow, Russia)

1986 – 1998 Senior Researcher; NICU; Research Center for Obstetrics, Gynecology and Perinatology (at present – Kulakov Federal National Perinatal Center, Moscow, Russia)

1998 – 2006 Chief Researcher at the Neonatal Intensive Care Unit of the Research Centre for Obstetrics, Gynecology and Perinatology (at present – Kulakov Federal National Perinatal Center)

2006 – 2012 Deputy Director of Research Centre for Obstetrics, Gynecology & Perinatology (at present – Kulakov Federal National Perinatal Center)

2012 till now Director, Department of Mother and Child Care; Ministry of Health of the Russian Federation

2003 – 2012 Chief neonatologist of Russian Federation

2003 – 2005 Member of Regional Advisory Panel on Reproductive Health in European Office of WHO

2016 till now UNDP-UNFPA-UNICEF-WHO-World Bank Special Programme of Research, Development and Research Training in Human Reproduction, Expert of Scientific and Technical Advisory Group

Scientific International Society Memberships:

Member World Association of Perinatal Medicine

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

Member Russian Association of Perinatal Medicine

Member Russian Society of Neonatologists

Publications and scientific activities:

Author of 294 papers, 10 patents, 30 books and chapters in the books in Neonatology, Perinatal Medicine, Organization of Healthcare for women and children.



LARISA DMITRIEVNA BELOTSEKOVITSEVA

Affiliation: Department of Obstetrics and Gynecology, Surgut Clinical Perinatal Center, Surgut State Medical University, Surgut, Russian Federation

Date and place of birth: 21 May 1952, Dzerzhinsk, Ukraine

Titles: MD, PhD, Doctor of Medical Science, Chief Physician, Professor, Head of Department

Short CV (Education and training, work experience):

1975 MD Tyumen Medical Institute, Russian Federation

1976 – 1984 Obstetrician-gynecologist at the Health Department of “Surgutneftegas” company, Surgut, Russian Federation

1984 – 1995 Deputy Chief of obstetrics, and chief obstetrician-gynecologist of Surgut city, Russian Federation

1995 Chief physician of Budget Institution of Khanty-Mansiysk Autonomous Region “Surgut Clinical Perinatal Centre” and Head of Obstetrics and Gynecology Department of Surgut State Medical University, Surgut, Russian Federation

1996 PhD Sechenov Moscow Medical Academy, Russian Federation

1999 Doctor of Medical Science Degree at Russian Federation State Highest Verification Committee, Moscow, Russian Federation

Scientific International Society Memberships:

2019 Board Member of the World Association of Perinatal Medicine (WAPM)

Associate Fellow of the International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

1994 Executive Board member, Russian Association of Perinatal Medicine

2003 Chairman, Regional Society of Obstetricians and Gynecologists

2017 Member of the Russian Professorial Assembly

2018 Board Presidium Member, Russian Society of Obstetricians and Gynecologists

Recognitions:

2014 The First Person, Russian award in the field of perinatal medicine

2016 Honorary Citizen of Russia, highest public recognition

2017 Tomorrow of Reproduction in Russia, Diploma of the winner of the VI National Award

2018 Letter of Appreciation from the President of the Russian Federation

2019 Letter of Appreciation from the President of the Russian Federation

Publications and scientific activities:

Published more than 600 scientific articles, 44 textbooks, and 14 monographs.

Mentored 25 PhD thesis, 3 Doctor of Medical Science thesis.

A member of the Editorial Board of 4 Russian medical journals: Journal of Reproductive Health, Journal of Gynecology, Obstetrics and Perinatology, Journal of Obstetrics, Gynecology and Reproduction, SurGU Journal of Medicine.



VICTORIA BITSADZE

Affiliation: Russian Academy of Sciences, Obstetrics and Gynecology Department, Institute of Children’s Health of I.M. Sechenov First Moscow State Medical University (Sechenov University), Moscow, Russia

Date of birth: April 16, 1970

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

1995 MD Moscow Medical Sechenov Academy, Moscow, Russia

1996 Obstetrics and gynecology Moscow Medical Sechenov Academy, Moscow, Russia

2001 PhD in Medicine Moscow Medical Sechenov Academy, Moscow, Russia

Scientific International Society Memberships:

International Society of Thrombosis and Haemostasis (ISTH)

Associate Fellow International Academy of Perinatal Medicine

Scientific National Society Memberships:

Russian Association of Obstetricians and Gynaecologists

Publications and scientific activities:

Published over 50 articles in peer-reviewed journals

Grants:

2018 -2019 Maternal and fetal thrombophilia in the development of fetal growth restriction syndrome and antenatal fetal death, Sechenov University, Moscow, Russia

2019-2021 Improving drug prevention of recurrent placenta-mediated pregnancy complications in women with refractory antiphospholipid syndrome, Sechenov University, Moscow, Russia

2020 – 2022 COVID-19, thromboinflammation and thromboembolism, Russian Academy of Sciences

**DOROTA AGATA BOMBA-OPON**

Affiliation: Feto-Maternal Unit 1st Department of Obstetrics and Gynecology, Medical University of Warsaw, Poland

Date and place of birth: July 31, 1969, Gdansk, Poland

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

Head of Feto-Maternal Unit in 1st Department of Obstetrics and Gynecology, Medical University of Warsaw, Poland

1995 MD, 1st Faculty of Medicine, Medical University of Warsaw, Poland

2000 specialist in obstetrics and gynecology - first degree Medical University of Warsaw, Poland

2003 PhD in Medicine Medical University of Warsaw, Poland

2005 specialist in obstetrics and gynecology - second degree Medical University of Warsaw, Poland

2012 habilitation Medical University of Warsaw, Poland

2015 certificate in perinatology Medical University of Warsaw, Poland

2020 Professor nomination by the President of Polish Republic

Prenatal ultrasonography, fetal intrauterine therapy Harris Birthright Research Centre

For Fetal Medicine King's College Hospital London, UK

Maternal-fetal medicine Department of Obstetrics and Gynecology, Division of Maternal Fetal Medicine Mount Sinai Hospital, Toronto, Canada

Fetoscopic Laser Surgery advanced hands-on course Dutch Fetal Care Academy Leiden University Medical Centre, Netherlands

4D ultrasound for assessment of fetal behavior and cognitive function of fetal brain Ian Donald Inter-University School of Medical Ultrasound Zagreb, Croatia

Scientific International Society Memberships:

Associate Fellow International Academy of Perinatal Medicine (IAPM)

2017 Board Member World Association of Perinatal Medicine (WAPM)

Scientific National Society Memberships:

2016 – 2019 Board Secretary Polish Society of Gynecologists and Obstetricians

Government Expert Committee Working Group responsible for the elaboration of antenatal care standards

Member of Expert Panel in Obstetrics for Agency for Health Technology Assessment in Poland

Recognitions:

Rector's Award for the best research paper: awarded six times, Medical University of Warsaw, Poland

Publications and scientific activities:

Published 84 scientific papers and 49 book chapters, 384 citations, h-index 10

Other

2010 Bronze Medal, award for long lasting service in health protection, President of Poland.



NAIMA LAMDOUAR BOUAZZAOU

Affiliation: Department of Neonatology, National Reference Center in Neonatology and Nutrition, Children's Hospital University Hospital Center of Rabat, Morocco

Date and place of birth: March 7, 1945, Rabat, Morocco

Titles: MD, Professor Emeritus of pediatrics and neonatology at the University Mohamed V of Rabat, Morocco

Short CV (Education and training, work experience):

1970 MD Faculty of Medicine and Pharmacy in Rabat, Morocco

1971 Fellowship in Pediatrics

1974 Pediatric and Childcare Faculty of Medicine University René Descartes, Paris, France

1975 Assistant Professor of Pediatrics

1979 graduated aggregation exam in pediatrics, top of her class

1979 Chief of Department Neonatology, later recognized as National Reference Center

in Neonatology and Nutrition, Children's Hospital University Hospital Center of Rabat, Morocco

1979 trained and worked in Pediatric Hospitals in Paris, Montréal, Washington, New York, Sao Paulo, Rio de Janeiro and Lausanne

1983 mission to Brazil under the supervision of Doctor Albert Sabin who developed the oral polio vaccine

2001-2010 Co-Founder and Director Pediatric Training and Research Unit in Nutrition and Alimentation Sciences Faculty of Medicine and Pharmacy, Rabat, Morocco

2016 President of the Ethics Committee of the Health Science, University Abulcasis, Rabat, Morocco

2017 Professor Emeritus University Mohamed V of Rabat, Morocco

Scientific International Society Memberships:

1996 Fellow National Academy of Medicine in France

1997 Member of the UNESCO Governmental Experts Committee for the draft of a Universal Declaration on the Human Genome and Human Rights

2013 Associated Fellow International Academy of Perinatal Medicine

Scientific National Society Memberships:

1995 Founder Moroccan Society of Neonatology

2005 – 2009 Member of the Scientific Commission of Medicine and Pharmacy Faculty of Rabat

Ex-President of the Group of Infant and Maternal Health Research and Nutrition of the Nutrition of the mother and child couple

Ex-member of the Central Office of Moroccan League for Children Protection

Ex-member of the National Technical and Scientific Comity of Vaccination of the Ministry of Health

Ex-member of the National Commission of Maternal and Neonatal Mortality Reduction of the Ministry of Health

Member of the Moroccan Pediatrics Society, Moroccan Infant Surgery Society and Moroccan Pediatrics Federation

Recognitions:

More than 17 national and international awards and distinctions

1997 Moroccan distinction *Wissam Al Arch de l'Ordre de Chevalier*

2003 Moroccan distinction *Wissam Al Arch de l'Ordre d'Officier*

2006 French Republic Academic Palms Officer's Award

2003 and 2006 Medal of Merit from the Moroccan Ministry of Health

2010 Medal of Merit and Gratefulness for managers training and scientific research, Moroccan Ministry of Postsecondary Education

Publications and scientific activities:

Numerous articles and publications in national and international medicine journals

Author of 8 medical books and *Pediatrician's Praying (La prière du pédiatre)*.

Organized and stipulated congresses, conferences, seminars, symposiums, workshops and days in medicine, pediatrics, neonatology, and nutrition.



THORSTEN BRAUN

Affiliation: Departments of Obstetrics and Experimental Obstetrics Campus Virchow, Charité – Universitätsmedizin Berlin, Corporate Member of Freie University Berlin, Humboldt-University Berlin, and Berlin Institute of Health, Germany

Date and place of birth: September 4, 1975, Dortmund, Germany

Titles: MD, PhD

Short CV (Education and training, work experience):

Medical studies Martin-Luther University Halle-Wittenberg, Germany and Faculty of Medicine at the Philipps-University Marburg, Germany

2002 – 2004 first experiences in Obstetrics and Gynecology Heinrich-Heine University Duesseldorf, Germany

2004 MD Department of Obstetrics and Perinatal Medicine at the Philipps University of Marburg, Germany

2004 – 2007 Postdoctoral Fellow Department of Physiology, Department of Obstetrics and Gynecology, University of Toronto, Canada (funded by German Research Foundation)

Postdoctoral Fellow School of Women's and Infants' Health, University of Western Australia, Australia (funded by German Research Foundation)

2007 till now Department of Obstetrics, Charité Medical University Berlin, Germany

2011 Consultant in Obstetrics and Gynecology Charité Medical University Berlin, Germany

2012 Deputy director at the Research Department 'Experimental Obstetrics' and study group of Perinatal Programming at the Charité Medical University Berlin, Germany

2014 Senior Consultant Charité Medical University Berlin, Germany

2017 specialized in feto-maternal medicine, Deputy Director of the Department of Obstetrics, Campus Virchow Charité University Berlin, Germany

2017 Habilitation (PhD) Charité Medical University Berlin, Germany

Lead Obstetric Consultant and Deputy Clinical Director of the Department of Obstetrics and Department of Experimental Obstetrics, Corporate Member of Freie University Berlin, Humboldt-University Berlin, and Berlin Institute of Health, Germany

Scientific International Society Memberships:

Founding member and Board member of the International Society for Placenta Accreta Spectrum (IS-PAS)

2019 Board Member of the International Society for Developmental Origins of Health and Disease

Member International Society for Developmental Origins of Health & Disease (SRI)

Member Society for Reproductive Investigation (formerly SGI)

Member International Federation of Placenta Associations (IFPA)

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

Member German Association for Perinatal Medicine (DGPM)

German Association of Obstetrics and Gynecology (DGGG)

German Society for Gynecology and Obstetrics in Berlin (GGGB)

Recognitions:

2000 Awarded Scholarship Philipps University of Marburg, Germany

2000 Science Award Niederrheinisch-Westfälische Society of Gynecology and Obstetrics, Germany

2010 Best Abstract Competition – 13th World Congress on Controversies in Obstetrics, Gynecology and Infertility (COGI)

2020 Annemarie and Günter Haackert-Stiftung Award

Publications and scientific activities:

Published more than 70 papers and book chapters and over 50 conference contributions.

Associate Editor Journal of Perinatal Medicine (JPME), De Gruyter.

Reviewer for over 24 international journals and scientific organizations.

Principal investigator in several German Research Foundation (DFG) projects in the field of perinatal programming.

The major research topic: the importance of prenatal stress during critical, perinatal developmental phases for the permanent, especially neuro-endocrine 'shaping' of disease risks.



ROBERTO CASSIS MARTINEZ

Affiliation: Department of Obstetrics and Gynecology, Clinical Hospital Kennedy, Guayaquil, Ecuador

Date and place of birth: June 7, 1947, Bahia de Caraquez, Ecuador

Titles: MD, Profesor, Director

Short CV (Education and training, work experience):

MD (cum laude) Faculty of Medicine University of Guayaquil, Ecuador

1975- – 1978 Postgraduate training in Gynecology, Obstetrics and Perinatal Medicine Free University of Berlin, Germany

1988 Certificate of Embryo Management at University of Viena, Austria

Scientific International Society Memberships:

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Publications and scientific activities:

He has published more than 50 publications, author of 3 books and co-author of 4 books in fetal ultrasound.



SNEŽANA CRNOGORAC

Affiliation: Clinical Center of Montenegro in Podgorica

Place of birth: Podgorica, Montenegro

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

1982 MD Faculty of Medicine University of Belgrade, Serbia

1990 specialist in obstetrics and gynecology Belgrade University Hospital, Faculty of Medicine University of Belgrade, Serbia

2000 MSc Faculty of Medicine University of Belgrade, Serbia

2006 PhD University of Kragujevac, Serbia

2002 – 2015 Head, Maternity Ward, Department of Obstetrics and Gynecology Clinical Center of Montenegro, Faculty of Medicine University of Montenegro, Podgorica, Montenegro

2012 – 2015 Head of the Department of Obstetrics and Gynecology Clinical Center of Montenegro, Faculty of Medicine University of Montenegro, Podgorica, Montenegro

2001 Assistant Professor Faculty of Medicine, University of Montenegro, Podgorica, Montenegro

2017 Full Professor Faculty of Medicine, University of Montenegro, Podgorica, Montenegro
Chair of Obstetrics and Gynecology Faculty of Medicine, University of Montenegro, Podgorica, Montenegro

Scientific International Society Memberships:

2009 Director Montenegrin branch Ian Donald School of Ultrasound

Associate Member International Academy of Perinatal Medicine

Board Member International Society of the Fetus as a Patient

Board Member Southeast European Society of Perinatal Medicine (SEESPM),

Member of European Society of Human Reproduction Special Interest Group in Fertility Preservation

Scientific National Society Memberships:

Vice President of the Montenegrin Society of Human Reproduction

Vice President Association of Gynecologist and Obstetricians of Serbia, Montenegro and Republic of Srpska

She was member of the working groups on guidelines of Ministry of Health, Government of Montenegro for Intrapartum care for healthy women and babies, Caesarean Section, working group against violence of women and children, and on immunization

Recognitions:

2014 William Liley Prize International Society The Fetus as a Patient

Visiting lecturer Transylvania University of Brasov, Romania

Visiting lecturer Charles University Prague, Czech Republic

Visiting lecturer University of Belgrade, Serbia

Publications and scientific activities:

Published many monographies, scientific and professional papers in regional and international medical journals, chapters of books, and presented more than hundred papers at national and international meetings.

Invited speaker at numerous national, regional and international meetings and has organized national and international courses and congresses.

Interested in perinatology: prenatal diagnosis and fetal malformations, preservation of fertility and pregnancies in patients with malignant diseases.



ALAA EBRASHY

Affiliation: Fetal Medicine Unit, Department of Obstetrics and Gynecology, Kasr Al Aini Faculty of Medicine, Cairo University, Egypt

Titles: MD, Professor, Director

Short CV (Education and training, work experience):

1986 graduated Kasr Al Aini Faculty of Medicine at Cairo University, Egypt

1989 Residency in obstetrics and gynecology Kasr Al Aini Faculty of Medicine at Cairo University, Egypt

1993 MSc Kasr Al Aini Faculty of Medicine at Cairo University, Egypt

1993 MD in obstetrics and gynecology Kasr Al Aini Faculty of Medicine at Cairo University, Egypt

2006 Professor obstetrics and gynecology Kasr Al Aini Faculty of Medicine at Cairo University, Egypt

2007 One of the founders Fetal Medicine Unit Cairo University, Egypt

Specialty training at Departments of Obstetrics and Gynecology Ulm University, Germany

Specialty training Birmingham Women's Hospital, UK

Professor of obstetrics and gynecology, Kasr El Aini Hospital, Cairo University, Egypt

Deputy Director Fetal Medicine Unit Kasr El Aini Hospital, Cairo University, Egypt

Visiting professor and consultant in fetal medicine Sharja University, Egypt

Visiting professor Army Forces College of Medicine, Cairo, Egypt

Scientific International Society Memberships:

Director Ian Donald Interuniversity School of Ultrasound in Obstetrics and Gynecology, Cairo, Egypt

Executive Committee Mediterranean Association for Ultrasound in Obstetrics and Gynecology (MEDUOG)

Board member Fetus as a Patient Society

Educational Committee World Association for Perinatal Medicine (WAPM)

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Publications and scientific activities:

More than 40 international publications and a reviewer of many international peer-reviewed journals.

Course Organizer of more than 200 Ultrasound workshops and symposiums in Egypt and Arab countries and worldwide.



EISA OSMAN EL-AMIN ABDALLA

Affiliation: National Ribat University, Khartoum, Sudan

Date and place of birth: January 1, 1953, Sudan

Titles: MD, Diploma in Tropical Child Health (DTCH), Membership of the Royal Colleges of Paediatrics (MRCP), Fellow of the Royal College of Paediatrics and Child Health (FRCPH), Professor of paediatrics and child care, Senior Consultant Neonatologist

Short CV (Education and training, work experience):

1976 MD Faculty of Medicine, Khartoum University, Sudan

Diploma in Tropical Child Health (DTCH)

Membership of the Royal Colleges of Physicians (MRCP)

Fellow of the Royal College of Paediatrics and Child Health (FRCPH)

Neonatology Training, Liverpool, UK

Associate Professor First Gezira University, Sudan

Neonatologist Saudi Arabia and Sultanate of Oman

2004 Full Professor National Ribat University, Khartoum, Sudan

Scientific International Society Memberships:

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

Head of Neonatal Society in Sudan

Publications and scientific activities:

Published more than 30 papers in pediatrics and neonatology, and his current interest is on initial feeding amniotic fluid to low-birth-weight babies to prevent necrotizing enterocolitis.



MASAYUKI ENDO

Affiliation: Department of Children's and Women's Health, Graduate School of Medicine, Division of Health Science, Osaka University

Date and place of birth: November 25, 1969, Okayama, Japan

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

1995 MD Faculty of Medicine, Osaka University, Japan

1995 – 2000 Residency training obstetrics and gynecology, Osaka University Hospital, Osaka Rosai Hospital, Kagoshima City Hospital, Japan

2000 Board Certificate Japan Society of Obstetrics and Gynecology

2000 – 2004 Completed Graduate Study at Graduate School of Medicine, affiliated to the Department of Gene Therapy Science, Faculty of Medicine, Osaka University, Japan

2004 – 2009 Post-doctoral training Children's Hospital of Philadelphia (CHOP), USA

2009 – 2011 Fetal surgery clinical fellowship Center for Fetal Diagnosis and Treatment, CHOP, USA

2011 – 2012 Post-doctoral training at Catholic University of Leuven, Belgium

2012 Assistant Professor Department of Obstetrics and Gynecology Osaka University, Japan

2014 Associate Professor Department of Obstetrics and Gynecology Osaka University, Japan

2019 Professor Department of Children's and Women's Health, Graduate School of Medicine, Division of Health Science, Osaka University, Japan

Scientific International Society Memberships:

Associate Fellow International Academy of Perinatal Medicine (IAPM)

International Fetal Medicine and Surgery Society

International Fetal Transplantation and Immunology Society

Asia Pacific Conference on Fetal Therapy

Scientific National Society Memberships:

Japan Society of Fetal Therapy

Japan Society of Obstetrics and Gynecology

Japan Society of Human Genetics

Japan Society of Perinatal and Neonatal Medicine

Japan Society of Ultrasonics in Medicine

Japan Society of Clinical Genetics in Obstetrics and Gynecology

Publications and scientific activities:

Published 60 publications and books.

Area of interests includes fetal stem cell and gene therapy in fetal medicine, vaginal mechanical function during pregnancy in urogynecology and medical anthropology.



SERTAC ESIN

Affiliation: Department of Perinatology, Medical Faculty, Baskent University, Ankara, Turkey

Date and place of birth: July 29, 1977, Balikesir, Turkey

Titles: MD, Professor, Director

Short CV (Education and training, work experience):

2001 MD Faculty of Medicine, Hacettepe University, Ankara, Turkey

2002 – 2007 Residency, Department of Obstetrics and Gynecology Hacettepe University, Ankara, Turkey

2014 Fellowship Perinatology, Etlik Zubeyde Hanım Maternity and Children's Hospital, Ankara, Turkey

2014 Associate Professor Medical Faculty, Baskent University, Ankara, Turkey

2017 Chair of Department of Perinatology, Baskent University, Ankara, Turkey

2020 Professor Medical Faculty, Baskent University, Ankara, Turkey

Scientific International Society Memberships:

Co-director of Ian Donald School of Ultrasound in Obstetrics and Gynecology, Turkey

2018 Young Scientist Section International Academy of Perinatal Medicine (IAPM)

2019 Associate Fellow International Academy of Perinatal Medicine

Member International Society of Ultrasound in Obstetrics and Gynecology

Scientific National Society Memberships:

Member of Turkish Society of Perinatology

Publications and scientific activities:

Published more than 40 international scientific articles.

Hosted 2 Ian Donald Ultrasound Schools in Ankara.

His research has included investigation of PPROM and preterm birth and has specific interest on fetal breathing patterns.



BORIS FILIPOVIĆ-GRČIĆ

Affiliation: Neonatal Intensive Care Unit, Department of Pediatrics, Clinical Hospital Center Zagreb, School of Medicine, University of Zagreb, Croatia

Date and place of birth: May 3, 1961, Sinj, Croatia

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

1985 MD School of Medicine University of Zagreb, Croatia

1992 Fellowship in Pediatrics Department of Pediatrics, Clinical Hospital Center Zagreb, School of Medicine, University of Zagreb, Croatia

Certified pediatrician-neonatologist at Neonatal Intensive Care Unit (NICU), Department of Pediatrics, Clinical Hospital Center Zagreb, School of Medicine University of Zagreb, Croatia

Former Head on NICU Department of Pediatrics, Clinical Hospital Center Zagreb, School of Medicine University of Zagreb, Croatia

Former Head of Department of Pediatrics, Department of Pediatrics, Clinical Hospital Center Zagreb, School of Medicine University of Zagreb, Croatia

Former Member of the Board of Clinical Hospital Center Zagreb, School of Medicine, University of Zagreb, Croatia

Full professor of Pediatrics, School of Medicine, University of Zagreb, Croatia
 Head Postgraduate Course in Neonatology at Chair of Pediatrics, School of Medicine, University of Zagreb, Croatia

President of the Board Continuous Medical Education, School of Medicine, University of Zagreb, Croatia

Scientific International Society Memberships:

Member of Executive Board of Union of European Neonatal and Perinatal Societies (UENPS)

Member of European Board of Neonatologists

Member of Scientific Education Committee of European Resuscitation Council for Newborn Life Support

Scientific National Society Memberships:

Past President Croatian Society for Perinatal Medicine, Croatian Medical Association

Founder and President of Croatian Society for Neonatology and Neonatal Intensive Medicine

Member of Executive Board of Croatian Pediatric Society, Croatian Medical Association
 Founder and Member of Executive Board of Croatian Resuscitation Council

Publications and scientific activities:

He published more than 100 publications.

Member of Editorial Board, Editor for Neonatology, journal Gynaecologia et Perinatologia

Member of Editorial Board of Journal of Pediatric and Neonatal Individualized Medicine

Introduced courses of pediatric resuscitation in cooperation with European Resuscitation Council.

Introducing the courses of neonatal resuscitation in cooperation with United Kingdom Resuscitation Council and European Resuscitation Council

Full instructor of Pediatric Life Support and of Neonatal Life Support Courses, European Resuscitation Council.

Organized Annual Congresses of Croatian Society for Perinatal Medicine.

Organized Annual Conferences of Perinatal Mortality in Croatia.

Head of Continuous Postgraduate Medical Education in Neonatology in Croatia.



ORION GLIOZHENI

Affiliation: University of Medicine of Tirana, Department of Obstetrics and gynecology, Albania

Date and place of birth: January 28, 1954, Tirana, Albania

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

1982 MD, Faculty of Medicine University of Medicine of Tirana, Albania

1982 – 1986 residency: Department of Obstetrics and Gynecology University of Medicine of Tirana

1986 specialist in obstetrics and gynecology

1990 PhD at the University of Medicine of Tirana

1996 Head of Department of Obstetrics and Gynecology, University of Medicine of Tirana

1999 Associate Professor Faculty of Medicine, University of Medicine of Tirana

2004 Professor Faculty of Medicine, University of Medicine of Tirana

1990 – 91 Department of Reproductive Medicine, Maternité Baudeloque University of Paris V “Rene Descartes”, Paris, France

1991 – 92 Department of Obstetrics and Gynecology, Hôpital Intercommunal de Creteil, Paris, France

1994 Certificate on Evidence based medicine at the University of Ticino, Switzerland

1994 Diploma in Reproductive medicine and biology at the University Hospital of Geneva, Switzerland

1998 Certificate on Evidence based medicine at the University of Montreal, Canada

1999 Certificate on Project Management and Design, Budapest, Hungary

Scientific International Society Memberships:

2008 Director of Ian Donald School

2009 Board member Fetus as a Patient Society

2011 Board Member of Mediterranean Association for Ultrasound in Obstetrics and Gynecology (MEDUOG)

2011 Board Member of Mediterranean Society for Reproductive Medicine (MSRM)

2010 Member of European Society for Reproductive Medicine and embryology (ESHRE)

2014 Member of the World Academy of Art and Science

2017 Honorary Professor at the University of Dubrovnik

2020 President elect of Southeast European Society of Perinatal Medicine

Scientific National Society Memberships:

1997 President of the Albanian Association of Perinatal Medicine

1998 – 2001 President of the National Bioethics Committee

2017 Honorary Member at the Kosovo Society of Ultrasound

Recognitions:

2016 William Liley Medal

2017 “Great Master” Prize in the field of medicine, education, and research, from the President of Republic of Albania

Publications and scientific activities:

Published more than 200 papers in national and international journals, author of 12 textbooks in obstetrics and gynecology, more than 250 presentations in national and international scientific meetings.



OLGA GREBENNIKOVA

Affiliation: N.I. Pirogov Russian National Research Medical University, Postgraduate Faculty, Department of Neonatology, Moscow, Russia

Date and place of birth: January 15, 1980, Moscow, Russia

Titles: MD, PhD, Associate Professor

Short CV (Education and training, work experience):

2003 graduated from the Russian State Medical University in Moscow

Residency in neonatology at the same University.

At the School of Clinical Electroencephalography and Neurophysiology (Moscow, Russia) and at Venice International University («10th International Course on Epilepsy») grant from International League against Epilepsy: trained in clinical electroencephalography with special attention to neonatal and pediatric EEG

2009 PhD thesis on medical treatment of perinatal brain lesions in infants of different gestations

Full time associate professor of neonatology at the Pirogov RNRMU and at the N.F. Filatov Children's City Hospital (Moscow) as a Consultant of Clinical Neonatal Electroencephalography for Neonatal Department and NICU, Neonatal Surgery Department, and Outpatient Department

Involved in post-graduate education and research

Scientific International Society Memberships:

2018 a member of Young Scientists, International Academy of Perinatal Medicine

2019 Associate Fellow, International Academy of Perinatal Medicine

2020 a member of Newborn Brain Society

Scientific National Society Memberships:

Active member of the Russian professional societies of perinatal medicine and clinical neurophysiology

Publications and scientific activities:

More than 50 national and international publications.

A member of the working group in the scientific project in perinatal neurology funded by the research grant of President of the Russian Federation to the leading scientific schools.

Main professional interests are perinatal neurology, neonatal seizures, clinical neurophysiology, neonatal EEG (video-EEG-monitoring, amplitude-integrated EEG), early human development.



IRINA VLADIMIROVNA IGNATKO

Affiliation: Department of Obstetrics, Gynecology and Perinatology, Sechenov First Moscow State Medical University, Moscow, Russia

Date and place of birth: October 28, 1968, Moscow, Russia

Titles: MD, PhD, DSci, Assistant Professor

Short CV (Education and training, work experience):

1983 – 1986 Nurse Moscow Medical College Academy of Medical Science of Soviet Union Moscow, Russia

1986 – 1993 MD Moscow Medical Sechenov Academy, Moscow, Russia

1995 Specialist in obstetrics and gynecology Moscow Medical Sechenov Academy, Moscow, Russia

1995 – 1997 PhD Specialist in obstetrics, gynecology and ultrasound Moscow Medical Sechenov Academy, Moscow, Russia

2005 DSci Specialist in obstetrics, gynecology and ultrasound Sechenov First Moscow State Medical University, Moscow, Russia

Scientific International Society Memberships:

Member International Society of Ultrasound in Obstetrics and Gynaecology

Associate Fellow International Academy of Perinatal Medicine

Scientific National Society Memberships:

Associate Fellow Russian Academy of Science (Professor of RAS)

Russian Association of Perinatal Medicine

Recognitions:

2008 Diploma named after LS Persianinov for the best work in Obstetrics, Russian Academy of Medical Science

2012 Prize for the development and implementation of new technologies in perinatal medicine, Government of the Russian Federation

2013 Diploma of Ministry of Health of the Russian Federation

2016 Prize and Diploma “First Faces” in nomination “Person of the Year”, Russian Association of Perinatal Medicine

Publications and scientific activities:

Total more than 250 publications; peer review articles 80; books (chapters in textbooks and monographs) more than 15; PhD thesis supervisor 10, DSci thesis supervisor two. Member of Editorial Board Russian Journal Problems of Gynecology, Obstetrics and Perinatology.

2005 Grant for young university professors Vladimir Potanin Foundation.

Other

Hobbies: tennis, swimming, travels, theater, pedagogics and psychology, pets (dogs).



PRAMOD JOG

Affiliation: D.Y. Patil Medical College Pune, India

Date and place of birth: August 10, 1958, Pune, India

Titles: MD, Diplomate of National Board (DNB), Fellowship of Indian Academy of Pediatrics (FIAP), Associate Fellow, IAPM; Professor

Short CV (Education and training, work experience):

1985 MD B.J. Medical College, Pune, India

1985 – 1988 Assistant Professor B.J. Medical College, Pediatric Department Sassoon Hospitals, Pune, India

Gathered experience from hospitals: Medi Point Hospital, Deenanath Mangeshkar Hospital, Jupiter Hospital

1996-till date Professor D.Y. Patil Medical College, Pune, India

Scientific International Society Memberships:

Member Standing Committee International Pediatric Association

Member Gavi Civil Societies Organisation (CSO) Steering Committee

Member, Executive Committee, Asian Society of Pediatric Infectious Diseases (ASPID)

Scientific National Society Memberships:

1992 – till today coordinator of Breastfeeding Promotion Network of India (BPNI) in Pune
1992 onwards-Executive Board Member of the Indian Academy of Pediatrics (IAP) for 9 terms

1995 Vice President of Indian Society of Perinatology and Reproductive Biology (ISOPARB)

Vice President, Infectious Diseases chapter of IAP, 2009 & 2013

2015-2017 Chairman IAP Advisory Committee on Vaccines and Immunisation Practices (ACVIP)

2016 President of the Indian Academy of Pediatrics (IAP)

Recognitions:

1983 Ten Outstanding Young Persons (TOYP) award

1995 RK Menda Award of Central Indian Medical Association (IMA) for outstanding community service

1996 Suresh Nadkarni award of IMA (Maharashtra) for health education medical write-ups

2007 Co-convenor for the Art and Science of Pediatric Practice (ASPP)

2011 Plotkin's Prize for best performance in Advanced course in Vaccinology (ADVAC), Annecy, France

Gold medal twice by the Breastfeeding Promotion Network of India (BPNI)

Publications and scientific activities:

Has delivered over 1500 speeches at national and international pediatric conferences. He trained over 1600 medical officers for the UNICEF's Child Survival and Safe Motherhood project.

1985 till now Editor in Chief Pediatric Review Journal.

Editor in Chief Times of Pediatrics.

Successfully campaigned the government of India to introduce the rotavirus vaccine and pneumococcal vaccine in the national immunization schedule.

1984 Created and executed the "Goodbye polio" program in the region of Pune.

1989 Practitioners' Epidemic Prevention and Surveillance Initiative (PEPSI) for the regular reporting of infectious diseases and epidemics.

1996 "Goodbye polio program" became the template for the successful national Pulse Polio campaign of the government of India, resulting in eradication of polio in India.

A pioneer of the programs Goodbye Polio as well as of the ImmunizeIndia app, the world's largest vaccination reminder cell-phone app.

Created and managed large scale maternal education and child health programs using digital, mobile and Internet technologies.

In partnership with the Ministry of Women and Child Development, has ensured that the IAP Poshan project educated 4 million women in 2015 and 2016 on simple practices to prevent child malnutrition and stunting.

Initiated IAP TV live at 1000 locations in India reaching 3 million mothers every year, with plan to expand to over ten thousand locations and educate by 2020 on practices to improve the health and nutrition status of mothers and children 25 million mothers every year.

1987 Divisional Coordinator for a joint project of the WHO, UNICEF and IAP for the Quality Reinforcement of Immunization Programmes.

Initiated School for Parents for lessons in parenting.

Initiated Magical Moments, a training program for pregnant mothers to focus on the importance of 1000 days & to prepare them for exclusive breastfeeding.

He worked for IAP modules like Human Lactation Management, The Science of Vaccinology, Respiratory Tract Infections, Asthma Training, Golden Hour Emergency Management, The Art and Science of Pediatric Practice, and Mission Kishore Uday.

During his tenure as President of IAP he initiated programmes like Ideal Start to Human Life; Rational Antimicrobial Practices; Cradle to Crayons (growth and development); Survival of the Sickest (intensive care) and "Paren-teen-ing".

Other

Dr Jog is also a Sanskrit scholar and has used his knowledge of Sanskrit to study Ayurveda and Yoga. He used this knowledge to establish a centre for asthma research and pioneered an interdisciplinary approach to treat asthma in children.



JOSIP JURAS

Affiliation: Department of Obstetrics and Gynecology, School of Medicine, University of Zagreb and Department of Obstetrics and Gynecology, University Hospital Centre Zagreb, Croatia

Date and place of birth: March 27, 1984, Šibenik, Croatia

Titles: MD, PhD, Assistant Professor

Short CV (Education and training, work experience):

2008 MD Faculty of Medicine, University of Zagreb, Croatia

2010 Scientific Fellow Department of Obstetrics and Gynecology, University Hospital Centre Zagreb, Croatia

2015 PhD, Faculty of Medicine, University of Zagreb, Croatia

2017 Specialist in obstetrics and gynecology

2018 Specialist of obstetrics and gynecology, Unit of Pathology of Pregnancy Department of Obstetrics and Gynecology, University Hospital Centre Zagreb, Croatia

2019 Assistant Professor, Department of Obstetrics and Gynecology, University Hospital Centre Zagreb, Croatia

2019 Fetal Heart Sonography Training

His activities include many trainings, three scientific projects and especially important fetal heart sonography training with colleagues who will work in screening.

Of awards, there are few to mention, among which one stands out for young scientist, at the 17th World Congress of International Society of Gynecological Endocrinology with the presentation of scientific work.

Scientific International Society Memberships:

2019 Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

2012 till now Board Member and Treasurer of Croatian Society of Perinatal Medicine, Croatian Medical Association

Recognitions:

2016 Young Scientist Award, 17th World Congress of International Society of Gynecological Endocrinology

Publications and scientific activities:

Published more than 110 scientific and professional articles, chapters in the books and is one of editors of University Textbook of Gynecology (Manualia Universitatis Studiorum Zagrabienensis) and other publications. As invited speaker delivered more than 20 lectures at international medical congresses.

Executive Editor of Croatian Medical Journal.

2009 – 2019 Secretary of the journal Gynaecologia et Perinatologia.

Involved as researcher in three scientific research projects.

Other

Skilled in medical statistics.



GWANG JUN KIM

Affiliation: Department of Obstetrics and Gynecology Chung-Ang University Hospital, Seoul, Korea

Date and place of birth: 28 May of 1961, Incheon, Korea

Titles: MD, Professor, Director

Short CV (Education and training, work experience):

1987 MD College of Medicine at Chung-Ang University, Seoul, Korea.

1992-1996 specialty training in obstetrics and gynecology, Gachon Medical School, Incheon, Korea

1996 gynecologist at the Department of Obstetrics and Gynecology, Gachon Gil, Hospital, Incheon, Korea

1999 Assistant Professor at the Gachon Medical School, Incheon, Korea

2004 Chung-Ang University Hospital, Seoul, Korea

2004 director of Department of Obstetrics, Chung-Ang University Hospital, Seoul, Korea
 2015 head of Department of Obstetrics and Gynecology, Chung-Ang University Hospital, Seoul, Korea

Scientific International Society Memberships:

Associate fellow of International Academy of Perinatal Medicine

Scientific National Society Memberships:

2013 – 2015 Spokesman of Korean Society of Obstetrics and Gynecology
 2017 – 2019 Secretary General, Korean Society of Research in Maternal Fetal Medicine
 2020 Head of International Cooperation Committee of Korean Society of Obstetrics and Gynecology

Recognitions:

2019 Prime Minister Citation (for improving women's health), Korea

Publications and scientific activities:

2001 published the first ultrasound textbook in Korean
 2006 Textbook of Gynecologic Ultrasound
 2008 Textbook of Fetal Echocardiography
 2010 Textbook of Echocardiographic Anatomy
 2015 Textbook of Pelvic Ultrasound
 2020 Textbook of Fetal monitoring
 Participated as a co-author in many other textbooks.

Other

2013 He has a patent of Cervical consistometer.



ESIN KOÇ

Affiliation: Department of Pediatrics, Gazi University, Ankara, Turkey

Date and place of birth: January 9, 1962, Izmir, Turkey

Titles: MD, Professor, Director

Short CV (Education and training, work experience):

1986 MD Faculty of Medicine, Hacettepe University, Ankara, Turkey

1987-1991 Dr. Sami Ulus Children's Hospital, Ankara, Turkey

1991 Board certified in pediatrics in 1991

1994 Neonatology subspecialty training Faculty of Medicine Ankara University Ankara, Turkey

1994 Guest neonatologist University of Graz, Austria

1995 Guest neonatologist Johns Hopkins Hospital, Baltimore, USA

1997 Associate Professor Department of Pediatrics Faculty of Medicine Gazi University, Ankara, Turkey

2002 Professor of Pediatrics and Neonatology Department of Pediatrics Faculty of Medicine Gazi University, Ankara, Turkey

Currently Professor of Pediatrics and Neonatology, Director of the Division of Neonatology Gazi University, Ankara, Turkey

Scientific International Society Memberships:

2018 Executive Board member Union of European Neonatal and Perinatal Societies (UENPS)

2019 Board Member World Association of Perinatal Medicine (WAPM)

Effective member European Workshop of Neonatology

Scientific National Society Memberships:

President of Neonatology Education Board (TUKMOS)

2010 – 2015 General Secretary Turkish Neonatal Society

2015 till now President of Turkish Neonatal Society

Member-Health Policies- Scientific Advisory Board

Member-Neonatal and Pediatric Health Scientific Committee of Turkish Ministry of Health

Member- Cellular therapies Scientific Advisory Board of Turkish Ministry of Health

Publications and scientific activities:

Published 93 international publications; 820 citations, h-index 16.



LILJANA KORNHAUSER CERAR

Affiliation: Neonatal Services, Department of Perinatology, Maternity Hospital, Division for Gynecology, University Medical Center Ljubljana, Slovenia

Date and place of birth: June 1, 1958, Ljubljana, Slovenia

Titles: MD, PhD

Short CV (Education and training, work experience):

1984 MD, Faculty of Medicine, University of Ljubljana, Slovenia

1993 board certificate of pediatrics, University of Ljubljana, Slovenia

1994 postgraduate education on hospital hygiene, Faculty of Medicine, University of Ljubljana, Slovenia

2000 MSc Medical School, University of Zagreb, Croatia

2010 PhD Faculty of Medicine, University of Ljubljana, Slovenia

1996 – present assistant professor of pediatrics at University of Ljubljana, Slovenia

1985 – 1986 medical doctor at Health Center of Ljubljana, Slovenia

1987 – 1993 resident of pediatrics, University Medical Center Ljubljana, Slovenia

1993 – present neonatologist, Neonatal Intensive Care Unit, Maternity Hospital, University Medical Center Ljubljana, Slovenia

2001 - 2015 Head of NICU, Maternity Hospital, University Medical Center Ljubljana, Slovenia

2015 – present head of Neonatal services, Maternity Hospital, University Medical Center Ljubljana, Slovenia

Scientific International Society Memberships:

2012 – 2014 member of Scientific committee, European Association of Perinatal Medicine (EAPM)

2014 – 2016 member of Educational Committee EAPM

Scientific National Society Memberships:

2001 – present president Association for the Welfare of Preterm Born Children, Slovenia

2007 – present vice-president of Slovene Association for Perinatal Medicine

2006 – 2014 secretary of Slovene Neonatal Society

2019 – present vice-president of Slovene Neonatal Society

Recognitions:

2007 title »Slovenian of the Year« for philanthropic work

Publications and scientific activities:

Author or co-author of more than 100 publications, reviewer for national (Zdravniški vestnik, Zdravstveno varstvo, Medicinski razgledi) and international journals (Pediatrics, Acta Paediatrica, Cure and Care: Journal of Neonatal Intensive Care, Collegium Anthropologicum).

National coordinator for multicentric international trials (OPTIMIST-A, COSGOD).



LABARAN DAYYABU ALIYU

Affiliation: Bayero University Kano, Nigeria

Date and place of birth: July 1966, Kano City, Nigeria

Titles: MD, Fellow of the West African College of Surgeons (FWACS), Associate Professor

Short CV (Education and training, work experience):

1995 MD, Graduated from College of Medicine University of Jos, Nigeria

1998 Certificate in Obstetrics Fistula Repair Laure Fistula Center, Murtala Muhammad Specialist Hospital (MMSH) Kano, Nigeria

2008 Certificate on Neonatal resuscitation and Competency in Basic Neonatal Airway Management, Paediatrics Department, Ahamadu Bello University (ABU) Zaria in collaboration with Stockport NHS Foundation Trust, UK

2010 Graduated as Fellow of the West African College of Surgeons, Lagos, Nigeria

2011 – 2015 Head of Fetomaternal Medicine Unit Abubakar Tafawa Balewa University Teaching Hospital Bauchi (ATBUT), Nigeria

2014 – 2015 Visiting Consultant FMC Birnin Kudu, Nigeria

2015 Professional Master Degree in Obstetrics and Gynecology Ultrasound

2015 Acting Head of Department Abubakar Tafawa Balewa University Teaching Hospital, Nigeria

2015 – 2016 Visiting Consultant FMC Azare Nigeria

Member Clinical Protocol Committee Obstetrics and Gynecology Department ATBUTH Bauchi Coordinator Masters in Human Reproduction Obstetrics and Gynecology Department, College of Medicine Bayero University Kano, Nigeria

2016 – 2018 Head of Fetomaternal Medicine Unit Aminu Kano Teaching Hospital Kano Nigeria

Scientific International Society Memberships:

President African Perinatal Society (APS)

2017 – 2018 Deputy Secretary World Association of Perinatal Medicine (WAPM)

Board Member WAPM

Director Ian Donald School of Ultrasound in Obstetrics and Gynecology (IDS)

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Affiliate Member International Clearing House of Birth Defects Surveillance and Research (ICBDSR)

Member Nigerian Medical Association

Scientific National Society Memberships:

2012 – 2014 Secretary General Medical & Dental Consultant Association of Nigeria (MDCAN) ATBUTH Branch, Nigeria

Member Research Committee African Center of Excellence for Population Health and Policy (ACEPHAP), Bayero University Kano

Publications and scientific activities:

Authored 38 articles in national and international journals, wrote 3 books and 4 book chapters.

Reviewer for 3 Journals, one national and two international.

Invited speaker at 15 national and international congresses.

Editorial Board Member: Donald School Journal of Ultrasound in Obstetrics and Gynecology.

Other

Member Linkages & Collaboration Committee ACEPHAP Bayero University Kano Nigeria.



ALEKSANDAR LJUBIĆ

Affiliation: MediGroup Private Healthcare System, Belgrade, Serbia

Date and place of birth: December 2, 1958, Belgrade, Serbia

Titles: MD, PhD, Professor, Chief Medical Officer (CMO)

Short CV (Education and training, work experience):

1983 MD, Faculty of Medicine, University of Belgrade, Serbia

1984 Teaching at Medical High School, Belgrade, Serbia

Postgraduate education Human Reproduction

Specialization in obstetrics and gynecology

1994 PhD in the field of Human Reproduction, Faculty of Medicine, University of Belgrade, Serbia

1986 – 2012 worked as physician, deputy director and director Institute for Gynecology and Obstetrics, Clinical Centre of Serbia, Belgrade, Serbia

2013 – 2020 co-founder and Chief Medical Officer (CMO) of the first Serbian private health system Medigroup, Belgrade, Serbia

Scientific International Society Memberships:

Founder and Director of Serbian Ian Donald Interuniversity School of Ultrasound in Obstetrics and Gynecology

2015 Deputy Secretary-General World Association for Perinatal Medicine (WAPM)

2017 Associate Fellow International Academy of Perinatal Medicine (IAPM)

1993 Member World Association of Perinatal Medicine (WAPM)

1993 Member European Association of Perinatal Medicine (EAPM)

1997 Member Federation International of Obstetrics and Gynecology (FIGO)

1999 Member American Diabetes Association

2005 Member European Society of Human Reproduction and Embryology (ESHRE)

Scientific National Society Memberships:

1984 Member Serbian Medical Society

1986 Member Association of Perinatal Medicine in Yugoslavia

1993 Member Section for ultrasound Serbian Medical Society

1993 – 1995 Secretary Section of Ultrasound, Serbian Medical Society

1995 – 1999 Secretary Section of Perinatal Medicine, Serbian Medical Society

1995 Member Section for Perinatal Medicine Serbian Medical Society

1996 Member Section of Obstetrics and Gynecologist Serbian Medical Society

1993- – 2003 Interdepartmental board Serbian Academy of Sciences and Arts for Human Reproduction

1998 Member Society of Obstetrics and Gynecologist of Yugoslavia

2004 Founder and Director Thomas Jefferson Ultrasound Centre, Clinical Centre of Serbia, Belgrade, Serbia

2008 – 2011 President State Committee for in Vitro Fertilisation, Ministry of Health Serbia

Founder and President Serbian Society of Ultrasound in Obstetrics and Gynecology

Recognitions:

1992 First Investigator Award 13th Trophoblast Conference, Rochester, USA

1993 The Belgrade Science Award

2017 Sir William Liley Award (WAPM)

2020 – Order of the Knights of the Private Health Sector Association of Private Healthcare Institutions and Private Practice of Serbia

Publications and scientific activities:

Leading investigator of 12 scientific projects, published more than 500 publications of which in peer-reviewed journals 71 with Citation index 507, H index 10.



ALEXANDER DAVIDOVICH MAKATSARIYA

Affiliation: Department of Obstetrics and Gynecology of the Institute of Children's Health of I.M. Sechenov First Moscow State Medical University of the Ministry of Health of the Russian Federation (Sechenov University); Russian Academy of Sciences

Titles: MD, PhD, DSci, Professor, Academician of Russian Academy of Sciences

Short CV (Education and training, work experience):

1971 – 1980 Associate Professor, Department of Obstetrics and Gynecology of I.M. Sechenov Moscow Medical Academy, Russia

1980 – 1987 Head of the Laboratory of Pathology of Hemostasis, Federal State Institution Research Center for Obstetrics, Gynecology and Perinatology, Moscow, Russia

1987 – present Professor and Chairman of Obstetrics and Gynecology Department of I.M. Sechenov First Moscow State Medical University, Moscow, Russia

2018 – present Coordinator of international collaboration with University of Vienna (Austria), University of Montpellier (France), Università degli Studi di Roma Tor Vergata (Italy), Tel-Aviv University, Israel, Sheba Medical Center (Israel)

Scientific International Society Memberships:

Full member International Academy of Clinical and Applied Thrombosis/Hemostasis

Academician International Higher Education Academy of Sciences

Member of International Academy of Perinatal Medicine

2005 – 2011 European Commission of Thrombosis and Hemostasis Problems, European Parliament

Member International Federation of Gynecology and Obstetrics (FIGO)

Member International Society of Perinatal Medicine

Member International Society Fetus as a Patient

Member International Society of Thrombosis and Haemostasis (ISTH)

Member International Society of Hypertension in Pregnancy (ISHP)

Scientific National Society Memberships:

Academician of the Russian Academy of Sciences

Academician of Russian Academy of Medical and Technical Sciences

Vice-President of Russian Association of Obstetricians and Gynaecologists

2001 – President of Russian Association of Study of Thrombosis and Hemostasis

Recognitions:

1988 V.F. Snegirev Prize for the monograph Thrombotic and Hemorrhagic Complications in Obstetrics, Russian Academy of Medical Sciences

2007 I.M. Sechenov Anniversary Medal of Honor, 250th Anniversary of Moscow Medical Academy

2008 L.S. Persianinov prize for the monograph Antiphospholipid Syndrome – an Immune Form of Thrombophilia in Obstetrics and Gynecology Russian Academy of Medical Sciences

2012 Laureate of State Prize of the Russian Federation.

2017 Winner at World Academic Championship in Gynecology for research paper Case of Thrombosis of Rare Localisation in a Cancer Patient with Combined Thrombophilia, International Agency for Standarts and Ratings

Honored Professor of FSBSI “The Research Institute of Obstetrics, Gynecology and Reproductology named after D.O.Ott” of the Ministry of Healthcare of the Russian Federation, Saint Petersburg, Russia

Honorary Professor Siberian Medical University, Tomsk, Russia

Honorary Professor Kuban State Medical University, Krasnodar, Russia

Honorary Professor Dubrovnik International University, Dubrovnik, Croatia

Honorary Professor Yerevan State Medical University, Erevan, Armenia

Honorary Professor State University of Medicine and Pharmacy of Moldova

2012 visiting professor at University of Vienna, Austria

2013 visiting professor at Weill Medical College, Cornell University, New York, USA

Publications and scientific activities:

Published 1300 papers and 45 books (among them 31 monographs)

Editor in Chief Obstetrics, Gynecology and Reproduction (Russia)

Member of the editorial Board of Annals of the Russian academy of medical sciences

Co-editor The Problems of Obstetrics, Gynecology and Perinatology (Russia)

Co-editor Obstetrics and Gynecology, Russia

Co-editor The problems of Reproduction, Russia

Supervised 25 professors and 165 candidates of medical science, many of them head of university departments in Russia, Ukraine, Belarus, Georgia, Armenia, Azerbaijan, Uzbekistan, Kazakhstan

Research grants:

2018 – 2019 Maternal and fetal thrombophilia in the development of fetal growth restriction syndrome and antenatal fetal death (Sechenov University)

2019 – 2021 Improving drug prevention of recurrent placenta-mediated pregnancy complications in women with refractory antiphospholipid syndrome (Sechenov University)

2020 – 2022 COVID-19, thromboinflammation and thromboembolism (Russian Academy of Sciences)

2013 Coordinator of scientific programme of World Congress of Perinatal Medicine.



NARENDRA MALHOTRA

Affiliation: Managing Director at Global Rainbow Healthcare & ART Rainbow IVF, Agra, India

Date and place of birth: June 10, 1957, Mumbai, India

Titles: MD, FRCOG, FISAR, FICMU Professor, Director

Short CV (Education and training, work experience):

He graduated (MBBS) in 1982 at Aligarh Muslim University (AMU) Aligarh, India

1986 Post graduated in obstetrics and gynecology at AMU, Aligarh, India

Scientific International Society Memberships:

Fellow Royal Society of Health (RSH) London, UK

Member International Society of Ultrasound in Obstetrics and Gynecology (ISUOG)

Member American Institute of Ultrasound in Medicine (AIUM)

Fellow International College of Surgeons (ICS)

Fellow ad eundem of the Royal College of Obstetrics and Gynaecology (RCOG)

Fellow Minimal Access Surgery (MAS)

Associate Fellow International Academy of Perinatal Medicine (IAPM)

2016 Vice-President World Association of Perinatal Medicine (WAPM)

Director of Ian Donald School of Ultrasound (India)

Member Guidelines Committee Federation International of Obstetrics and Gynecology (FIGO)

Scientific National Society Memberships:

Current President Indian Society of Aesthetic & Regenerative Gynaecology (InSarg)

2008 – 2009 President Federation Obstetrics and Gynaecological Societies India (FOGSI)

2017 – 2019 President Indian Society for Prenatal Diagnosis and Therapy (ISPAT)

2016 – 17 President of Indian Society For Assisted Reproduction (ISAR)

2008 Dean Indian College of Medical Ultrasound (ICMU)

2006 President Indian Federation of Ultrasound in Medicine and Biology (IFUMB)

Vice-President South Asian Federation of ObsGyn (SAFOG)

Fellow Indian Academy of Juvenile & Adolescent Gynaecology and Obstetrics (IAJAGO), Bombay

Fellow Indian College of Maternal & Child Health & NARCHI (ICMCH), Calcutta

Fellow Indian College of Medical Ultrasound (ICMU) & Member IFUMB

Fellow Indian College of Obstetrics & Gynaecology (ICOG)

Recognitions:

1986 F.O.G.S.I. Ethicon travelling research fellowship award

1987 Indumati Jhaveri Prize

1993 Asia Oceania Young Gynaecologist Award, Manila Phillipines

1999 Man of the Year Award

1999 Best Citizens of India Award

2010 Achievers of India award

Recipient of Honorary membership FRCOG

2019 recipient of Nepal Samman & Lifetime Achievement Award

Corion Award

Jagdishwari Mishra Award (5 times)

Corona Warrior Awards (5 times)

Agra Prahri Samman (Leaders Agra)

Publications and scientific activities:

Published more than 125 papers, presented 500 papers, over 1000 guest lectures given in India and abroad, more than 35 orations given.

He is Editor of more than 35 books, many chapters, on editorial board of many journals, Editor of series of STEP by STEP books, Revising Editor of Jeffcoatte, Revising Editor of Donald Obstetric Manual, Revising Editor of Ultrasound in Obstetrics and Gynecology.

Founder Editor South Asia Federation of Obstetrics and Gynaecology Journal

Visiting Professor at Sarajevo School of Science and Technology, Bosnia and Herzegovina.

**JAVIER MANCILLA-RAMÍREZ**

Affiliation: Director General of Health Quality and Education, Secretary of Health, Mexico

National Researcher SNI-2, National System of Researchers, Mexico

Associate Physician, Neonatology Division, Women's Hospital, Mexico City

Senior Researcher and Coordinator of Medical Specialties, High School of Medicine, National Polytechnic Institute, Mexico

Date and place of birth: June 20, 1956, Guaymas, Sonora, Mexico

Titles: MD, PhD

Short CV (Education and training, work experience):

MD Surgery and Obstetrics, University of Guadalajara, Mexico

Medical Pediatrics, Neonatology, Immunology and Infectious Diseases, Autonomous National University of Mexico (UNAM)

MSc (with honors) UNAM

PhD (with honors) UNAM

Post-doctoral Fellowship in Geographic Medicine and Infectious Diseases, Tufts University School of Medicine, Boston, Massachusetts, USA

2009 – 2014 General Director, National Institute of Perinatology, Mexico

2000 Founder Chairman Master of Sciences in Clinical Research Program, High School of Medicine, National Polytechnic Institute, Mexico

1995 – 1997 Director, Research and Education, Secretary of Health, Tabasco, Mexico

1998 – 1999 Director, Regional Laboratory of Public Health, Tabasco, Mexico

1992 – 1994 General Coordinator of Research and Postgraduate Education, University of Guadalajara, Mexico

Scientific International Society Memberships:

2013 – 2015 Deputy Secretary General, World Association of Perinatal Medicine (WAPM)

2015 – 2017 Member of the Education Committee, WAPM

2005 Corresponding Member Royal Academy of Doctors of Spain

2007 Corresponding Member Royal Academy of Medicine of Salamanca, Spain
 2013 Corresponding Member Royal Academy of Pharmacy of Castilla y León, Spain
 2014 Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

1993 till now Regular Member National Academy of Medicine, Mexico
 1997 till now Regular Member Mexican Academy of Pediatrics
 2007 – 2009 President, Mexican Council of Certification in Pediatrics, Neonatology Section
 2011 – 2013 President, National Federation of Neonatology of Mexico
 2017 – 2019 President, Mexican Academy of Pediatrics

Recognitions:

2013 National Prize Miguel Otero Arce in Biomedical Research, General Council of Health, awarded by the President of Mexico
 2012 Honorary Member Academia Mexiquense de Medicina

Publications and scientific activities:

Author of more than 80 scientific papers, 47 medical books and 59 chapters in medical books.

Scopus 56757135900, h-index 13, 1,655 citations, Orcid 0000-0002-9236-8149.



ALEXANDRA MATIAS

Affiliation: Faculty of Medicine, Porto University Centro Hospitalar Universitário S. João, Porto, Portugal

Date and place of birth: June 19, 1964, Porto, Portugal

Titles: MD, PhD, Associate Professor

Short CV (Education and training, work experience):

1988 graduated Medical Faculty of Porto, Portugal

1990 – 1998 fellowship in Obstetrics and Gynecology in Porto

1990 fellowship from the Alexander von Humboldt Stiftung for the research in the Pharmakologisches Institut in Heidelberg, Germany

2000 PhD “Venous return in the evaluation of fetal heart function”

2002 coordinator of the Prenatal Diagnostic Unit of Hospital de S. João in Porto, Portugal

2003 “Fetal Medicine” Diploma by the “Executive Board of the International Educational Committee in Fetal Medicine”

2007 assistant professor Faculty of Medicine, Porto, Portugal

Scientific International Society Memberships:

2004 vice-President for Europe of the Sociedad Iberoamericana de Diagnóstico y Tratamiento Prenatal and member of the Educational Committee of the European Society of Perinatal Medicine

2008 member of the Board of The Fetus as a Patient Society

2014 Ian Donald School Director of the Portuguese branch

2016 Member of the Advisory Board of Mediterranean Association of Ultrasound in Obstetrics and Gynecology (MEDUOG)

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

2010 A President of the Portuguese Association of Prenatal Diagnosis

Recognitions:

Won 12 international prizes

Publications and scientific activities:

Published 125 original articles in indexed journals (2678 citations), gave 250 oral communications, invited 200 times as the speaker at international conferences, wrote 36 chapters in the books, and edited two books.

2015 she is Group leader of the research group in Reproductive Genetics and Embryo-Fetal Development” from the Instituto de Investigação e Inovação em Saúde, i3S, Universidade do Porto.



RATKO MATIJEVIĆ

Affiliation: Department of Obstetrics and Gynecology Merkur University Hospital, School of Medicine, University of Zagreb, Croatia

Date and place of birth: June 8, 1964, Zagreb, Croatia

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

1989 MD School of Medicine University of Zagreb, Croatia

1989 first experience Department of Obstetrics and Gynecology Sveti Duh University Hospital, Zagreb, Croatia

1993 trainee in obstetrics and gynaecology UK

1996 passed MRCOG exam and become a Member of the Royal College of Obstetrics and Gynaecology (MRCOG), UK

1997 granted status of specialist in obstetrics and gynaecology Croatia

2013 Fellow of RCOG (FRCOG)

1996 working in St Marys Hospital in Manchester, UK

1998 Department of Obstetrics and Gynaecology Sveti Duh and Merkur University Hospitals, School of Medicine Zagreb University, Croatia

2014 – 2018 Head of University Department of Obstetrics and Gynaecology, Merkur Hospital, School of Medicine Zagreb University, Croatia

Scientific International Society Memberships:

2005 President of the International Society for Pathophysiology of Pregnancy

2015 – 2019 President of Southeast European Society of Perinatal Medicine

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

Board Member Croatian Perinatal Society Croatian Medical Association

Publications and scientific activities:

Published more than 100 publications and book chapters as well as the book Pregnancy Guide.

He is involved in clinical work and teaching as well as management of health systems and evidence-based medicine.



ANTON MIKHAILOV

Affiliation: St. Petersburg Maternity Clinic #17 St. Petersburg, Russia
Chief Scientist of Ott Institute of Obstetrics, Gynecology and Reproduction of Russian Academy of Science

Chief Obstetrician Gynecologist of North-West Region of Russian Federation

Mechnikov North-West State Medical University, St. Petersburg, Russia

Pavlov First St. Petersburg State Medical University, St. Petersburg, Russia

Date and place of birth: 1960, Leningrad, USSR

Titles: MD, PhD, DSci, Professor

Short CV (Education and training, work experience):

MD Graduated from 1st Leningrad Medical Institute, Russia

1990 PhD Ott Research Institute of Obstetrics and Gynecology, Russian Academy of Medical Sciences, St. Petersburg, Russia

1999 DSci in Ott Research Institute of Obstetrics and Gynecology

1983 – 2002 Ott Research Institute of Obstetrics and Gynecology, Russian Academy of Medical Sciences, St. Petersburg, Russia

2003 till present Director and Chief Doctor of St. Petersburg Maternity Hospital # 17

Scientific International Society Memberships:

Board Member of European Association of Perinatal Medicine

Board Member of International Society Fetus as a patient

Associate Fellow of International Academy of Perinatal Medicine

Director of the St.-Petersburg Branch of Ian Donald Inter-University School of Medical Ultrasound

Scientific National Society Memberships:

Executive Board Member of Russian Society of Obstetrician and Gynecologists

Chair of Executive Board of St. Petersburg Association of Ultrasound Diagnostics in Obstetrics and Gynecology

Chair St. Petersburg International School of Perinatal Medicine and Reproductive Health

Recognitions:

Honorary doctor of the Russian Federation
 Honorary Blood Donor of the Russian Federation

Publications and scientific activities:

Author of more than 300 scientific papers, 3 monographs, editor of 5 international medical books translated to Russian.
 Invited speaker at more than 200 Russian and international congresses and conferences.

Other

Married, three daughters and three granddaughters.

**SONAL PANCHAL**

Affiliation: Dr. Nagori's Institute for Infertility and IVF, Ahmedabad, India

Date and place of birth: 16th October 1961, Ahmedabad, India

Titles: MD

Short CV (Education and training, work experience):

MD Radiodiagnosis, Gujarat University, Ahmedabad, India

2015 Master of Ultrasound in Obstetrics and Gynecology, Ian Donald Inter-university School of Medical Ultrasound

Specialized training in 3D/4D ultrasound, fetal echocardiography, breast imaging and ultrasound in urogynecology from world renowned authorities

Consultant sonography specialist at Dr. Nagori's Institute for Infertility and IVF, Ahmedabad
 Pursuing PhD, Sarajevo School of Science and Technology (SSST), Sarajevo, Bosnia and Herzegovina

Faculty Ian Donald master's courses in ultrasound in obstetrics and gynecology and human reproduction

Conducts fellowship programs in ultrasound and infertility recognized by the state Gujarat University, Ahmedabad, India

Professor Dubrovnik International University, Croatia

Scientific International Society Memberships:

National Academic Director, Ian Donald School, India

Scientific National Society Memberships:

Director of Centre of Excellence for Ian Donald School inter-university of medical ultrasound, Ahmedabad, India

Life member of Indian Society of Assisted reproduction

Life member of Indian Fertility Society

Life member of Indian Radiology and Imaging association

Recognitions:

2008 Congress of International Society of Ultrasound in Obstetrics and Gynecology best paper award for Assessing correlation between ovarian and stromal volumes and fasting and postprandial insulin levels in PCOS patients co-authored with Dr. C.B. Nagori

2015 Diploma of Appreciation from Ian Donald Inter-University School of Medical Ultrasound, for training maximum number of fellowship students

Publications and scientific activities:

Published 29 papers in the national and international journal, 70 chapters in the books, edited and authored more than 10 books, more than 800 guest lectures at several state, national and international conferences.

National advisory board member for International Journal of infertility and Fetal Medicine, Jaypee publication and reviewer for Journal of Human Reproductive Sciences.

Deeply interested in training gynecologists and radiologists for ultrasound in Gynecology and Infertility.

Other

Keen interest in drawing and painting and has won several international painting competitions as a child.

Doing oil paintings, water colour painting, Mehendi, fabric painting, etc.

Has participated in Garba (Gujarati folk dance) competitions and has performed several stage shows of Garba.

Has performed in several television dramas.

**NIKOLAOS PAPANTONIOU**

Affiliation: National and Kapodistrian University of Athens, Greece

Date and place of birth: June 5, 1951, Athens Greece

Titles: MD, PhD, Professor Emeritus of Obstetrics – Gynecology and Perinatal Medicine

Short CV (Education and training, work experience):

Professor Emeritus of Obstetrics and Gynecology, of the National and Kapodistrian University of Athens, Greece

Former Chair of the 3rd Department of Obstetrics and Gynecology, National and Kapodistrian University of Athens, Greece

Director of Post Graduate MSc course High Risk Pregnancy

1970 MD graduated from Athens College

1976 MD Medical School of the National and Kapodistrian University of Athens, Greece

1985 specialist in Obstetrics and Gynecology, Alexandra State and University Maternity Hospital, Greece

1986 PhD Athens University, Greece

1985-1986 sub-specialization in Maternal-Fetal Medicine and Clinical Assistant, Hammersmith Hospital, UK

1986 Honorary Lecturer of the University of London, UK

1987 – 2013 specialist, Senior Registrar, Assistant Professor, Associate Professor 1st Department of Obstetrics and Gynecology, “Alexandra” State and University Maternity Hospital, University of Athens, Greece

2013 Full Professor of Obstetrics, Gynecology, Maternal Fetal Medicine, Athens University School of Medicine, Greece

2014 – 2018 Chairman of the 3rd Department of Obstetrics and Gynecology

2014 – 2018 Director of post graduate MSc course High Risk Pregnancy

2016 – 2017 he was elected Director of Domain for Health of Mother and Child, administrative coordinator of 8 university clinics

Scientific International Society Memberships:

Associate Felloow International Academy of Perinatal Medicine

President South-East European Society of Perinatal Medicine (SEESPM)

Member International Fetoscopy Working Group

Member Fetus as Patient Society

Member International Society of Ultrasound in Obstetrics and Gynecology (ISUOG)

Member Mediterranean Association for Ultrasound in Obstetrics and Gynecology (MEDUOG)

Scientific National Society Memberships:

p. President Hellenic Society of Perinatal Medicine

President Hellenic Societies of Ultrasound in Obstetrics and Gynecology

p. President Hellenic Society of Ultrasound in Medicine and Biology

General Secretary of the International Hippocratic Foundation (www.internationalhippocraticfoundation.org)

Member Hellenic Society of Obstetrics and Gynecology

Member Hellenic Society of Prenatal Diagnosis and Fetal Therapy

Member Hellenic Society of Gynecological Endocrinology

Recognitions:

2017 Papanikolaou Award Cornell University New York, USA

2020 Soranos Award Southeast European Society of Perinatal Medicine

Publications and scientific activities:

Published 166 publications in international and of 62 in Hellenic peer reviewed journals (2590 citations, h-index: 27).

Author or co-author of 11 chapters in International and 18 chapters in Greek medical textbooks.

2016 co-Editor official textbook of the Athens Medical School Obstetrics and Gynecology He is the 2016 Editor of the translation to Greek of the book Gynecologic and Obstetric Surgery: Challenges and Management Options.

Supervised 58 PhD theses.

Invited speaker at more than 200 conferences in Greece and abroad and participated with more than 700 papers.

Main topics in the clinical practice in the field of maternal fetal medicine: the organization and quality of perinatal care, the application of ultrasound in obstetrics and gynecology, invasive prenatal diagnostic and therapeutic procedures and screening tests for prenatal diagnosis of congenital malformations and pregnancy related complications.

Scientific activities: investigation of fetal physiology, investigation of the embryonic hormonal profile, ultrasonographic investigation of fetal anomalies, implementation and enhancement of antenatal fetal testing, improvement of fetal operations including umbilical cord transfusion, fetal death induction in multiple gestations, fetal therapy, investigation of antenatal testing parameters in high risk pregnancies, non-invasive antenatal testing and the investigation of the role of microRNAs in preeclampsia and gestational diabetes.

He introduced laser therapy in Twin to Twin Transfusion Syndrome in Greece.

His research work was funded by European Union (EU), the Greek state and Athens University.

He was responsible for the EU funded research program ARISTEIA (excellence).

Other

He is the co-founder of one Greek and one European patent.



SONILA PASHAJ

Affiliation: Centre for Ultrasound and Prenatal Medicine, Frankfurt am Main, Germany

Place of birth: Shkoder, Albania

Titles: MD, PhD

Short CV (Education and training, work experience):

2002 MD Faculty of Medicine University of Tirana, Tirana, Albania

2007 degree in obstetrics and gynecology, Faculty of Medicine,

University of Tirana, Tirana, Albania.

2012 PhD University Johannes Gutenberg, Mainz, Germany

2001 – 2002 general practitioner Hospital of Tirana “Mother Tereza”, Tirana, Albania

2003 – 2007 Residency in obstetrics and gynecology, Hospital of Tirana “Mother Tereza”, Tirana, Albania

2005 Fellowship (4 months) University of Rome “Tor Vergata”, Department of Obstetrics and Gynecology, Rome, Italy

2006 Fellowship (6 months) University of Rome “La Sapienza”, Department of Obstetrics and Gynecology, Rome, Italy

2007 – 2010 Assistant Professor University for Nurses, Tirana, Albania

2010 – 2012 Department of Obstetrics and Gynecology, Hospital Northwest, Frankfurt/Main, Germany

2011 Qualified Specialist Fetal Medicine Foundation Germany

2012 – 2017 obstetrician and gynaecologist Department of Obstetrics and Gynecology Maternity Hospital of Tirana, Albania

2012 Level II in ultrasound German Society for Ultrasound in Medicine (DEGUM)
 2014 – 2017 Assistant Professor Albanian University of Tirana, Tirana, Albania
 2017 until now Center for Ultrasound and Prenatal Medicine, Frankfurt am Main, Germany

Scientific International Society Memberships:

Member World Association of Perinatal Medicine (WAPM)
 Associate Fellow International Academy of Perinatal Medicine
 Member International Society the Fetus as a Patient
 Member International Society of Ultrasound in Obstetrics and Gynecology (ISUOG)

Scientific National Society Memberships:

Member German Society of Obstetrics and Gynecology
 Member German Society for Ultrasound in Medicine
 Member Fetal Medicine Foundation Germany

Recognitions:

2012 First Scientific Prize German Society of Ultrasound in Medicine (DEGUM), Davos, Switzerland
 2013 Young Investigator Award in Perinatal Medicine, Euroson, Stuttgart, Germany
 2017 Young Scientist Award in Perinatal Medicine, Belgrade, Serbia

Publications and scientific activities:

More than 40 peer reviewed papers, 8 book chapters in obstetrics and gynecology, and in ultrasound. More than 50 invited lectures at national and international meetings.
 2014 Editor Ultrasound International Open (UIO), Thieme, Stuttgart – New York.

Other

Organizer of `First trimester screening courses of Fetal Medicine Foundation Germany in Albania and Kosovo.



SELMA POROVIĆ

Affiliation: Private dental practice «Academic Dental Clinic» Sarajevo, Bosnia and Herzegovina

Date and place of birth: 1983, Tuzla, Bosnia and Herzegovina

Titles: PhD

Short CV (Education and training, work experience):

2007 graduated at Faculty of Dental Medicine at the University of Sarajevo, Bosnia and Herzegovina

2009 dental practitioner at the Public Institution “Sarajevo Canton Health Center”, Bosnia and Herzegovina

2014 MSc Faculty of Dentistry University of Sarajevo, Bosnia and Herzegovina

2015 specialist in preventative and pediatric dentistry “Sarajevo Canton Health Center”, Bosnia and Herzegovina

2017 PhD Faculty of Dentistry University of Zagreb, Croatia

Scientific International Society Memberships:

2015 – 2018 Co-Director of Ian Donald Inter-University School of Medical Ultrasound Branch for Bosnia and Herzegovina

2018 section of young scientist at the International Academy of Perinatal Medicine

Scientific National Society Memberships:

2019 section of young scientists of the Bosnian Academy of Science and Art

Recognitions:

2014 “Children’s and Preventive Dental Days” winner of the best Writing and Presentation Award, Zagreb, Croatia

Publications and scientific activities:

Published over thirty scientific and professional publications in national and international journals and three chapters in the books.

Active participant and invited lecturer at forty scientific and professional conferences, schools and seminars in the country and abroad, as well as a member of scientific and organizational committees at national and international conferences.

Member of the editorial board of the magazine Donald School Journal of Ultrasound in Obstetrics and Gynecology.

Member of the Editorial Board for Continuing Medical Education CME.ba.

Other:

She speaks fluently English and Czech and passive German. Mother of two children.



TANJA PREMURU-SRŠEN

Affiliation: Department of Perinatology, Division of Obstetrics and Gynecology, University Medical Centre Ljubljana, Faculty of Medicine University of Ljubljana, Slovenia

Titles: MD, PhD, Associate Professor

Short CV (Education and training, work experience):

1986 MD Faculty of Medicine, University of Ljubljana, Slovenia

1987 physician Division of Obstetrics and Gynecology, University

Medical Centre (UMC) Ljubljana, Slovenia

1992 residency in obstetrics and gynecology

1992 MSc in perinatology Faculty of Medicine, University of Ljubljana, Slovenia

1996 board certified specialist in obstetrics and gynecology

1998 PhD Faculty of Medicine, University of Ljubljana, Slovenia

2014 associate professor Faculty of Medicine, University of Ljubljana, Slovenia

1996 Department of Perinatology, Division of obstetrics and gynecology, UMC Ljubljana, Slovenia

2003 – 2004, Head of the Unit for Outpatient Clinic and Polyclinic Services at the Department of Perinatology, Division of Obstetrics and Gynecology, UMC, Ljubljana, Slovenia

2004 – 2014, Head of the Department of Perinatology, UMC Ljubljana, Slovenia

Scientific International Society Memberships:

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific Committee Alpe Adria Congresses of Perinatal Medicine

Advisory Board of Mediterranean Association of Ultrasound in Obstetrics and Gynecology (MEDUOG)

Executive Board of South-East European Society of Perinatal Medicine (SEESPM)

Board of International Society of The Fetus as a Patient

Scientific National Society Memberships:

1995, she has been affiliated with the Chair of Obstetrics and Gynecology, Faculty of Medicine, University of Ljubljana

2007 – 2015 President of the Slovenian Association of Perinatal Medicine (SAPM)

2013 – 2018 Member of the Council of Experts Slovenian Medical Society of Gynecology and Obstetrics

2015 till now President Educational Committee of SAPM

2015 – 2018 Member Expert Committee for Gynecology and Obstetrics Ministry of Health, Republic of Slovenia

2018 till now President of the Expert Committee for Gynecology and Obstetrics Ministry of Health, Republic of Slovenia

Publications and scientific activities:

Field of expertise is maternal-fetal medicine and ultrasound diagnostics in pregnancy.

Author or co-author of 27 articles published in SCI journals and several chapters in domestic and international books.



MIGUEL ANTONIO RUOTI COSP

Affiliation: Department of Gynecology and Obstetrics, Faculty of Medical Sciences - FCM, National University of Asuncion – UNA, Paraguay

Date and place of birth: December 7, 1967, Asunción, Paraguay

Titles: MD, Associate Professor

Short CV (Education and training, work experience):

1994 graduated at FCM - UNA

2000 Specialist in Gynecology and Obstetrics, FCM - UNA

2003 Diploma Advanced Studies – Master (area of knowledge Obstetrics and Gynecology) University of Zaragoza, Spain

2007 Specialist Perinatal Medicine, FCM - UNA

2012 Master Perinatal Medicine, FCM - UNA

2013 Specialist General Ultrasonography and Gynecology and Obstetrics,
Faculty of Health Sciences - FACISA, East National University - UNE, Paraguay

2007 – 2013 Coordinator Department of Perinatal Medicine of the FCM-UNA

2013 till now Head Medical Department of the Chair of Gynecology and Obstetrics,
FCM-UNA

Director, Specialization Courses in Ultrasonography in Internal Medicine, Gynecology
and Obstetrics (5 courses) FACISA - UNE

Master Courses Ultrasonography in Gynecology and Obstetrics (1 courses FCM -
UNA and 1 course FACISA - UNE)

Scientific International Society Memberships:

1999 Vice President of the Latin American Federation of Residences in Gynecology
and Obstetrics - FLAREGO

2017 President of the Ibero-American Society for Prenatal Diagnosis and
Treatment SIADTP

2019 Secretary General of the Latin American Academy of Ultrasonography – ALAUS
Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

1998 Past President Paraguayan Association of Residents of Gynecology and Obstetrics
APAREGO

2008-2011 President of the Paraguayan Society for Prenatal Diagnosis and Treatment
- SODIAPP

2012 National Corresponding Member Academy of Medicine of Paraguay (AMP)

2018 Associated Member Academy of Medicine of Paraguay

2017 till now President Paraguayan Society of Gynecology and Obstetrics - SPGO

Recognitions:

1999 Distinctions for scientific work Association of Residents of Gynecology and Obs-
tetrics of Northeast Argentina - AREGONEA

2003 Honorable Mention Latin American Association of Gynecology of Adolescence
and Childhood - ALOGIA

2004 National Science Award Chamber of Senators of the Republic of Paraguay

2004 Science Award Association of Gynecology and Obstetrics of Aragon - AGOA

2004 Science Award Ibero-American Society for Prenatal Diagnosis and Treatment -
SIADTP

2005 Science Award Paraguayan Society of Perinatology - SOPAPER

2010 Science Award Society for Prenatal Diagnosis and Treatment of Paraguay

2010 Science Award Paraguayan Society of Ultrasound

2016 nominated as a Latin American Distinguished Professor by the Latin American
Federation of Perinatal Medicine

2018 Distinguished Latin American Expert in Prenatal Diagnosis and Treatment by the
SIADTP

Publications and scientific activities:

Published more than 100 papers and book chapters as well as the book Pregnancy Guide
Author of 25 publications in indexed journals.

2000 Author and Editor of national books Obstetrics and Perinatology, Publisher EFA-CIM, Paraguay.

2008 Author and Editor Use of drugs in pregnancy, Publisher EFACIM.

Author and Editor of 15 international books.

**RENATO AUGUSTO MOREIRA DE SÁ**

Affiliation: Federal Fluminense University and Fernandes Figueira Institute (FIOCRUZ), Rio de Janeiro, Brazil

Date and place of birth: October 15, 1966, Campos dos Goytacazes, RJ, Brazil

Titles: MD, MSc, PhD, Professor

Short CV (Education and training, work experience):

1989 MD Fluminense Federal University, Niteroi, Brazil

1989 Internship in obstetrics and gynecology Fluminense Federal University, Niteroi, Brazil

1997 Master in Clinical Obstetrics at Rio de Janeiro Federal University Brazil

2001 PhD Obstetrics and Gynecology Minas Gerais Federal University, Belo Horizonte, Brazil

2004 Post- Doctoral study in Fetal Medicine Poissy Hospital - University Rene Descartes, Paris, France

2004 Associated Professor of Obstetrics - School of Medicine - Federal Fluminense University Rio de Janeiro, Brazil

2004 Head of Obstetrics, Perinatal Group – Rede D’or São Luiz

2015 Researcher in Fetal Medicine Fernandes Figueira Institute/FIOCRUZ

Scientific International Society Memberships:

Board Member World Association of Perinatal Medicine (WAPM)

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Director of Ian Donald Interuniversity School of Ultrasound, Brazilian Branch

Member of Latin American Academy of Ultrasound (AL AUS)

Scientific National Society Memberships:

2012 – 2019 President of the National Commission in Fetal Medicine Brazilian Federation of Gynecology and Obstetrics (FEBRASGO)

2019 – President of the Rio de Janeiro Society of Obstetrics and Gynecology

2019 – President of International Relations Consultancy Committee - Brazilian Society of Fetal Medicine (SOBRAMEF)

Publications and scientific activities:

Published 126 relevant papers in international and national journals, published around 100 chapters in medicine books.

Leader of the scientific projects and grants.

Participated as the invited speaker at many national and international meetings.

**AIDA SALIHAGIĆ KADIĆ**

Affiliation: University of Zagreb Medical School, Department of Physiology, Zagreb, Croatia

Date and place of birth: May 6, 1959, Belgrade, Serbia

Titles: MD, PhD, Full Professor (permanent position) of Physiology and Neuroscience

Short CV (Education and training, work experience):

1984 graduated from the Medical School University of Zagreb

1986 employed at the Department of Physiology Medical School University of Zagreb

1988 MSc thesis Medical School University of Zagreb

1989 PhD thesis Medical School University of Zagreb

1993 postgraduate study "Ultrasound in Clinical Medicine"

1995 – 1996 postdoctoral fellow at INSERM, Tours, France

1992 Assistant Professor Medical School University of Zagreb

1997 Associate Professor of Physiology, Immunology and Fundamental Neuroscience Medical School University of Zagreb

2000 – 2004 Head of the Department of Physiology, Medical School University of Zagreb

2008 Full Professor (field Basic Medical Sciences, branches Physiology and Neuroscience) Medical School University of Zagreb

2013 permanent position of Full Professor Medical School University of Zagreb

Scientific International Society Memberships:

A member of the World Association of Perinatal Medicine

Associate member of the International Academy of Perinatal Medicine (IAPM).

2020 was nominated for regular membership of the IAPM and the European Academy of Sciences and Arts

Scientific National Society Memberships:

1999 – today Vice-President of the Croatian Society of Physiologists

A member of the Croatian Society for Neuroscience

Recognitions:

French Ministry of Science Fellowship Award

State Annual Award for the Promotion of Children's Rights in Croatia

Publications and scientific activities:

The author/co-author of 7 handbooks (3 university), 3 university textbooks, and 1 scientific book. She has more than 170 international and national publications; 64 papers indexed in CC, SCI and in other international index publications (IM, Excerpta Med, etc.). Total citations (Scopus): > 1400, h-index: 22. She had more than 50 invited lectures at renown international and national meetings. She is a reviewer of many prestigious scientific journals.

Research area: perinatal physiology, neurophysiology of the fetus and fetal behavior, intrauterine growth restriction and fetal hypoxia, perinatal brain damage.

She was leader of 4 scientific projects, financed by the Ministry of Science and Education of the Republic of Croatia and 1 project financed by the University of Zagreb. Collaborator on the scientific projects “Hypoxia in utero, brain lesions, postnatal behavior” and “Development of the fetal brain and cocaine intoxication”.

Other:

President of the Union of Societies “Our Children” Croatia (non-governmental and non-profitable organization with about 4000 active members).

President of the Central Coordinative Committees of national actions “Child Friendly Towns and Districts” and “For the Child’s Smile in Hospital”.

A member of the Council for Children of the Government of the Republic of Croatia.

**VASILE FLORIN STAMATIAN**

Affiliation: 1st Department of Obstetrics and Gynecology University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca, Romania

Date and place of birth: May 17, 1952, Turda, Cluj County, Romania

Titles: MD, PhD, Professor, Head

Short CV (Education and training, work experience):

MD University of Medicine and Pharmacy in Cluj Napoca, Romania

1990 Research fellow Louvain University Brussels, Belgium

1993 Research fellow Hospices Civils de Lyon L’Hotel – Dieu, Lyon, France

1993 Edith Margraff Communication, Paris, France

1993 Università degli Studi di Perugia, Perugia, Italy (1993)

1998 The Fetal Medicine Foundation, Edinburgh, Scotland

1999 Medical School, University of Zagreb

1999 Fetal Medical Foundation, London, England

Senior Researcher University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca, Romania

2001 Professor of Obstetrics and Gynecology, Head of the Obstetrics and Gynecology Department, President of the Graduate Course of Midwifery, University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca, Romania

2004 Coordinator for the exam to obtain Competence in Ultrasound in Obstetrics and Gynecology Romanian Ministry of Health and Education

Scientific International Society Memberships:

1990 – 1996 Member of the International Society of Gynecological Endocrinology
2002 – till now Founding member Southeast European Society of Perinatal Medicine
2005 Director Romanian Branch Ian Donald Interuniversity School of Ultrasound in Obstetrics and Gynecology
2010 President Southeast European Society of Perinatal Medicine
2010 Member International Society of Ultrasound in Obstetrics and Gynecology (ISUOG); Associate Member European Society of Prenatal Medicine
Founding member and Secretary Romanian-German Society of Obstetrics and Gynecology
Board Member European Association of Perinatal Medicine (EAPM)
Member Federation International of Obstetrics and Gynecology (FIGO)
Member European Association of Gynaecologists and Obstetricians (EAGO)
Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

1976 Founding member Romanian School of Ultrasound in Obstetrics and Gynecology
2004 Co-president Obstetrics and Gynecology Committee, Romanian Ministry of Health
2006 – 2008, and 2010 – 2020 President Romanian Society of Obstetricians and Gynecologists
Bioethical Committee University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca, Romania
Founding member Romanian Society of Medical Genetics
Vice-President Romanian Society of Ultrasound
Fellow Romanian Academy of Medical Sciences
Founding member and President Romanian Association of Perinatal Medicine
President of Foundation Provita- Mother and Child Care, Romania

Recognitions:

Honorary Member Romanian Society of Laparoscopic Surgery
Honorary member Medical Association Timisoara, Romania
Honorary member Society of Physicians and Natural Sciences
2020 Honorary Vice-President Romanian Society of Obstetricians and Gynecologists

Publications and scientific activities:

Published over 230 papers in peer-reviewed national and international journals (BDI 170, 68 ISI), 6 books, co-author of 7 books, and the author of one CD – Diagnosis and Attitude in Perinatal Medicine.

He has been invited as speaker to more than 35 international and national congresses, meetings and courses.

Scientific research and interests have been focusing on prenatal diagnosis, fetal ultrasound, chromosomal anomalies, CVS, amniocentesis, amniotic fluid, fetal lung maturity, childbirth organization, fetal monitoring, pre-term labor, gynecological endocrinol-

ogy and menopause, organization and quality of perinatal care, prenatal diagnosis of congenital malformations and of ultrasound in obstetrics and gynecology. One of the pioneers of ultrasound examination in obstetrics in Romania.

Principal investigator of several research projects for the National Research Council and for the Ministries of Higher Education and Health in Romania and the European Research Projects (EUROPOP); The Twin Birth Study, Toronto, Canada (2010).

Honorary Editor in Chief Romanian Journal of Obstetrics and Gynecology.

1998-till now Editor in Chief Journal of Romanian Society of Obstetrics and Gynecology

2018 Honorary President of the Board Journal of Romanian Society of Obstetrics and Gynecology.

Editorial Board member Bulletin of Perinatal Neonatology (official Journal of The Moldavian Society of Perinatal Medicine).

Editorial Board member Obstetrics and Reproductive Medicine (official Journal of the South-East European Society of Perinatal Medicine).

2004 – 2012 Editorial Board member Donald School Journal of Ultrasound in Obstetrics and Gynecology.

2010 Founder IMOGEN Institute of Medical Research, a multidisciplinary institution of obstetrics, Imaging, pathologic anatomy, genetics, and neurosciences.



VEDRAN STEFANOVIĆ

Affiliation: Fetomaternal Medical Center, Helsinki University Hospital, Finland

Date and place of birth: November 4, 1966, Croatia

Titles: MD, PhD, Professor; Obstetrics, Gynecology and Perinatal Medicine

Short CV (Education and training, work experience):

1990 MD School of Medicine University of Zagreb, Croatia

1992 PhD Department of Histology and Embryology, School of Medicine, University of Zagreb, Croatia (the youngest Croatian Medical PhD)

1992 continuing career in Finland Helsinki University Hospital

2002 Specialist in obstetrics and gynecology Helsinki University Hospital

2005 subspecialist in Fetal Medicine Helsinki University Hospital

2009 Professor Helsinki University Hospital

Current positions:

Professor of Obstetrics, Gynecology and Fetal Medicine, Fetomaternal Medical Center, Helsinki University Hospital, Finland

Senior Consultant in Fetal Medicine, Department of Fetal Medicine, Helsinki University Hospital, Finland

National Coordinator for Fetal Medicine Subspeciality, Finland

Clinical Instructor at Medical School, University of Helsinki, Finland

Scientific International Society Memberships:

Co-founder of International Society for Placenta Accreta Spectrum <https://is-pas.org/home.html>

Co-founder Nordic Fetal Therapy Alliance <https://www.nnfm.org/nordfetal/>

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

Finnish Ultrasound Society

Finnish Society of Obstetrics and Gynecology

Finnish Society of Perinatal Medicine

Recognitions:

1985 – 1987 for three consecutive years awarded as The Best Zagreb University Medical School student

2005 and 2017 awarded as The Best teacher at Medical School University of Hesinki, Finland

Publications and scientific activities:

Authored 146 publications, most of which are original scientific papers (also publications in NEJM and Cell), this includes book chapters and systematic reviews.

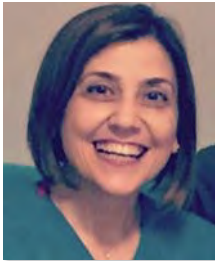
He was supervisor of seven PhD thesis and 29 master thesis.

Has been invited speaker at 60 international conferences during past ten years.

The main scientific interest of Prof. Stefanovic is prenatal diagnostics and fetal therapy.

Other:

Language proficiency: Croatian, English, Finnish, Swedish, Italian, Spanish and Portuguese.

**EBRU TARIM**

Affiliation: Prof. dr. Ebru Tarim Clinic in Perinatology, Adana, Turkey

Date and place of birth: April 1, 1972, Gaziantep, Turkey

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

1995 MD Hacettepe University Faculty of Medicine, Ankara, Turkey

1995 - 1999 residency Department of Obstetrics and Gynecology,

Baskent University, Ankara, Turkey

2005 worked at King's College with Prof. Kypros Nicolaides and Prof. Lydsey Allan, London, UK

2006 Associate Professor in obstetrics and gynecology, Baskent University, Adana, Turkey

2013 Professor in Perinatology, Baskent University, Adana, Turkey

2013 - 2016 Chief of Perinatology Department, Baskent University, Adana, Turkey

Scientific International Society Memberships:

Member International Society of Ultrasound in Obstetrics and Gynecology (ISUOG)

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

2016 – 2018 she was the President of Turkish Ultrasound Society
Board Member Turkish Perinatology Association
Board Member Turkish Obstetric and Gynecological Ultrasonography Association
Member Turkish Medical Association
Member Turkish Gynecology and Obstetrics Association

Publications and scientific activities:

She has published more than 60 publications and book chapters.

**SABINA TERZIĆ**

Affiliation: Pediatric Clinic, Clinical University Center Sarajevo, Bosnia and Herzegovina

Date and place of birth: November 14, 1974, Brčko, Bosnia and Herzegovina

Titles: MD, PhD

Short CV (Education and training, work experience):

2001 MD Medical Faculty University of Sarajevo, Bosnia and Herzegovina
2001 working at Pediatric Clinic, Clinical University Center Sarajevo, Bosnia and Herzegovina
2010 Pediatrician and neonatologists at Neonatal Intensive Care Unit, Pediatric Clinic, Clinical University Center Sarajevo, Bosnia and Herzegovina
2009 MSc Medical Faculty University of Sarajevo, Bosnia and Herzegovina
2017 PhD Medical Faculty University of Tuzla, Bosnia and Herzegovina
2012 Assistant in Pediatrics, Medical Faculty University of Sarajevo, Bosnia and Herzegovina
Licensed instructor by American Academy of Pediatrics: Neonatal Resuscitation

Scientific International Society Memberships:

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

Member Ethical Committee Clinical University Center Sarajevo, Bosnia and Herzegovina
Member Hospital Transfusiology Board Clinical University Center Sarajevo, Bosnia and Herzegovina

Publications and scientific activities:

Author or co-author of more than 50 papers, cited 51 times.

Published chapters in two books.

Speaker at numerous congresses and symposia in Bosnia and Herzegovina and abroad.

2018 Researcher, international project Amikacin pharmacokinetics to optimize its dosing recommendations and physiological considerations in neonates with perinatal asphyxia treated with hypothermia.

2019 Researcher, Global PaedSurg Study.



TUANGSIT WATAGANARA

Affiliation: Division of Maternal Fetal Medicine, Department of Obstetrics and Gynecology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand

Date and place of birth: August 23, 1975, Bangkok, Thailand

Titles: MD, Professor

Short CV (Education and training, work experience):

1997 MD, Faculty of Medicine (First Class Honor), Siriraj Hospital, Mahidol University, Bangkok, Thailand

2001 Diploma of The Thai Board of Obstetrics & Gynecology

2004 Diploma of The Thai Sub board of Maternal and Fetal Medicine

2004 Fellowship Maternal-Fetal Medicine and Perinatal Genetics, Tufts-New England Medical Center, Boston, MA, USA

Professor, Mahidol University, Bangkok, Thailand

Chief, Division of Maternal Fetal Medicine, Department of Obstetrics and Gynecology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand

Scientific International Society Memberships:

Co-Opted Councilor of Asian Federation of Societies for Ultrasound in Medicine and Biology (AFSUMB)

Deputy Secretary-general World Association of Perinatal Medicine (WAPM)

Executive Director Ian Donald Inter-University School of Medical Ultrasound

Associate Fellow International Association of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

President of Medical Ultrasonic Society of Thailand (MUST)

Executive Board Member National Center for Genetic Engineering and Biotechnology (BIOTEC)

Recognitions:

2003 Outstanding Young Investigator Award from Conference on Circulating Nucleic Acids in Plasma and Serum (CNAPS III Meeting), USA

2007 Shan S. Ratnam Young Gynecologist Award from 20th American College of Obstetrics and Gynecology Meeting, Japan

Publications and scientific activities:

He has a special research interest in prenatal screening, diagnosis, and therapy, as well as preeclampsia screening and prevention. He has over 100 publications in peer review journals, edited and authored several textbooks.

Executive Editor; Donald School Journal of Ultrasound in Obstetrics and Gynecology

Editorial Board Member (Fetal Medicine); BMC Pregnancy and Childbirth.



JUN YOSHIMATSU

Affiliation: National Cerebral and Cardiovascular Center, Osaka, Japan.

Date and place of birth: January 11, 1963, Oita, Japan

Titles: Professor and Chief Director of the Department of Obstetrics and Gynecology, National Cerebral and Cardiovascular Center, Osaka, Japan.

Short CV (Education and training, work experience):

1987 graduation from Oita Medical College, Oita, Japan. After his graduation from Medical School, he has dedicated his most of time to clinical research and investigation in fetal medicine and perinatology. He has been studying hypertensive disorder during pregnancy, especially the disorder of the organs in hypertensive condition including brain hemorrhage, perinatal cardiomyopathy, renal failure and pulmonary edema. After he came back from NICHD, NIH, Detroit, Michigan (Professor Roberto Romero) in 2002, he worked harder on this subject and also at the same time, he contributed the promotion of the equal accessibility of the high-level perinatal care regionally and nationwide.

After he moved to National Cerebral and Cardiovascular Center, his research subject has been focused on the prenatal diagnosis and evaluation of congenital heart disease. He also studies the perinatal management of the pregnant women with heart disease. His remarkable activities on these subjects have been internationally approved by perinatologists as well as cardiologists and cardiac surgeons. His recent interest is on the analysis of fetal heart movement. His trial of the estimation of the electrical activity of fetal heart by using high resonance echocardiography with AI is attracting a lot of attention.

He has held many positions at various Society both domestic and international. He has got many awards. He has a lot of titles of Specially Appointed Professor, Department of Gynecology and Obstetrics, Kagawa University, Takamatsu, Japan, Specially Appointed Professor, Department of Gynecology and Obstetrics, Osaka Medical University, Osaka, Japan, Board Director, The Obstetrical Gynecological Society of Osaka.

Scientific International Society Memberships:

2018 IAPM associate member

2019 board member of WAPM

Scientific National Society Memberships:

2016 – 2017 President of Japanese Society for the study of the kidney in pregnancy

2018 Local organizer of 20th Ian Donald Inter-University School of Medical Ultrasound, Japanese Branch

Recognitions:

2011 Commendation of Minister of Ministry of Health, Labour and Welfare Honor

Publications and scientific activities:

2019 Management of pregnant women with cardiac disease: medical view.



ALI SUNGKAR (1966 - 2021)

Affiliation: Fetomaternal Division, Department of Obstetrics and Gynecology, Faculty of Medicine University of Indonesia, Cipto Mangunkusumo Hospital, Jakarta, Indonesia

Titles: MD, PhD, Head

Short CV (Education and training, work experience):

1999 Fellowship obstetrics and gynecology Department of Obstetrics and Gynecology, University of Indonesia, Jakarta, Indonesia

2011 PhD Faculty of Medicine University of Indonesia, Jakarta, Indonesia

2012 Fellowship in Fetomaternal Medicine Department of Obstetrics and Gynecology, Faculty of Medicine University of Indonesia, Cipto Mangunkusumo Hospital, Jakarta, Indonesia

Scientific International Society Memberships:

Member Fetus as a Patient International Society

2010 till now International Scientific Committee, Asia Pacific Society of Infectious Disease in Gynecology and Obstetrics

Educational Committee World Association Perinatal Medicine (WAPM)

Associate Fellow International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

Head of Task Force of Reproductive Tract Infection at the Indonesian Society of Obstetrics and Gynecology

Former 2nd Secretary Indonesian Medical Association, Jakarta Branch

Currently 2nd Secretary of Indonesian Society of Obstetrics and Gynecology

Recognitions:

2000 Young Gynecologist Award, Asia Oceania Federation of Obstetrics and Gynecology

2013 William Liley Medal, Fetus as a Patient International Society

Publications and scientific activities:

He has published several papers in national and international journals and chapters in the books in the field of obstetrics and gynecology and fetomaternal medicine.

YOUNG SCIENTISTS UNIT

YOUNG SCIENTISTS UNIT	
1.	Costin Berceanu, Romania
2.	Themistoklis I. Dagklis, Greece
3.	Przemyslaw Kosinski, Poland
4.	Ioannis Kyvernitakis, Germany
5.	Fatima Usman, Nigeria
6.	Nicola Volpe, Italy
7.	Alexandra Zavadenko, Russia

YOUNG SCIENTISTS SECTION



COSTIN BERCEANU

Affiliation: Faculty of Medicine, Craiova Emergency University Hospital, Craiova University of Medicine and Pharmacy, Craiova, Romania

Date and place of birth: December 17, 1979, Craiova, Romania

Titles: MD, PhD, Associate professor

Short CV (Education and training, work experience):

2004 MD, Faculty of Medicine, Craiova University of Medicine and Pharmacy, Craiova, Romania

2005 Assistant Professor Faculty of Medicine, Craiova University of Medicine and Pharmacy, Craiova, Romania

2009 PhD Faculty of Medicine, Craiova University of Medicine and Pharmacy, Craiova, Romania

2016 Lecturer Faculty of Medicine, Craiova University of Medicine and Pharmacy, Craiova, Romania

2017 Associate Professor Faculty of Medicine, Craiova University of Medicine and Pharmacy, Craiova, Romania

2017 coordinator for PhD students, Faculty of Medicine, Craiova University of Medicine and Pharmacy, Craiova, Romania

Scientific International Society Memberships:

Member World Association of Perinatal Medicine (WAPM)

Member International Society of Ultrasound in Obstetrics and Gynecology (ISUOG)

Member Unit of Young Scientists International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

Member Romanian Society of Obstetrics and Gynecology

Member Romanian Society of Ultrasonography in Obstetrics and Gynecology

Publications and scientific activities:

Author or co-author of 13 specialized books, wrote over 30 chapters in the books. Published over 150 full text articles in listed or indexed ISI Thomson Reuters Web of Science Core Collection journals, and over 300 abstracts published and presented at various scientific events (Hirsch index of 10 by ISI Thomson Reuters Web of Science).

Invited speaker to numerous scientific events. Over 20 papers awarded at different scientific events.

**THEMISTOKLIS IOANNI DAGKLIS**

Affiliation: 3rd University Clinic of Obstetrics and Gynecology, School of Medicine, Aristotle University of Thessaloniki, “Ippokrateio” Hospital, Thessaloniki, Greece

Date and place of birth: August 21, 1976, Thessaloniki, Greece

Titles: MD, PhD, Assistant Professor in Obstetrics and Gynecology

Short CV (Education and training, work experience):

2000 MD (with distinction) School of Medicine, Aristotle University of Thessaloniki, Greece

2005 – 2007 Sub-specialized in Maternal-Fetal Medicine, Harris Birthright, King’s College Hospital and the Fetal Medicine Foundation, London, UK

2006 PhD Department of Physiology and Pharmacology, School of Medicine, Aristotle University, Thessaloniki, Greece

2011 MSc Management of Health Units, Open University of Greece

2011 Specialist in Obstetrics and Gynecology, 4th University Clinic of Obstetrics and Gynecology, “Ippokrateio” Hospital, Thessaloniki, Greece

2011 – 2012 Diploma in Fetal Medicine, Harris Birthright, King’s College Hospital and the Fetal Medicine Foundation, London, UK

2014 MSc Reproduction and Development, University of Bristol, UK

2011 till now Consultant in Maternal-Fetal Medicine, 3rd University Clinic of Obstetrics and Gynecology, Aristotle University of Thessaloniki, “Ippokrateio” Hospital, Thessaloniki, Greece

2018 till now Assistant Professor in Obstetrics and Gynecology 3rd University Clinic of Obstetrics and Gynecology, Aristotle University of Thessaloniki, “Ippokrateio” Hospital, Thessaloniki, Greece

Scientific International Society Memberships:

Unit of Young Scientists within the International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

Coordinating Committee for the Development of Clinical Guidelines, Hellenic Society of Obstetricians and Gynecologists

Recognitions:

2016 – 2018 The First Prize and Scholarship “G. Papanikolaou” for the best research proposal in the field of Obstetrics and Gynecology in Greece

Publications and scientific activities:

He has published more than 80 papers in peer reviewed journals, receiving more than 2000 citations. He has conducted more than 70 lectures in congresses and seminars.

**PRZEMYSŁAW KOSIŃSKI**

Affiliation: 1st Department of Obstetrics and Gynaecology, Medical University of Warsaw, Poland

Date and place of birth: 1981, Warsaw Poland

Titles: MD, PhD, Associated Professor

Short CV (Education and training, work experience):

2007 MD 1st Faculty of Medicine, Medical University of Warsaw, Poland

2011 – 2013 Fellowship Fetal Medicine Foundation at King's College Hospital and University College Hospital in London, UK (under the supervision of Professor Kypros Nicolaides)

2012 Fetal Cardiology Course in Royal Brompton Hospital in London and Evelina Children's Hospital in London, UK

Currently involved in fetal therapy: fetoscopic tracheal occlusion (FETO) in fetuses with congenital diaphragmatic hernia (so far, our institution is the only one in Poland where the procedure is routinely performed) and minimally invasive fetoscopic repair for myelomeningocele

1st Department of Obstetrics and Gynaecology at the Medical University of Warsaw has become a reference center for FETO procedure in fetuses with congenital diaphragmatic hernia

Scientific International Society Memberships:

Member Unit of Young Scientists International Academy of Perinatal Medicine (IAPM)

Member International Society of Ultrasound in Obstetrics and Gynecology (ISUOG)

Scientific National Society Memberships:

Member Polish Society of Gynaecologists and Obstetricians

Board Member Ultrasound Section of Polish Society of Gynaecologists and Obstetricians

Recognitions:

2015 Prime Minister Award in the category of science and technology (with Professor Mirosław Wielgoś)

2016 1st Prize in the Golden Scalpel medical innovation contest

2018 2nd Prize in the Golden Scalpel medical innovation contest

Publications and scientific activities:

2019 Member, Expert Team for development of recommendations of the Polish Hypertension Society Management of Hypertension - 2019 edition. Guidelines of the Polish Hypertension Society He was one of the main authors of the joint statement of the Polish Hypertension Society, Polish Cardiac Society, and Polish Society of Gynaecologists and Obstetricians.



IOANNIS KYVERNITAKIS

Affiliation: Asklepios Clinics Hamburg- Dpt. of Obstetrics and Prenatal Medicine, Campus Barmbek, Wandsbek and Heidberg-Nord, Asklepios Medical School, University of Semmelweis, Germany

Date and place of birth: April 5, 1984, Heraklion, Greece

Titles: MD, PhD

Short CV (Education and training, work experience):

2004 – 2010 MD Medical School Philipps-University of Marburg, Germany

2012 PhD Philipps-University of Marburg, Germany

2015 Board certified in Obstetrics and Gynecology, University Hospital of Marburg (UKGM)

2015 Assistant professor, Philipps-University of Marburg, Germany

2016 – 2018 Subspecialty in Maternal-Fetal-Medicine, prenatal diagnosis and fetal therapy, Buergerhospital in Frankfurt am Main, Germany

2019 Associate Professor, Philipps-University of Marburg

2019 Asklepios Clinics in Hamburg, Germany

Scientific International Society Memberships:

Member International Society of Ultrasound in Obstetrics and Gynecology (ISUOG)

Member Fetal-Medicine Foundation (FMF),

Member World Association of Perinatal Medicine (WAPM)

Member Unit of Young Scientist International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

Member German Board of Obstetricians and Gynecologists (DGGG)

Member Consortium in Obstetrics and Prenatal Medicine (AGG)

Member German Society of Ultrasound in Medicine (DEGUM)

Recognitions:

2012 Dental Materials Group (DMG), Young Investigator Award

2013 DMG, Young Investigator Award

2014 Christian-Lauritzen Award

2018 Dr. Senckenberg Foundation fellowship

Publications and scientific activities:

Published several articles and book chapters.

The areas of clinical expertise: prenatal diagnosis and therapy (prevention of preterm birth, twin pregnancies, and fetal growth restriction).

Extensive research in the field of prevention of preterm birth.



FATIMA USMAN

Affiliation: Department of Paediatrics, Faculty of Clinical Sciences, Bayero University, Kano (BUK)/Aminu Kano Teaching Hospital (AKTH), Nigeria

Date and place of birth: June 20, 1984, Kano, Nigeria

Titles: MBBS, FWACP, PGP, MSc

Short CV (Education and training, work experience):

2008: Bachelor of Medicine, Bachelor of Surgery (MBBS) (graduated with first class honors), Bayero University Kano, Nigeria

2016 Fellow of the West African College of Physicians

2017 Postgraduate program in Paediatric nutrition, Boston University, USA

2019 MSc in advanced Paediatrics, Kings College London, UK (graduated with a distinction)

Worked at Murtala Muhammed Specialist Hospital, the largest government-owned hospital in northern Nigeria.

Currently works at neonatal unit of Aminu Kano Teaching Hospital/Bayero University, Kano in Nigeria (active in teaching/mentoring medical and postgraduate students as well as research).

She is the thematic lead in paediatrics for the master's program on Maternal and Child Health and Population Policy for the Africa Centre of Excellence for Population Health and Policy (ACEPHAP) at Bayero University Kano.

She is also a trainer for Nigerian Society of Neonatal Medicine (NISONM)

Scientific International Society Memberships:

Member African Perinatal Society (APS)

Member Unit of Young Scientists for the International Academy of Perinatal Medicine (IAPM)

Member of American Society of Hematology (ASH)

Scientific National Society Memberships:

Member of Paediatric Association of Nigeria (PAN)

Member of Nigerian Society of Neonatal medicine (NISONM)

Member of Nigeria Medical Association (NMA)

Member of Medical and Dental Consultant Association of Nigeria

Member Medical Women's Association of Nigeria (MWAN)

Member of the outreach and linkages committee for the Africa Centre of Excellence for Population and Policy, Bayero University Kano, Nigeria

Member blood transfusion committee at AKTH Aminu Kano Teaching Hospital (AKTH), Kano, Nigeria

Recognitions:

2008: Best graduate student Bayero University Kano

2008: First Bank of Nigeria prize for best graduate student in Paediatrics

2013: Asoquo Antia Memorial Prize for the best membership candidate in Paediatrics for West African College of Physicians

2013: Best membership candidate in Paediatrics for the National Postgraduate Medical College of Nigeria

2016: Merit certificate for the AuthorAID Research Writing

2017: Second Prize Award for the best scientific paper World Congress of Perinatal Medicine, Belgrade, Serbia

2018: Recipient of Commonwealth award

Publications and scientific activities:

She is the author of numerous papers.

Areas of research interest are jaundice, kernicterus and neonatal neurology, and is currently involved in many research activities as part of the Stop Kernicterus in Northern Nigeria (SKINN) group and the international genetics of jaundice genomic repository.

Between 2014-2016 was part of the working research group for the Saving Life at Birth (SLAB) project for the prevention of kernicterus in Nigeria in collaboration with Bill and Melinda Gates foundation, USAID, Bilimetricx, UKAid, Norwegian Ministry of Foreign Affairs, Grand Challenges Canada.

In 2019, she was a member of the research grant writing team that won the competitive Africa Centres of Excellence for Development Impact grant for the Africa Centre of Excellence for Population Health and Policy (ACEPHAP) at Bayero University Kano, a World Bank and Association of African Universities grant.



NICOLA VOLPE

Affiliation: University Hospital of Parma Ospedale Maggiore, Parma, Italy

Date and place of birth: April 22, 1981, Bari, Italy

Titles: MD, PhD, Professor

Short CV (Education and training, work experience):

2005 MD Faculty of Medicine and Surgery, "Aldo Moro" Bari University, Italy

2005 – 2010 Fellowship in obstetrics and gynecology Policlinic of Bari, Italy
 2009 – 2012 Research Fellow FMF London, UK
 2012 Diploma in Fetal Medicine Fetal Medicine Foundation (FMF)
 2013 Temporary Professor University of Parma and University of Modena and Reggio Emilia, Italy
 2013 till now working at University Hospital of Parma Ospedale Maggiore, Parma, Italy
 2014 PhD University of Bari, Italy
 2016 professor, mentor and organizer of the “II level MasterDegree in Advanced Ultrasound Evaluation of Fetal Heart and Brain Level Two, University of Parma, Italy
 Training University Hospital of Bari, Italy
 Training King’s College Hospital and University College Hospital in London, UK

Scientific International Society Memberships:

2018 Member Unit of Young Scientists International Academy of Perinatal Medicine (IAPM)

Scientific National Society Memberships:

2017-2019 Coordinator Section of the Youngsters Italian National Society for Ultrasound in Obstetrics and Gynecology (SIEOG - Società Italiana Ecografia Ostetrica e Ginecologica)

2019 Scientific Secretary Italian National Society for Ultrasound in Obstetrics and Gynecology (SIEOG)

Recognitions:

His research has been awarded at few international congresses

Publications and scientific activities:

Published more than 90 articles, chapters, or abstracts in national and international publications.

His research has been focusing mainly on fetal ultrasound of the first trimester, fetal anomalies, ultrasound in labor and premature delivery.

2020 Social media Editor Journal of Perinatal Medicine.



ALEKSANDRA ZAVADENKO

Affiliation: Neonatology Department, Postgraduate Faculty, Pirogov Russian National Research Medical University, Moscow, Russia

Date and place of birth: October 25, 1983, Moscow, Russia

Titles: MD, PhD, Assistant Professor

Short CV (Education and training, work experience):

2007 MD, Sechenov First Moscow State Medical University, Russia

2009 Completed Residency in Neurology, Russian Medical Academy of Postgraduate Education

2009 Subspecialization in Clinical Electroencephalography Russian Medical Academy of Postgraduate Education

2012 Postgraduate Training, Department of Neonatology, Pirogov Russian National Research Medical University, Russia

2014 – PhD, Pirogov Russian National Research Medical University, Russia

2012 – 2018 - Neurologist, Epileptologist, Outpatient Neurological Department, Morozov Children's City Hospital, Moscow, Russia

2012 till now Consultant Neurologist, Children's City Hospital named after N. F. Filatov, Moscow, Russia

Assistant Professor Department of Neonatology, Postgraduate Faculty, Pirogov Russian National Research Medical University, Moscow, Russia

Scientific International Society Memberships:

Member Young Scientist Unit, International Academy of Perinatal Medicine (IAPM)

Member International Child Neurology Association (ICNA)

Scientific National Society Memberships:

Member Russian Society of Neurologists

Member Russian League Against Epilepsy (RLAE)

Publications and scientific activities:

Author of 52 publications on perinatal neurology, behavioral neurology and epileptology, including 29 publications in the Russian peer-reviewed medical journals and 2 chapters in books, 12 papers cited in Scopus international database (Initial h-index in Scopus = 2. According to the Russian Index of Scientific Quotations, h-index = 5).

Her research interests have been focused on epilepsies with the onset at the neonatal period or early infancy, their clinical, neurophysiological manifestations and neurodevelopmental features, treatment, and differential diagnosis.

chapter 9

ACTIVITIES OF IAPM

GENERAL ACTIVITIES

Apart from the statutory annual meetings, activities carried out by the IAPM include symposiums and courses, the preparation of statements, humanitarian work and collaboration with other Academies and scientific societies.

ANNUAL MEETINGS

These meetings are held in accordance with a set format, which includes three sub-divisions: 1) Administrative meeting, 2) Ceremonial meeting and 3) Scientific meeting (or IAPM Conference).

In the **Administrative meeting**, members of the IAPM International Council listen to and discuss reports from the President, the General Secretary and the Treasurer (article 24 of the constitution), as well as the information given to them by the various working groups.

Defining the IAPM's mission and its future plans are obligatory subjects for discussion at these meetings, as well as the election of new members and decisions concerning the place, date and organiser of next year's meetings.

The meeting is chaired by the IAPM President, assisted by the General Secretary, who writes up and prepares the minutes of the meeting, which are subsequently sent to all the regular Fellows. Associate Fellows are not members of the International Council.



Administrative Meeting in Budapest, 2007.

The **Symposium**, also known as the IAPM Conference, is normally run by the team organising the annual meeting, in accordance with instructions from the Board of Directors.

Finally, there is the **Ceremonial meeting**, attended by all regular and associate Fellows in full academical dress (see page 79), which is held in a historic building linked with a local Academy or scientific or cultural Institution.



Scientific Meeting (Barcelona, 2006). Speech of Prof. W. Trust Anderson, President of the World Academy of Arts and Science (WAAS).

Apart from a speech by the IAPM President on the «state of the Academy», this meeting holds a memorial service dedicated to Fellows of the Academy who died during the previous year, as well as naming new members of the Academy (both regular and associate Fellows). Once the General Secretary has read out the appropriate decree, the new Fellows swear the solemn oath and receive the symbols of Academy membership (Academic medal and diploma for the regular Fellows, diploma for the associate Fellows). Finally, one of the Vice-Presidents officially closes proceedings and all present sing the «Gaudemus Igitur» anthem.



Ceremonial Meeting (Barcelona, 2006).

MEETINGS OF THE BOARD OF DIRECTORS

In accordance with articles 29 and 30, «the Board of Directors (BD) shall convene two meetings a year, usually held at the same time as the various perinatal scientific conferences». The BD shall be deemed to be validly constituted if at least four members are present, including the President.

These meetings discuss and deal with urgent matters and routine business (organisation of annual meetings, the work of the working groups, publications, etc.). The International Council is regularly informed of developments and decisions taken here at its next meeting and for this reason, the General Secretary takes minutes. Meetings of this type were held at Prague (2006), Florence (2007), Dubrovnik (2007) and New York (2008).

OTHER MEETINGS

Symposiums organised by the IAPM: with the aim of collaborating with other academic institutions and, at the same time, to achieve its teaching and training targets, the IAPM participates in international conferences organised by other institutions. Such was the case, for example, with the International Conference on Maternal Mortality, organised by FIGO and the WAPM and held in Lima, Peru, from 11th to 13th May 2006. The IAPM organised and ran a «Social symposium on ‘The rights of the woman’», in which several of the regular Fellows took part: J. M. Carrera (as co-ordinator), A. Kurjak, S. Karchmer, F. A. Chervenak, L. Cabero, G. C. Di Renzo, W. Holzgreve and Z. Papp.

On the other hand, on September 29th, 2007, a Symposium about «The Beginning of Human Life» was held in Zagreb, Croatia, organized by Prof. Asim Kurjak, and auspiced by The World Academy of Arts and Science, the International Academy of Perinatal Medicine and the Academy of Medical Sciences of Croatia.

International Conference on Maternal Mortality organized by FIGO and WAPM, with the cooperation of International Academy of Perinatal Medicine, Lima, Peru, 2006.



Jornada Internacional
Acciones para Mejorar La Morbi-Mortalidad Materna

Organizada por:
 Federación Internacional de Ginecología y Obstetricia (FIGO)
 y World Association of Perinatal Medicine (WAPM)

Con la colaboración de:

- Federación Latinoamericana de Sociedades de Obstetricia y Ginecología (FLASOG)
- Fondo Población de las Naciones Unidas (UNFPA)
- Ian Donald Inter-University School of Ultrasounds in Obstetrics and Gynecology
- International Academy of Perinatal Medicine (IAPM)
- International Society of The Fetus as a Patient
- Matres Mundi International
- Ministerio de Salud del Perú (MINSA)
- Sociedad Canadiense de Obstetricia y Ginecología
- Sociedad Española de Ginecología y Obstetricia (SEGO)
- Sociedad Iberoamericana de Diagnóstico y Tratamiento Prenatal (SIADTP)

Sociedad anfitriona
 • Sociedad Peruana de Obstetricia y Ginecología (SPOG)

Acreditado por FIGO y CMP

11, 12 y 13 de mayo de 2006
 LIMA, PERÚ

PROGRAMA OFICIAL

PUBLICATIONS

The IAPM has co-operated with the WAPM and Matres Mundi in publishing various books, such as for example:

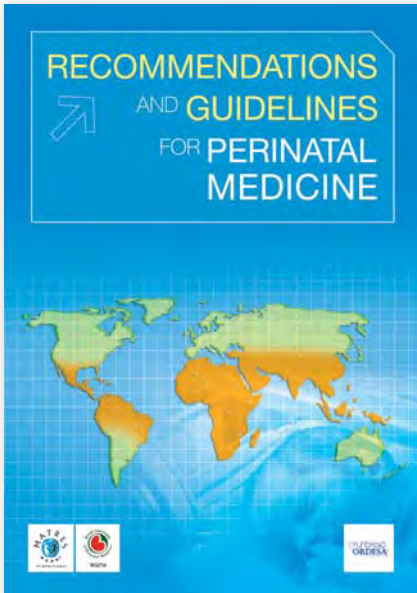


Cover of the book «Maternal and Infant Health in the World» (2006).

- **Maternal and Infant Health in the World**

Published by MATRES MUNDI INTERNATIONAL in collaboration with WAPM and the INTERNATIONAL ACADEMY OF PERINATAL MEDICINE. This book covers the state of maternal and infant health in the world's various countries. Each page in the book is dedicated to one country, giving information concerning population, education, nutrition, the status of women, health in general and maternal and infant health.

Research and the selection of data for inclusion was carried out by Prof. Ernesto Fabre and Dr. Daniel Oros of MATRES MUNDI International. Editorial co-ordination was in the hands of Prof. José M. Carrera, Secretary General of IAPM.



Cover of the book «Recommendations and Guidelines in Perinatal Medicine» (2007).

- **Recommendations and Guidelines in Perinatal Medicine**

Published by WAPM and MATRES MUNDI INTERNATIONAL in collaboration with the INTERNATIONAL ACADEMY OF PERINATAL MEDICINE and financed by the ORDESA Foundation.

This is a book especially aimed at perinatal specialists in developing countries.

Editor-in-chief: José Maria Carrera, Secretary General of the IAPM. General Co-ordinators: Xavier Carbonell, working groups co-ordinator of the WAPM and Ernesto Fabre, Vice-President of Matres Mundi.

The book has 48 chapters grouped into 5 sections: a general section, pregnancy, labour, the puerperal period, newborn and there is also a section on specific recommendations. 102 authors from all over the world collaborated on it.

HUMANITARIAN ACTIVITIES

Ever since the IAPM joined the «International Perinatal Medicine Group» in September 2005, one of whose members is the charitable organisation MATRES MUNDI INTERNATIONAL, formal collaboration between the two bodies has taken place, culminating in the signing of an «Agreement» in May 2006 stating that MATRES MUNDI is the humanitarian agency of the IAPM.

In the spirit of this agreement, the IAPM, along with the WAPM, co-operates in implementing the «Training programme for international NGO volunteers in Perinatal Medicine» developed by MATRES MUNDI (Sept. 2006) and in the design of an «Integral Plan for the Reduction of Maternal Mortality in Central Africa», developed jointly with MATRES MUNDI and WAPM. This project was published in «J. Perinatal Med» (2007, 35: 266-277) and «Progress in Obstetrics and Gynaecology» (2007, 50; 7: 398-404).

This institutional co-operation was clearly demonstrated at the celebration of the 10th Anniversary of Matres Mundi held in the «Palau de la Musica» in Barcelona on October 26th 2006. During the course of the official proceedings, there were speeches by Prof. E. Saling, IAPM President, along with Prof. Carrapato, WAPM President, and Prof. Asim Kurjak, President of the Ian Donald School and former WAPM President.



Speech of Prof. Erich Saling at the celebration of the 10th Anniversary of Matres Mundi.



Intervention of Prof. Asim Kurjak in the 10th Anniversary of Matres Mundi.



People that attended the concert of «Palau de la Música», Barcelona (Oct. 2006) in the 10th Anniversary of Matres Mundi.

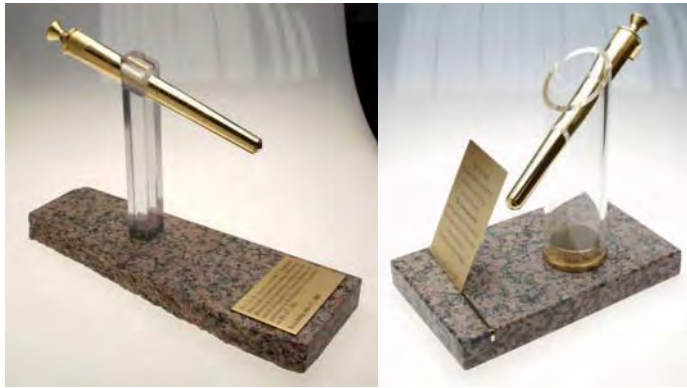


Some African Maternity Hospitals and Health Centers, constructed, restored or furnished by Matres Mundi, under the umbrella of «International Academy of Perinatal Medicine» and other institutions (WAPM, etc.). 1) Maternity of Djunang (Cameron); 2) Health Center of Djunang (Cameron); 3) Health Center of Tonge; 4) Maternity of Loango (Congo); 5) Health Center of Mbala (Congo); 6) Hospital of Maduda (Congo); 7) Maternity of Kasangulo (Congo); 8) Maternity of Pangu (Congo); 9) Maternity of Kikwit (Congo); 10) Nutritional Center of Tshela (Congo).

PRIZES AND AWARDS

PRESIDENTIAL AWARD

With the agreement of the International Council, in 2005 the first IAPM President, Professor Erich Saling, instituted the so-called «International Academy of Perinatal Medicine's Presidential Award», which is awarded every two years. This presidential award is symbolised by the presentation of a «Golden Amnioscope», designed by the company that produces these instruments, the Richard Wolf Company of Knittlingen, Germany. In the words of Prof. Erich Saling, «the Amnioscope is a symbol of the first steps to open up direct exploration of the intrauterine space, which started in 1960. It is therefore particularly suitable to represent such a special award.»



Presidential Award of IAPM. The «golden amnioscope».

The «Presidential Award» recognises figures who have contributed to the overall development of Perinatal Medicine, based on their original scientific publications and their contribution to the development of IAPM.

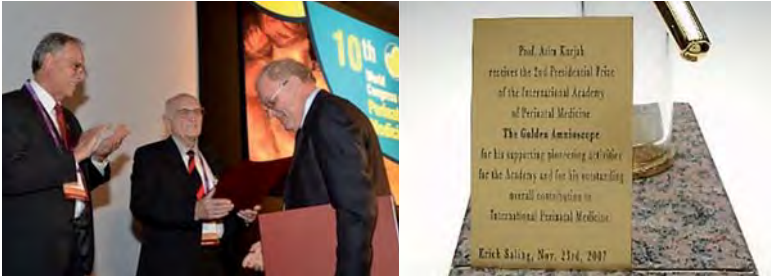
So far, this award has been granted to:

- 2005: Prof. José M. Carrera from Spain. The awards ceremony was held in Zagreb, Croatia at the 7th World Congress of Perinatal Medicine.



Delivery of the Presidential Award to Prof. José M. Carrera.

- 2007: Prof. Asim Kurjak, from Croatia. The presentation of this second «Presidential Award» took place in Budapest, Hungary, at the third meeting of the IAPM.



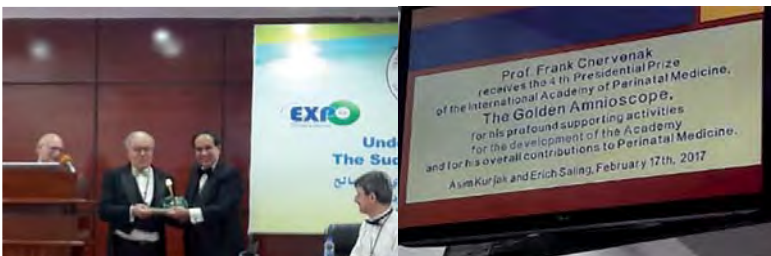
Delivery of the Presidential Award to Prof. Asim Kurjak.

- 2016: Prof. Ola Saugstad from Norway. He received his award in Tirana, Albania at the 12th meeting of the IAPM



Delivery of the Presidential Award to Prof. Ola Saugstad.

- 2017: Prof. Frank Chervenak from USA. The award was delivered in Khartoum, Sudan during the 13th IAPM meeting.



Delivery of the Presidential Award to Prof. Frank Chervenak.

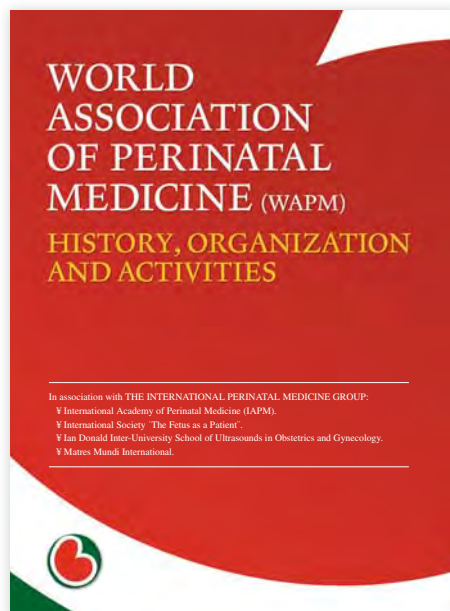
CO-OPERATION WITH OTHER SOCIETIES OF PERINATAL MEDICINE

In September 2005, the IAPM joined the «International Perinatal Medicine Group», consisting of the «World Association of Perinatal Medicine», the International Society «The Foetus as a Patient», the «Ian Donald Inter-University School of Medical Ultrasound» and

«Matres Mundi International». This is why chapter 14 of «WAPM: History, organization and activities» is dedicated to the IAPM and a video on the founding ceremony of the IAPM was shown during the opening ceremony of the 7th World Congress of Perinatal Medicine (Zagreb, 21-24th September 2005).

Our academy has organised special symposiums or has held a meeting of the Board of Directors at all the Conferences of the WAPM and the International Society «The Foetus as a Patient» that have taken place since the IAPM was founded.

Likewise, the IAPM has friendly relations with most national and continent-wide associations of perinatal medicine (European Association of Perinatal Medicine, Federation of Asia and Oceania Perinatal Societies, American Society for Maternal-Fetal Medicine).



Cover of the book of WAPM.

MEETINGS OF THE IAPM

First meeting of the IAPM:

BARCELONA, 25TH MAY 2005

As previously described in chapter 4, which dealt with the founding ceremony of the IAPM, this meeting took place in Barcelona and was organised by Prof. José M. Carrera and his group of assistants.

Thanks to an agreement with the Royal Academy of Medicine of Catalonia, all the associated meetings took place in their main building, whose architectural and historical characteristics are described elsewhere (page 142).

The meeting of the group promoting the new Academy (Profs. E. Saling, A. Kurjak, A. Antsaklis, F. Chervenak and José M. Carrera) took place in the old Library of the Royal Academy on the morning of 25th May 2005. This was followed by the **official signing of the documents** giving a legal basis to the founding, in the presence of almost all the dignitaries who would later become members of the IAPM's International Council. Afterwards, everyone moved on to the «Gimbernat Amphitheatre» for a trial run of the Founding Ceremony, which would take place that afternoon.

The **Ceremonial meeting** has been described in detail in chapter 4.

On this occasion, no **Scientific meeting** as such took place, although prior to the IAPM meeting, the third Course of the Spanish branch of the Ian Donald School of Ultrasound was held in Barcelona (23rd and 24th May 2005), with the participation of most of the future regular Fellows.



After the Foundational Meeting (Barcelona, 2005) several regular fellows (Profs. Dudenhausen, Carrera, Ballariga, Van Asche and Karchmer), fraternized with relevant figures of Spanish Perinatal Medicine: Prof. A. González, Prof. L. Cabero, Prof. J. A. Usandizaga, Prof. J. Troyano, Prof. P. Acien and Prof. J. M. Bajo.

Second meeting of the IAPM:

BARCELONA, 26TH NOVEMBER 2006

The meeting was organised by Professor José M. Carrera, IAPM General Secretary, helped by his usual group of assistants from the Dexeus University Institute of Barcelona, Spain. The annual meeting took place in accordance with the following schedule:

.....

09.00 -11.00 h.: **ADMINISTRATIVE MEETEING** of the International Council (regular fellows).

Place: President's Room of the Royal Academy of Medicine of Catalonia.

17 regular Fellows attended the meeting and the following gave their apologies for absence: W. Holzgreve, G. Mandruzzato, S. Schenker, H. Nishida, C. Amiel-Tison, E. Bancalari, S. Karchmer, G. Pardi, S. Sakamoto, Ola D. Saugstad and A. Van Asche.

The **agenda** consisted of the following points:

1. Minutes of the meetings of the Board of Directors held in Zagreb and Prague.
2. President's report.
3. General Secretary's report.
4. Treasurer's report.
5. The IAPM's principles and philosophy.
6. Creation of study groups.
7. Next meeting of the IAPM.
8. Any other business.

The reading of the minutes of the Board of Directors meetings in Zagreb and Prague was followed by reports from the **President** (doc.1) and the **General Secretary**. The latter detailed some of the activities carried out by the IAPM, namely:

Report of the President at the 2nd Administrative Meeting of the IAPM in Barcelona on November 25th, 2005

Doc. 1

Dear Colleagues,

May I welcome you to the 2nd Meeting of our Academy.

My words are less a real report but more a statement reflecting my personal view of being the «primus inter pares» of our Academy. More detailed reports directed to the specific goals of our Academy will be presented by the individual members of the Board.

Personally I am somewhat ambivalent. On the one hand, I am honoured to represent this new and scholarly institution.

Our original field –particularly the prenatal part– is one of the most challenging and one of the greatest frontiers of Medicine. Indeed many established old disciplines within the last decades have reached the intrauterine environment and gain new specific insights into their own field.

The enormous scientific and clinical progress in the interdisciplinary field of Perinatal Medicine makes our field a new frontier.

The opportunities of our discipline are well described in the Textbook, now in the second edition, edited by Asim and Frank and to which many of us have contributed.

On the other hand I am ambivalent because there are so many problems of a serious nature for which we could do more specifically. Initially our Academy did develop a number of plans but I believe that we can be more effective in execution if we are to live up to the expectations and goals of our institution.

I very much hope that all of you and particularly the founders share this view and will help the Academy to achieve the goals for which it was created.

Thank you for your attention.

Collaboration with the FIGO-WAPM International Conference; co-operation in the publication of several books: «History of the WAPM», «Maternal and Infant Health in the World», «Recommendations and Guidelines in Perinatal Medicine»; humanitarian activities (a reproductive health training course for international volunteers, jointly with the WAPM and Matres Mundi), etc. The report of Secretary General was unanimously approved.

Subsequently Prof. A. Kurjak presented a proposal to create several study groups.

After a short discussion the future development of the four «Project topics» and the seven «Study Groups» was approved unanimously.

The **Project topics** are:

1. **Globalization-how much does it affect Perinatal Medicine?**
To be lead by Asim Kurjak and his team.
2. **The beginning of human life-Scientific, legal, ethical and religious controversies,**
Will be elaborate by Asim Kurjak, Frank Chervenak and José M. Carrera.
3. **Declining fertility rate-how do we respond?**
To be elaborate by Asim Kurjak and José M. Carrera and
4. **Genetic screening and diagnosis-the role of the molecular genetics.**
To be elaborate by Wolfgang Holzgreve, Zoltan Papp, Frank Chervenak and Asim Kurjak.

The proponed **Study Groups** within the IAPM which could activate inter-academia activities are:

1. **Fetal neurology** (Kurjak, Amiel-Tison, Levene).
2. **Multiple pregnancy** (Arabin, Dudenhausen, Nishida).
3. **Ethics and law** (Chervenak, Shenker, Carrapato).
4. **Preeclampsia** (Benedetto, Holzgreve, Uzan, Karchmer, Papageorgiou).
5. **Prenatal Diagnosis** (Nicolaidis, Antsaklis, Carrera, Papp).
6. **IUGR** (Mandrizzato, Pardi, Saugstad, Van Asche).
7. **Prematurity** (Romero, Di Renzo, Maeda, Nishida, Saling).

Finally, Prof. Zoltan Papp gives a proposal for the scientific Meeting of Budapest (2007), which is discussed between regular fellows, implementing some changes on the same.

The title of the scientific session will be: «Scientific an ethical controversies in Prenatal Diagnosis: Present and Future».

For her part, the **Treasurer** (B. Arabin) explained the challenges facing her due to lack of funds. Several members discussed the financial situation and offered income from future meetings to guarantee the Academy's basic activities. A regular donation from the WAPM should be requested after the biannual world congress.

Prof. Frank Chervenak presented a draft statement of the IAPM's mission and philosophy, prepared with the assistance of Larry McCullough (see page 119). This text was approved unanimously by the International Council.

12.00 -13.30 h.: **SYMPOSIUM**

Topic: Globalization in Medicine.

Programme:

- **Introductory Speech:** Prof. Erich Saling, President of IAPM.
- **Globalization:** Good and bad news: Prof. W. Truet Anderson, President of the World Academy of Art and Science (WAAS).
- **Globalization and Perinatal Medicine:** Prof. Asim Kurjak, President of the World Association of Perinatal Medicine.
- **Closing of Scientific Meeting;** Prof. José M. Carrera, Secretary General of the IAPM.
- **Press Conference.**

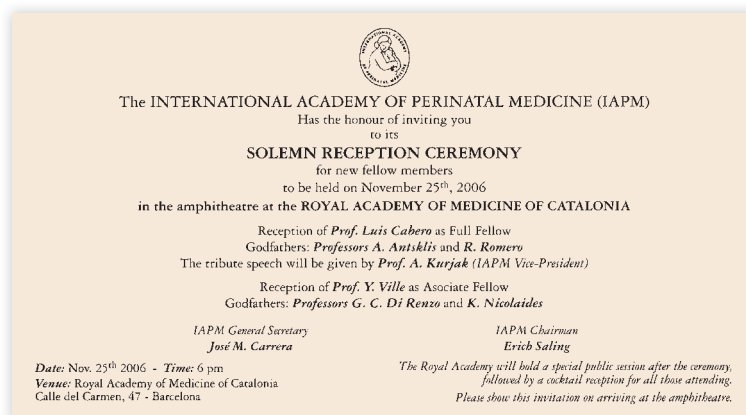
Some relevant personalities of the Spanish Perinatal Medicine attended this meeting.



II Scientific Meeting of the IAPM (Barcelona, 2006) on «Globalization in Medicine».

18.00-20.00 h.: CEREMONIAL MEETING

Place: Chapter Hall of the Royal Academy of Perinatal Medicine of Catalonia (Amfiteatre Gimbernat).



Special invitation for Solemn reception Ceremony of new fellow membes
(Barcelona, Nov. 25, 2006).

The Ceremonial Meeting was attended by all regular fellows.

The needs of the Chapter Hall were cared by three assistants (Silvia Núñez, Paz Maristany and M. Ángeles Botija) experts in protocol. As Masters of Ceremony acted Elvira Pais (in Spanish) and Marta Carrera (in English).

The meeting was developed according to this schedule:

- Welcome Words from the President, Prof. Erich Saling, addressed to regular fellows and personalities that attended the act.
- Reading by Secretary General of Minutes of the first Ceremonial Meeting.
- Presidential Address: The President open the academic Course and make a speech about the status of the Academy (doc. 2).

Presidential Address at the Ceremonial Meeting of the IAPM on November 25th, 2006 in Barcelona

Doc. 2

Dear Vice-Presidents, dear Secretary General, dear Fellows, Ladies and Gentlemen,

Welcome to the second meeting of the Academy.

On behalf of the Executive Council and all members, I would like to express the gratitude that all of us feel for the leadership, contributions and version of Professor José Maria Carrera who conceived the idea of creating this Academy

and for his tireless effort that made it a reality here in the city of Barcelona where we first met. Professor Carrera has been recognized with the first Presidential Prize of the Academy, the Golden Amnioscope. May I ask that all in attendance stand and join me in recognizing the pioneering effort of Professor Carrera by applause.

This Academy was founded with a noble purpose of proving leadership, version and guidance in one of the most difficult areas in Medicine. In contrast to other established fields, Perinatal Medicine did not exist until a few decades ago when the unborn child became a patient. We are unique in Medicine in that we take care of two patients. Our patients –mother and fetus– who have the greatest degree of intimacy possible. Their interests should be the same. Yet, nature and experience has taught us that conflict in this relationship can be a cause of disease and that some of the most difficult human decisions in Medicine take place when balancing the interest of our two patients.

Academies in Science and Arts have a distinguished history. They first served as a forum for new ideas and the developments of means of communication like the first scientific journal and more recently Academies have been called upon to advise countries and their governments in matter of policy.

What is the vision for the future of our academy? Most continents are represented by our Fellows. You were elected to fellowship because of your outstanding scientific contributions but also because of your dedication to serve as leaders of your communities. Here members of the World Association of Perinatal Medicine, the European Association of Perinatal Medicine and the Society «The Fetus as a Patient» are represented .

My call to all of you is, that the collective talent and energy of our fellows be used to ensure that our two patients –mother and fetus– are given all the benefits and opportunities that they deserve.

Our Academy is only 18 months old. This is a brief existence compared to the centuries of history of other academies in Europe. I and other members of the Council have mediated about the direction of our first efforts to accomplish the noble goals we have set to achieve.

The Academy was founded at a propitious time when imaging techniques allowed everyone to be a witness to marvels of human development and intrauterine life.

Moreover, compelling epidemiologic evidence now indicates that prenatal life is a major determinant of adult health and disease. The increasing realization that two modern epidemics –obesity and diabetes– as well as premature death from cardiovascular disease, may have their origins in environmental factors experienced during intrauterine life give our discipline greater importance than was dreamt by many. Therefore, I believe that patients, families, colleagues and governments are ready to recognize that a major revolution is taking place. The prevention of disease as well as the promotion of health should begin in utero. When considering our priorities, I would ask you to think of the need to address the most pressing problem of modern obstetrics and perinatal medicine to preterm birth. We have learned that the solution to this disorder will tax our scientific imagination and will require cooperation across conven-

tional frontiers and the active participation of governments and professional societies. I am delighted that the Academy will meet in Croatia to address this matter in 2008.

The second subject in my mind is the drama of maternal mortality in developing countries. Our Academy should use its influence to support the initiatives that governments, WHO, United Nations and Foundations are undertaking to engage and contribute to the solution of this problem. I wish to commend the effort of Professor Carrera for his dedication to this cause through *Matres Mundi*.

We need first concrete bold steps. Perinatal Medicine has been largely a diagnostic discipline. The main goal of prenatal care—now as before—should include the modern diagnosis of congenital anomalies. Thus, I am glad that Professor Zoltan Papp will host this Academy in Hungary next year with the main topic: Scientific and ethical controversies in prenatal diagnosis.

This meeting will culminate with the issuance of the first statement by the Academy: The Budapest Declaration.

I urge all Fellows to support Professor Papp so that the first public act of the Academy will be thoughtful, insightful and of value to our countries, societies and our patients.

Thank you.

- The Secretary General reads the official document with the designation of a new regular fellow member of the Academy. The official appointment reads: «In Barcelona, in May 25 of 2005, the Board of Directors of the Academy nominated Prof. **Luis Cabero** to become its regular fellow, and the nomination was unanimously approved by the International Council at the administrative plenary session of the Academy that took place in Zagreb, in September, 24, of 2005.»



Prof. E. Saling president of IAPM, delivered the diploma of the Regular Fellow to Prof. Luis Cabero.



Speech of Prof. Luis Cabero.

- Prof. Roberto Romero, from United States and Aris Antsaklis, from Greece, in their condition of Academic Godfathers proceed to ask the mentioned candidate to come in, and Prof. Asim Kurjak, vice-President of the International Academy, pronounce the laudatio of the new regular fellow.
- Oath of the regular new member, imposition of the academic medal and delivery of the Academic Diploma.
- Reading of official designation of a new associated fellow of the Academy. By proposal of the Board of Directors met in Prague last May, 25, 2006, decided to nominate Prof. **Ives Ville**. Professors Gian Carlo di Renzo, from Italy and Kypros Nicolaides from United Kingdom, actuated as Academic Godfathers. Immediately after take place the oath of the new associated fellow, and the reception of the academic Diploma.



Speech of Prof. Yves Ville.

- Both new fellows addressed some words to the Assembly.
- The vice-president of the Academy, on behalf of the International Council, took word and closed the Academical Ceremony.

To finish the solemn ceremony, the Choral performed *Gaudeamus Igitur*, which all of us listened standing up.

After this ceremonial meeting a cocktail took place.

THE APPOINTMENT OF PROF. ERICH SALING AS A FOREIGN CORRESPONDING MEMBER OF THE ROYAL ACADEMY OF MEDICINE OF CATALONIA

On conclusion of the IAPM's Ceremonial Meeting, a formal plenary session of the Royal Academy took place, in order to confer on Prof. Erich Saling his diploma and appointment as a «Foreign Corresponding Member», which had been unanimously approved by all its numerary members.

The ceremony was presided over by Prof. Angel Ballabriga due to the ill-health of the President, Prof. Jacinto Corbella. Prof. Ballabriga explained the reasons for the granting of this honour to Prof. Saling in German and Spanish, highlighting his international standing and the fact that he is considered to be the spiritual father of perinatal medicine worldwide.



Laudatio of Prof. Ballabriga. He explained the reasons for the concession the appointment of «Foreign Corresponding Member» of Royal Academy to Prof. Erich Saling.

Prof. Saling's obligatory lecture of investiture was entitled «Out of the sandbox of perinatal medicine» (doc. 3).

Following the presentation of the relevant diploma, which was received by Prof. Saling amidst rapturous applause from the Academy members, officials and dignitaries present, the new Corresponding Member directed some words of thanks to the regular Fellows of the Royal Academy (doc. 4).



Speech of Prof. Erich Saling.



Delivery of Diploma to Prof. E. Saling.

Investiture Lecture of Prof. Erich Saling, on the occasion of being appointed to a foreign corresponding member of the Royal Academy of Medicine of Catalonia (November 25th, 2006)

Doc. 3

Mr. President of the Royal Academy of Medicine of Catalonia, Academic God Fathers, members of Royal Academy, distinguished audience,

Our generation –alive today– is privileged to live in a remarkable age. Not only has interstellar space been spectacularly opened up to human exploration but, through a continuing biological and medical development of no less importance, «intrauterine space», the world in which we spend our prenatal life from conception to birth, has become increasingly accessible to science. Until forty six years ago, the possibilities of surveillance and of care for the unborn child were –if an aeronautic comparison be allowed– on a par with the prototype glider of Otto Lilienthal, who made his first attempts to fly in

Berlin about a hundred years ago. As little as forty years ago, the fetal heart sounds could be heard only with the aid of a primitive stethoscope. There was no greater access to the unborn child.

Today a new great field of medicine – prenatal medicine and in cooperation with neonatologists perinatal medicine – has come into being on a scale that is entirely comparable to the progress made in aeronautical and aerospace science.

The delivery of the child, generally known as «the birth», constitutes less and less the actual beginning, particularly for the perinatologists and modern obstetrician. It is not uncommon for specialists to have known a child that has just been born for more than thirty – nowadays close to forty weeks, and sometimes the acquaintance has been quite specific. Needless to say, there are many intrauterine conditions which are still not fully understood, and it is our wish and intention to achieve many improvements in areas where we continue to be confronted by serious problems. But in the history of obstetrics since our famous ancestor Hippocrates, which spans more than two thousand five hundred years, nothing has even approached the breathtaking medical progress that has been made in the last forty-six years.

May I now mention some of our initial and basic contributions to this new medical field referred to in a slightly symbolically formulated topic:

«Out of our sandbox of Perinatal Medicine»

Our first investigations have been focussed on the resuscitation of the newborn. The methods used were antiquated. So for instance thorax compression techniques and mouth-to-mouth respiration has still been used. Because of its curiosity let me look for a moment far back into the history of resuscitation. An old and most impressive method, seeming to be unbelievable, was to induce breathing movements in the newborn by rectal application of cigar smoke. The origin of this method goes back to measures: from the 19th century, which have been created to save people from drowning in the river Thames in London.

We developed new equipment for endotracheal ventilation of severely asphyxiated newborns. To confirm the efficacy of this method in:

1958 We catheterized the umbilical vessels and the aorta of the newborn for the very first time.

In 1959 We developed a new blood exchange technique after our two-catheter-principle for the treatment of severely erythroblastotic newborns. This method lead to only minimal strain to the newborn.

The next step was fetal blood analysis, the first was performed on June 20th, 1960 and published in 1961. This method – although we had not realized it at that time – was a definite breakthrough for the start of prenatal medicine.

In 1962 we developed amnioscopy – a method for examining amniotic fluid with the membrane still intact, to see whether there was a meconium passage or not and whether the fetus is at a higher hypoxic risk or not during the last weeks of pregnancy.

In the same year we developed the first concept of a heart-lung-machine for use in neonates, particularly very small prematures with serious disturbance of lung function.

1964 Followed the introduction of belt expression of the fetus to support the bearing down efforts of the parturient during the second stage of labor. Our midwives named it lovingly «fruit press». Curiously this principle has been rediscovered by an American company a few years ago. They developed and recommended complicated special equipment.

1965 Introduction of combined clinical biochemical assessment of the newborn, immediately after delivery by Apgar-Score and simultaneous measurement of blood pH in umbilical vessels in combination with fetal blood analysis.

1966 Development of a newborn-laryngoscope which has become widespread in the meantime. This instrument is also particularly suitable for the intubation of very small prematures and has ten years ago still been recommended in a book by Swiss anesthesiologists.

1966 Development of the concept of the so-called oxygen conserving adaptation of the fetal circulation –later by other authors erroneously so-called «brain sparing effect». Many studies using Doppler-technique have later confirmed the existence of reduced circulation in different organ systems, particularly in under-supplied fetuses.

1968 Introduction of modern monitoring of the fetus during labor by combined use of cardiotocography and fetal blood analysis.

1975 Introduction of a new method of external cephalic version in cases of breech presentation by relaxing the uterus with tocolytic substances.

Now we leave the sandbox and change to the more current events.

In 1981 we introduced the operative early total cervix occlusion, a new method of preventing recurrent late abortion and prematurity.

1989 Development of a complex prematurity-prevention-program, suitable for routine use by physicians. And 4 years later,

1993 Development of a prenatal care self examination by the patient herself for the prevention of prematurity, mainly by vaginal pH-measurement.

The most important honours which I received have been firstly the ERICH SALING PERINATAL PRIZE founded.

2000 by the World Association of Perinatal Medicine, which is awarded at each World Congress to the best scientist in Perinatal Medicine.

The second very important honour is that I have been chosen from the three leading scientific institutions from the World Association of Perinatal Medicine, the European Association of Perinatal Medicine and the Society «The Fetus as a Patient».

2005 as the first President of the International Academy of Perinatal Medicine, founded in such a ceremonial way in Barcelona.

Naturally it is a particularly great pleasure to receive appreciation and honor from so respected outstanding colleagues and: from a distinguished institution like your Academy.

Thank you so much.

Doc. 4

Words of thanks for the appointment becoming a corresponding member of the Royal Academy of Medicine of Catalonia on November 25th, 2006

Mr. President of the Royal Academy,

respected present authorities, distinguished audience.

First of all may I thank the three presidents, Prof. Asim Kurjak, Prof. Aris Antsaklis and Prof. Frank Chervenak very much for their initiatives and efforts to found and to establish the Academy and that they have nominated me as the president for the first 5 year period. Equally may I also thank Prof. José M. Carrera, our general secretary, who took over and performed the tremendous work of successfully preparing all the basic prerequisites in such detail for the foundation of our new academy.

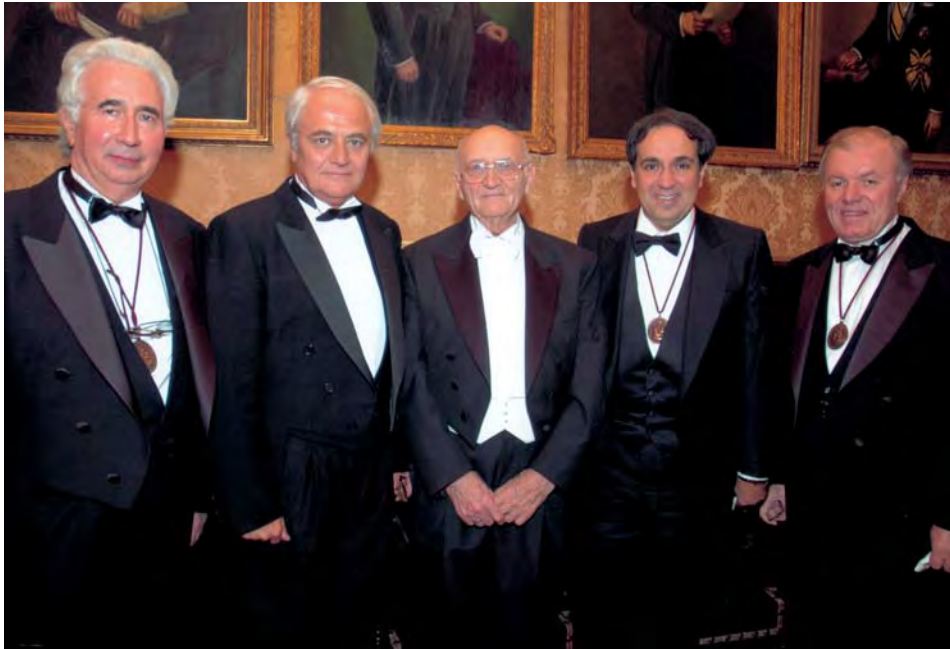
Let me shortly emphasize the importance of our field in which we all are involved.

As little as 45 years ago, the fetal heart sounds could be heard only with the aid of a primitive stethoscope. There was no other access to the unborn child.

How huge it became in the meantime and how advanced Perinatal Medicine presently is, can be illustrated by the Textbook of Perinatal Medicine edited in 1998 by Prof. Asim Kurjak. This work contains about 2,000 pages with 187 contributions prepared by more than 290 experts. Many colleagues and laymen are still not aware which breakthrough has been achieved in this new field. With the prenatal part –the main part of Perinatal Medicine– a new dimension of the entire human medicine has been created namely we brought forward the applied medicine for the first time in an earlier initially not accessible stage of the human life, the intrauterine period. Some of you who are assembled here today are highly successful architects of this new original and very important part of medicine.

It is a great honour and challenge for all of us –I mean the regular and the associated fellows– to have now a new important forum in the form of the just founded International Academy. This gives us optimal preconditions to continue building up this outstanding and so fascinating science of perinatal medicine which should be achieved with mutual understanding and close interdisciplinary co-operation, particularly between obstetricians and neonatologists. I will do my best to be the «primus inter pares» within the International Academy of Perinatal Medicine.

I thank you for this order and for this high honour.



The President (Prof. Erich Saling), the Vice-Presidents (Prof. Asim Kurjak, Frank A. Chervenak and Aris Antsaklis) and the Secretary General (Prof. José M. Carrera), after the Ceremonial Meeting (Barcelona, 2006).

Third meeting of the IAPM:

BUDAPEST, 23RD NOVEMBER 2007

The meeting was organised by Prof. Zoltan Papp, regular Fellow of the IAPM and professor and director of the 1st Department of Obstetrics and Gynaecology at Semmelweis University, Budapest, Hungary.

The annual meeting of the IAPM took place in accordance with usual procedure.

The INTERNATIONAL ACADEMY OF PERINATAL MEDICINE (IAPM) has the honor of inviting Regular Fellows to its

SOLEMN CEREMONY

for memorial resolutions to be held on November 23rd, 2007 at 10.00 a.m. in the Palace of the Hungarian Culture Foundation.

Professor Chiara Benedetto will say the memorial oration about fellow **Professor Giorgio Pardi**

and

Professor Kazuo Maeda will say memorial oration about fellow **Professor Shouichi Sakamoto**

José M. Carrera
IAPM General Secretary

Erich Saling
IAPM Chairman

Organ Recital at Budapest Matthias Church
12.00 a.m., November 23, 2007

Organ:

György T. Szeifert, MD, PhD, Professor of Neurosurgery on the great Rieger instrument of the Matthias Church

Program:

John Stanley (1712–1786): Trumpet voluntary

Johann Pachelbel (1653–1706): Canon in D

Johann Sebastian Bach (1685–1750): Jesus, joy of man's desiring (chorale from cantata 147)

Dietrich Buxtehude (1637–1707): Prelude, Fugue and Ciacona in C

Franz Liszt (1811–1886): Chorale from Weinen, Klagen

Programme of the Third Meeting of IAPM.

**08.30-09.30 h. ADMINISTRATIVE MEETING
OF THE INTERNATIONAL COUNCIL** (Regular Fellows).

Place: Anjou Room, Hilton Hotel. 20 regular Fellows attended the meeting.



Administrative Meeting of the International Council (Budapest, 2007).

The **agenda** consisted of the following points:

1. Minutes of the meeting held in Barcelona.
2. President's report.
3. General Secretary's report.
4. Treasurer's report.
5. Report on study group activities.
6. Information concerning the organisation of the Ceremonial meeting.
7. Election of new regular and associate Fellows.
8. Meeting of the IAPM.
9. Any other business.

The President's short report reviewed IAPM activities since the last meeting (doc. 5).

**Short report of the President for the Administrative Meeting
of the IAPM**

Doc. 5

Dear Fellows,

May I welcome you to the 3rd Meeting of our Academy.

Fortunately, contrary to my rather critical attitude during the previous –the 2nd– Administrative Meeting in Barcelona, we can state that our Academy in the meantime has developed a few more activities, which have enhanced our reputation.

The scientific meeting which was held on November 26th, 2006 in cooperation with the World Academy of Art and Science, and Royal Academy of Medicine of Catalonia was focused on «Globalisation and Perinatal Medicine» a current and important field.

During the same occasion some projects and study groups were also initiated. In cooperation with the WAPM and Matres Mundi an Integral Plan for the reduction of maternal mortality in Africa has been designed in August of this year.

Further in September of this year the Recommendations and Guidelines for Perinatal Medicine prepared on the initiative of the WAPM and Matres Mundi in cooperation with our Academy have also been presented during the 8th World Congress of Perinatal Medicine in Florence.

The program of the present meeting, which will be held today, is an impressive collection of high level contributions taken from quite different current fields of Perinatal Medicine presented from a more paramount viewpoint.

Now may I report on an outstanding example, namely an important event in which our Academy was involved as a cooperating institution.

Prof. Frank Chervenak, who was an active participant at the meeting in question, was kind enough to send me some more details.

On September 29th, 2007 a Symposium on Facts and Doubts about the Beginning of Human Life was held in Zagreb, Croatia organized by Prof. Asim Kurjak. The meeting was really special because it addressed a topic that is sometimes neglected although it has challenged mankind for thousands of years: «The Beginning of Human Life».

Major religions groups, including the Roman Catholics, the Jews, Buddhists, Islam, and Orthodox Christianity were represented by world leaders. These contributions were complemented by thoughtful presentations on evolution, genetics, cloning, scientific visualization of early life, sociology, conception without the development of human life and secular ethics.

This congress, arranged by one of the host organizations (The World Academy of Art and Science) which represents «Unity in Diversity», was a highly successful meeting-point. The myriad viewpoints were respected by all participants since attention was given to individual religious beliefs. It was an excellent example of how our International Academy of Perinatal Medicine, The World Academy of Art and Science, and the Academy of Medical Sciences of Croatia could work synergistically to achieve a coordinated, comprehensive intellectual interchange of the highest order.

All participants left the congress a little wiser and a little more humble about their vision of reality about the beginning of human life.

This was an event which really fully upholds the dignity of our Academy.

Another event of great importance is just approaching during this meeting. This is the publication of the Budapest Declaration of «Ethical Challenges of Genomics for Perinatal Medicine».

Let us now continue with the next item on the Agenda.

10.00-12.00 h. CEREMONIAL MEETING

Place: Palace of the Hungarian Cultural Foundation, Budapest.

Attendance consisted of the same regular Fellows who were present at the Administrative Meeting.

The regular Fellows entered the room in alphabetical order, followed by the members of the Board of Directors in order of precedence.



Ceremonial Meeting, Budapest, 2007.

The event consisted of two parts: in the first, following the President's speech of welcome (doc. 6), the General Secretary read out the minutes of the last meeting and the President of the International Academy, Professor Erich Saling, opened the Academy's new year with the customary report on the «state of the Academy». Afterwards, two regular Fellows, Prof. Chiara Benedetto and Prof. Kazuo Maeda, gave a memorial oration in memory and honour of the regular Fellows who had died during the past year: Prof. Giorgio Pardi of Italy and Prof. Shouichi Sakamoto of Japan.

Presidential Address during the Ceremonial Meeting of the Academy**Doc. 6**

Dear Fellows,

Our Academy consists of a worldwide selection of highly efficient, productive, powerful and competitive experts. This great potential gives our institution, which is only two years old, the chance to influence and steer important sectors of development of our interdisciplinary field of Perinatal Medicine.

Fortunately in the meantime our activities have become more extensive.

Apart from our specific scientific field, some of our Fellows are also trying to get representatives from other scientific sectors involved, respectively even

from different sections of our society –for instance influential politicians and world leaders– to join and support us in achieving adequate progress.

Our arguments are convincing. We and they must be made aware of what is happening now in our new field of medicine. We are discovering the uterine space more and more from many angles, and with this knowledge we can achieve tremendous improvements of applied medicine before birth, which will be increasingly beneficial to all human beings in the near future.

We should be aware that we are the first generation that can make use of such great chances at all.

Further I would also like to include in my short speech some words of recognition and of thanks concerning the activities of our Secretary General, Prof. José M. Carrera.

From the very beginning our Academy, besides its own special kind of style. This undoubtedly has its origin, in Prof. Carrera's creativity. After having received the very first circular of the precisely elaborated minutes of the Ceremonial Meeting and having been additionally asked to bring tail coats, most of us had reservations as to whether this was really an up-to-date way. But after having worn these noble clothes and having followed the strong ceremonial procedure the majority of us had the good feeling of not only being academic, but also aristocratic.

Prof. Carrera is a master; with his talents he has brought us back to the good old academic tradition, which at the present time is rarely seen, and to a certain extent not known anymore.

But dear José this is only one of your great merits. You have contributed so much to International Perinatal Medicine in several other directions and it would be a serious loss to our Academy if you would definitely finish your activities as Secretary General, as you have considered.

May I ask you –also on behalf of all the Fellows– to continue your activity in this so important position within our Academy!

The last part of my report is unfortunately sad.

On principal our Academy is comparable with a living organism, in that it is subject to similar changes and events. On the one hand our institution is still extremely young, but on the other hand it has already had to lament the first deaths. These are particularly regrettable because both the Fellows who died were not only outstanding experts in Perinatal Medicine but were also historic monuments.

Prof. Sakamoto in his paternal role as the co-founder of the 1st Intercontinental Institution of Perinatal Medicine and

Prof. Pardi, who was one of the very first Italian pioneers of Perinatal Medicine who joined us in Berlin at the very early stages of our interdisciplinary field. We are deeply affected by the loss of both of our important Regular Fellows.

May I ask you please to stand for a moment of remembrance... thank you.

And now we will proceed to remember the deceased regular fellows and pay respect to them in greater detail.



IN MEMORY Prof. GIORGIO PARDI,

by Chiara Benedetto

Mr. President, Prof. Saling, Officers, fellow members, ladies and gentlemen,

His demeanor was imposing, his character vivacious, and his legacy immeasurable and it goes without saying that we will all miss Giorgio Pardi very much.

His CV starts in this manner: «In 1962 I started working in the Institute of Pathology at the University of Milano where I learned how to design and perform studies with experimental animals, perform autopsies, mainly fetoneonatal and began the study of perinatal anatomy».

In 1969 he won a «Fulbright-Hays Act» Grant for Research in Obstetrics at the University of Southern California, Los Angeles. Upon his return he began his Academic career at the University of Milano and set up a Perinatal Medicine center, in the Mangiagalli Hospital. In this period he started a fruitful and long lasting collaboration with other great Italian «Masters» in Perinatal Medicine who have marked the history and development of this sub-specialty.

In 1986 he became Full Professor of Obstetrics and Gynecology and Chairman of the department of Obstetrics and Gynecology at the San Paolo Hospital. There, he was assisted by a large group of young, motivated fellows involved in research projects, as well as in clinical duties. Together with the traditional areas of gynecology and maternal-fetal medicine he started a program of assisted reproduction with an innovative section dedicated to HIV-discordant couples.

In 2002 he became Chairman of Obstetrics and Gynecology at the Mangiagalli hospital where he set up a new Maternal Fetal Medicine Center in strict collaboration with the different clinical areas involved, namely neonatal intensive care, and labor and delivery units. He did all this thanks to a private donation.

At the time he was also Director of the Department of «Women, neonate and child's health» unifying the clinical areas of OBGYN and pediatrics, which represent approximately one third of the clinical activities of the new «Policlinico Foundation».

Among the honors he received during his outstanding career we remember his Presidency of the Italian Society of Perinatal Medicine, of the Society of Obstetrics and Gynecology of Lombardia which he brought back to life making it one of the points of reference of the Health System in Lombardia.

He was member of the Consiglio Superiore di Sanità and president of the Italian Association of Academic Obstetricians and Gynecologists. In 2005 he was nominated Grande Ufficiale by the President of the Italian Republic and honorary member of the American Gynecological and Obstetrical Society. Last but not least he became a regular fellow of this International Academy of Perinatal Medicine in 2005.

There is no doubt that Giorgio Pardi played a unique and pivotal role in transforming Italian Obstetrics and Gynecology into a modern clinical science. Since the beginning of his career he was determined to move obstetrical re-

search forward and he showed great foresight in recognizing the fundamental importance of ensuring a new generation of young obstetricians who shared his vision of obstetrics and the potential in research.

He promoted research aimed at fundamental questions regarding human pregnancy specifically maternal and fetal metabolism and nutrition, and pioneered many of the studies which used cordocentesis for clinical use and research. What's more, he also understood the importance of developing techniques to assess fetal well being which included evaluation of the maternal and fetal cardiovascular system. Many of his collaborators played a key role in developing and completing landmark studies in human biology involving assessment of fetal circulation through velocimetry studies.

Professor Pardi's vision was all encompassing and included research developments in many areas of reproductive technologies, in genetics and in placental pathology. When he returned to the Mangiagalli Hospital as Chairman of Obstetrics and Gynecology, he coordinated research activities with his closest pupils to form an exceptional research network which brought together professionals working in the three main university hospitals in Milan.

Furthermore, we have to recognize Giorgio's incredible energy, determination, and his impatience to move the field forward. What has always been unmistakable was his generosity to all those around him and his determination to promote and advance the science of obstetrics through the improvement in training standards and in the goals he set for young people. He was always ready to discuss for hours as equal with fellows, students and residents. Great teacher, curious, always ready to learn in a «give and take» approach involving the person he was talking to, regardless of his or her role.

Knocking at his door you would always get an answer even in busy or difficult times.

He will be looked back on as a true pioneer in the field of Perinatal Medicine and his scholarship, integrity, mentorship and the close friendship he developed with many of his colleagues will forever be remembered by those who had the fortune to work alongside him.

I am sure he is among us, for there is a piece of him in each of our hearts. Goodbye Giorgio, you will continue to live through our work.



IN MEMORY Prof. SHOUICHI SAKAMOTO

by Kazuo Maeda

Mr. President Prof. Saling, Officers, fellow members, ladies and gentlemen,

It is with great sadness that we mourn Prof. Shouichi Sakamoto, who was born in 1924, and we were almost the same age. We first became friends after the war.

It was around June 1945, when he was a Japanese navy lieutenant commanding the navy air-force in the Kyushu islands of Japan during the final stage of the

2nd World War, and I was studying medicine at Kyushu University on the island. Although we expected extensive ground combat in the Japanese islands, which might kill both of us, we fortunately did not meet the terrible fighting and survived after the surrender of the Japanese troops in August of that year. Afterwards Sakamoto studied medicine at Tokyo University and graduated in 1950. He entered the Dept. of Obstetrics and Gynecology at Tokyo University Hospital where he excelled in endocrinology and biomedical engineering, and we both shared a similar research interest in fetal monitoring.

He was appointed Professor and Chairman of the Dept. of Obstetrics and Gynecology at Tokyo University in 1970, and he chaired the perinatology committee of the Japan Society of Obstetrics and Gynecology. He was a founder of the Japanese Perinatology Society, and contributed to the progress of gynecology, obstetrics and perinatology through the International Federation of Gynecology and Obstetrics (FIGO), the World Association of Perinatal Medicine (WAPM), the International Academy of Perinatal Medicine (IAPM) and other various societies.

He was a non-rotating member of the FIGO Executive Board and later became a Vice President. At the FIGO congress in Moscow in 1973 he proposed Japan as a future congress venue. I remember Prof. Saling kindly congratulating us at Moscow after the Board decided to hold the 9th congress in Tokyo. Afterwards, Sakamoto and the Japanese people successfully organized the 9th FIGO World Congress of Gynecology and Obstetrics in Tokyo in 1979. There was a large ultrasound symposium at the congress. Prof. Kratochwil of Vienna and I organized the session, where Prof. Kurjak was invited from Yugoslavia, for his first visit to Japan. I presented the conclusions of the national study group on the bioeffect and safety of ultrasound which was chaired by Sakamoto and myself.

Prof. Sakamoto became an honorary Professor in 1984 and moved to the Tokyo Women's Medical University, where he was appointed Dean of the Mother and Child Medical Care Center, and Prof. Nishida was appointed Professor. Surprising progress was made in the survival of very low birth weight infants in the Neonatal Intensive Care Unit of the Center by the efforts of Sakamoto and Nishida.

Prof. Sakamoto became President of the Federation of Asia-Oceania Perinatal Societies in 1986, and President of the Japan Association of Obstetricians and Gynecologists in the same year. In 1991, Sakamoto was appointed as the first President of the World Association of Perinatal Medicine, and he successfully organized the first World Congress of Perinatal Medicine in Tokyo, with the Emperor and Empress present at the inauguration. The Japanese Emperor had free discussions with Prof. Kurjak and attendants at the reception after the opening ceremony.

Prof. Sakamoto was made a Fellow of the Federation of Asia-Oceania Perinatal Societies in 1992 and President of the International Association of Maternal and Neonatal Health in 1994. I also remember the first meeting of the International Academy of Perinatal Medicine in 2005 in Barcelona, where Prof. Sakamoto was nominated as a regular Fellow of the Academy.

He became the Dean of the AIKUKAI Institute Hospital, and he was in charge of the Royal Family doctor for a number of years. In 1991 he received the FIGO

medal and he was also awarded the Japanese Order of the Sacred Treasure in 2001. In addition, he was an excellent painter of portraits, and was famous for his paintings of Japanese mothers and the infants.

He said farewell to us at the meeting of the Japan Society of Perinatal and Neonatal Medicine in July 2006 before his admission to hospital due to a hepatic lesion, but he recovered to return to his daily work. However unfortunately he relapsed with a malignant disease, reported to be malignant lymphoma, and was ill for some months in 2006, before he passed away on December 28, 2006.

I remember Prof. Shouichi Sakamoto as a great organizer, excellent perinatologist, wonderful teacher, good physician and a fine artist.

May we all pray that his soul rests in peace.

Thank you.

In the event's second part, the General Secretary, Prof. José M. Carrera, read out the document officially designating two new regular Fellows: Prof. Yves Ville (from France) and Prof. Robert Brent (from the USA). The members nominated will receive their diplomas and medals at the next IAPM meeting, to be held in 2008.

Immediately thereafter, Prof. Zoltan Papp delivered a few words as the meeting's host and finally, Prof. Asim Kurjak, the Academy's first Vice-President, made a brief speech about the Academy's future on behalf of the International Council and the IAPM's Board of Directors and closed this Academy ceremony (doc. 7).



Reading of appointment of news regular fellows and annual report of IAPM.

Speech of Prof. Asim Kurjak, Vicepresident of the IAPM, Closing ceremony of IAPM meeting, Budapest 2007

Doc. 7

Mr. President, Officers, fellow members, ladies and gentlemen,

Perinatal medicine is at a stage when we can recognize only clinical syndromes rather than distinct disease entities caused by specific pathological mechanisms.

This is true of each of the five conditions: premature labor/delivery, premature rupture of membranes, small for gestational age, congenital anomalies and preeclampsia.

The biggest challenge is to define the pathophysiological mechanisms underlying our great obstetric syndromes at the molecular and cellular levels.

They must be identified early enough to allow intervention to prevent not only the clinical manifestation of disease but the long-term handicap it causes.

Extraordinary progress has been made in perinatal care during the last half century, something for which we can all rejoice and be proud. But there is still much to do.

At the very beginning of the 21st century, it is clear that the developments of the last century will fundamentally change many aspects of today's world. Modern communications technologies are changing the societal and economic structures, and our knowledge is growing at a speed that would have been unthinkable only a few years ago.

Ideas that provoke thinking, ideas that may be able to even trigger changes, *think on* is an expression of our conviction that we as an Academy carry an obligation to think about the ideas and concepts that could take our Academy further.

The future rests on our past.

With the rapid development of information and communications technologies, industrial nations are transforming into societies in which knowledge is the most contested and valuable good.

Since time immemorial, science has been competing for the best minds and the best conditions for them to work in.

In addition to scientific excellence, standards of research can and must be viewed under the guidance of ethical standards. Which standards does a community commit itself to uphold? This issue can relate to questions of human dignity, as in the current debate about whether embryonic stem cells should be used in research and the cloning discussion. It can relate to ideal values such as peace and humanity, as in the 20th-century debate about atomic and hydrogen bombs.

Everyone knows that without the uncertainty of the new, nothing new is possible. To try to prevent this in one way or another would be fatal for science, as well as for our society as a whole.

Research means thinking ahead. Research means recognizing challenges and taking responsibility for the new. The freedom needed for this is now an international standard, to which we must adapt. The question of the development of such standards for research can therefore not be posed frequently and persistently enough.

Too little is known about what genetic engineering actually is, about what stem cell research actually entails, about what brain research can accomplish. Superficial knowledge fuels more fears than is necessary and sometimes leads to absurd laws that would never have emerged if there were real scientific understanding. I don't think we can ever know enough.

We should be futuristically thinking scientists.

But, there is something else! We have to admit that we are components in an ongoing evolutionary process whose final point we cannot determine. That is the insight that we will err many times if we want to make progress. Therefore we need a new culture of tolerance for error, in which the error is seen as a constitutive part of acting. The person erring should not even have to apologize. He should regret it, but it can't be held against him. If he assumes responsibility and does something that turns out differently from what he thought, he has to be given mercy, because when attempting to steer these complex systems error is constitutive, unavoidable. Humility comes when one sees that this is what reality is and that one should not make pompous promises that can't be kept.

On account of great increases in knowledge about the molecular bases of pathogenesis and the course of illnesses, new therapeutic approaches will be found almost per-force. Much more attention will be devoted to the subject of individual diagnostics and possibly personalized treatment, that is, treatments tailored to individual people, or better, a group of people with a similar clinical picture and a similar genetic background, with better results than we can imagine today. But whether society will be in a position and have the will to pay for these therapies, is an open question.

And this Niagara of information has to be organized and codified. As you all know early attempts at such codification resulted in various religious beliefs, and only later did these beliefs give rise to science. As we know, astronomy eventually arose from astrology, chemistry from alchemy, and history from mythology.

We will be able to make these remarkable advances because of a growing understanding at the molecular level of how brains work, and a new understanding of the evolutionary relationships between ourselves and our closest relatives.

In our great enthusiasm we should not forget important fact of life! A fact of life is that close to 1.5 billion people in the world live in extreme poverty, a situation which is particularly stark in the developing world, where 80% of them live.

Poverty has a woman's face; of the world's 1.3 billion poorest, only 30% are male.

Furthermore, for 90% of the pregnancies and deliveries in our world, the reality is very different. Poverty is one of the most influential factors for illness, and illness—in a vicious cycle—can lead to poverty. Education has proven to be a critical strategy to break this cycle.

Big question is how can we change?

Fortunately, there are ways in which our actions can help these women in the long run.

One is research. The development of research partnerships between developing and industrialized countries will not only help to combat the global inequity of health but will also be of enormous mutual benefit for all.

Pregnancy, childbirth and being a newborn are not diseases—they are special

periods in human life when the risk of death or disability can be very high. This must be understood clearly by all: from medical, nursing and mid-wifery schools, from research funding bodies to industry and governments. Not understanding or knowing well the normal can lead to abuse of technology and iatrogenic complications.

Obviously, global problems can be solved by global efforts. Even a modest personal contribution to this global tragedy will be our moral duty.

This will help to promote the idea that today's men and women are able to find mutual support, understanding and encouragement in diversity as the best way to grow as people in a more equitable and supportive society, where no one is excluded.

The IAPM should be responsible for research and education. It has the potential of being a leading influence in the world of Perinatal Medicine.

We represent the best the World has to offer in Perinatal Medicine. Let us work together to make the World of Perinatal Medicine a better place.

To conclude the formal ceremony, the Children's Choir performed *Gaudeamus Igitur*, which we all listened to standing up.



The regular fellows that attended the Third Meeting.

Subsequently, the regular Fellows went to Matthias Church to be present at an Organ Concert specially dedicated to Academy members.

14.30-18.30 h. SYMPOSIUM (IAPM Annual Conference)

Place: Hilton Hotel ballroom, Budapest.

The symposium was organised by Prof. Zoltan Papp, with the agreement of the IAPM Board of Directors.

The subject of the meeting was «Scientific and Ethical Controversies in Prenatal Diagnosis and the New Challenge of Prenatal Molecular Genetic Testing».

Moderators: Professors Erich Saling and Zoltan Papp.

Katalin Szili, President of the Hungarian Parliament: welcome address.

Roberto Romero **Genetic and environmental factors in the genesis of foetal anomalies.**

Kypros Nicolaides **Biochemical and ultrasound screening of foetal aneuploidies.**

Asim Kurjak **Ultrasound in prenatal diagnosis.**

Aris Antsaklis **Invasive procedures in foetal diagnosis.**

Birgit Arabin **Prenatal diagnosis and management of multiple pregnancies.**

Manuel Carrapato **Genetic screening programs in the newborn period.**

Moderators: Professors Frank A. Chervenak and Asim Kurjak

Wolfgang Holzgreve **State of the art prenatal molecular diagnosis and screening.**

José Maria Carrera **Bioethical and legal practical aspects of prenatal diagnosis.**

Joseph Schenker **Ethical considerations of pre-implantation diagnosis.**

Zoltan Papp **Attitudes of couples to prenatal diagnosis in genetic counselling practice.**

Frank A. Chervenak **Prenatal molecular genetic diagnosis and screening. Present and future ethical challenges.**

Discussion and conclusion: BUDAPEST DECLARATION OF THE IAPM ON THE NEW CHALLENGE OF PRENATAL MOLECULAR GENETIC TESTING.

18.30-19.15 h. On Conclusion of the Scientific Meeting,
the **second part of the ADMINISTRATIVE MEETING** took place,
which had been interrupted in the morning.

On this occasion, the regular Fellows reached agreement in choosing and nominating 20 Associate Fellows, who will receive the relevant Diploma at the Annual Meeting in New York (2008).

The International Council

appointed as Associated Fellows the following personalities:

Vincenzo D'Addario (from Italy)
Badreldeen Ahmed (from Qatar)
Ana Bianchi (from Uruguay)
Isaac Blickstein (from Israel)
Xavier Carbonell (from Spain)
Tao Duan (from China)
Anne Greenough (from UK)
Tsuyomu Ikenue (from Japan)
Torvid Kiserud (from Norway)
Zhera Nese Kavak (from Turkey)

Eberhardt Merz (from Germany)
Anton Mikhailov (from Russia)
Giovanni Monni (from Italy)
Ritsuko Kimata Pooh (from Japan)
Stephen Courtenay Robson (from UK)
Kohei Shiota (from Japan)
Milan Stanojević (from Croatia)
Dharmapuri Vidyasagar (from India)
Radu Vladereanu (from Romania)
Liliana Voto (from Argentina)

The meeting finished with a Dinner at the venue of Hungarian Parliament, presided by its President Dr. Katalin Szili.



The regular fellows in Hungarian Parliament with the President Dr. Katalin Szili.

Dr. Katalin Izli,
the President of the Hungarian Parliament *and* *Professor Zoltán Papp,*
the Host of the Third Meeting of the I.A.P.M.

request the pleasure of your company

at a Dinner on Friday, November 23, 2007
from 8.00 p.m. to 10.00 p.m.

on the occasion of the

Third Meeting of the International
Academy of Perinatal Medicine.

Parliament Building
Budapest

Bus leaves at 7.30 p.m. from the Hotel Hilton lobby.

Invitation to Dinner in Parliament Building.



Prof. Zoltán Papp, organizer of the Third Meeting of IAPM (Budapest, 2007) in the rostrum of Hungarian Parliament.

Fourth meeting of the IAPM:**NEW YORK, 6 – 7TH JULY 2008**

The meeting was organized in New York by Professor Frank Chervenak with following program:

July 6, 2008

08:00 - 10:30: **CEREMONIAL MEETING**

Place: Cornell Medical Center, New York

New regular fellows:

1. Yves Ville (France)
2. Robert Brent (USA)

New associate fellows:

- | | |
|------------------------------------|-----------------------------------|
| 1. Vincenzo D'Addario (Italy) | 11. Eberhard Merz (Germany) |
| 2. Ahmed Badreldeen (Qatar) | 12. Anton Mikhailov (Russia) |
| 3. Ana Bianchi (Uruguay) | 13. Giovanni Monni (Italy) |
| 4. Isaac Blickstein (Israel) | 14. Ritsuko Pooh (Japan) |
| 5. Xavier Carbonell (Spain) | 15. Steve Robson (United Kingdom) |
| 6. Tao Duan (China) | 16. Kohei Shiota (Japan) |
| 7. Anne Greenough (United Kingdom) | 17. Milan Stanojevic (Croatia) |
| 8. Tsuyomu Ikenue (Japan) | 18. Dharmapuri Vidyasagar (India) |
| 9. Torvid Kiserud (Norway) | 19. Radu Vladareanu (Romania) |
| 10. Zehra Nese Kavak (Turkey) | 20. Liliana Voto (Argentina) |



Gospel singers who provided the choral accompaniment



Group photo, fellows of IAPM in front of Cornell Medical Center

11:00 ADMINISTRATIVE MEETING of the International Council

Place: Cornell Medical Center, New York

Agenda:

1. Minutes of the meetings held in Budapest (J.M. Carrera)
2. Report of the President (E. Saling)
3. Report of the Secretary General (J.M. Carrera)
4. Report of the Treasurer (B. Arabin)
5. Report of the Study Groups Activities (A. Kurjak)
6. Information about Ceremonial and Scientific Meeting.
7. Presentation of book "IAPM: History, organization and activities".
8. Next Meetings of IAPM. Report of organizers: 2009 Dubrovnik (A. Kurjak), 2010 Athens (A. Antsaklis), 2011 Paris (S. Uzan).
9. Any other business.

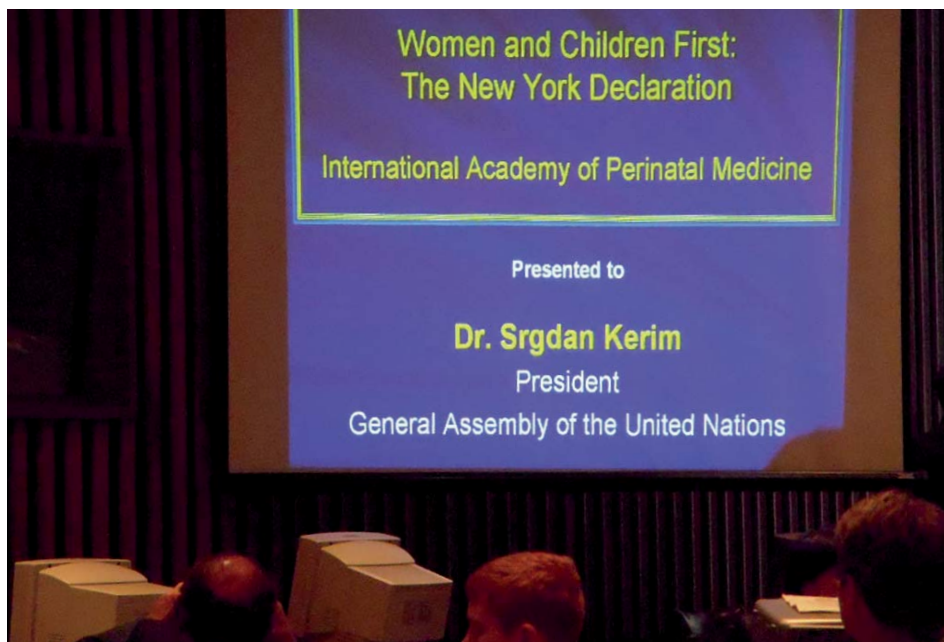


Board meeting at Cornell Medical Center

July 7, 2008

13:00 - 15:00: RECEPTION WITH PRESIDENT AND INVITED DELEGATES OF UN

Venue: United Nations, New York



United Nations General Assembly Hall before adoption of the Declaration Women and Children First

Statement by the President of the General Assembly, H. E. Mr. Srgjan Kerim, on the occasion of the presentation of the New York Declaration on Women and Children First, International Academy of Perinatal Medicine United Nations, Conference Room 1, July 7, 2008

Dr. Chervenak, Ladies and Gentlemen,

I am pleased to join you this afternoon on the occasion of the presentation of the International Academy of Perinatal Medicine's New York Declaration on WOMEN AND CHILDREN FIRST.

Universal access to healthcare for women and children worldwide is a priority of the United Nations General Assembly, endorsed by world leaders at the historic adoption the Millennium Development Goals in 2000.

Among the eight ambitious human development targets set out in Goals, are; goal 3 to promote gender equality and the empowerment of women; goal 4 to reduce child mortality by half by 2015 and; goal 5 to significantly improve maternal health.

There are other goals focused on - eradicating extreme poverty and hunger; achieving universal primary education and; combating HIV/AIDS, malaria and other diseases, which also have a significant bearing on the lives and health of women and children.

None of the Goals can be achieved in isolation from the others. In order to achieve them on time by 2015, we must remember their interconnectedness and strive to develop comprehensive policies and implement them effectively.

Women who live in extreme poverty and who are deprived of education will have little opportunity to access the information and services that could be life-saving for them and their children.

Success stories do exist. For example, with support from the World Health Organization and UNICEF, Vietnam has led an immunization program for pregnant women, which has eliminated maternal and neonatal tetanus - also known as “the silent killer,” - a life threatening disease that affects mostly newborns in poor communities in developing countries.

Many countries have launched national campaigns to end obstetric fistula, a treatable injury consisting of a hole in the birth canal which, without prompt medical intervention, causes much suffering, humiliation and discrimination, as well as chronic medical problems.

Most affected women do not know that the condition can be treated or either cannot afford the treatment. However, greater attention at the international level combined with growing political will at the national level is creating more effective frameworks for partnerships with the private sector and civil society to address this issue.

Still, much faster progress is necessary in all areas of the world to ensure that women and children can live healthy and productive lives.

Lack of access to education, harmful practices such as female genital mutilation, insufficient investment in research and technology on women and children’s needs, a lack of health care services tailored to women and children, and cultural restrictions and taboos are both development challenges and human rights issues.

HIV is another disease that disproportionately affects women and girls. At the recent High-level Meeting of the General Assembly to review progress on the implementation of the Declaration of Commitment on HIV/AIDS, we concluded that increased financial resources and investment in health-care systems in developing countries was necessary to provide universal access to treatment, as well as to prevent the disease from spreading further.

Health policy leaders have an ethical responsibility to take into account the needs of those who are under-represented in the policy-making arena. But

they cannot make progress alone. Only through partnership with other sectors, including the scientific and research community, the private sector, the media and communications industry, and women and children themselves, can substantial progress be made and maintained over the long-term.

I salute your dedication to raising awareness among the scientific community about constituencies and issues that are too often neglected. I am confident that your efforts and commitment will inspire action and ensure a better understanding of where policymakers and the healthcare system have fallen short and how current weaknesses can be corrected.

Last, but certainly not least, we must all work together to ensure that women are equally represented at the policy-making level, as well as in the higher echelons of the health care system, and in the research community. Only then will their needs be adequately reflected in policy, and in practice, including through necessary budgetary allocations.

I would like to conclude with the proverb:

“If you educate a man you educate an individual, but if you educate a woman you educate a nation”.

The same principle can be applied to health. Improving women’s health will undoubtedly improve the health of societies as a whole, because through women’s empowerment lies the potential of progress for all humanity and hope for future generations.

Thank you.



The New York Declaration Women and Children First signed by fellows of IAPM in United Nations

Fifth meeting of the IAPM:

DUBROVNIK, 29TH OCTOBER – 2ND NOVEMBER 2009

The meeting was organized by Professor Asim Kurjak with following program:

October 31, 2009

08:00 - 10:30: **ADMINISTRATIVE AND CEREMONIAL MEETING**

Place: Marin Držić Theatre

Agenda:

1. Minutes of the meeting held in New York (J.M. Carrera)
2. Report of the President (E. Saling)
3. Report of the Secretary General (J.M. Carrera)
4. Report of Treasurer (B. Arabin)
5. Report of the Study Groups Activities (A. Kurjak)
6. Next Meetings of IAPM. Report of organizers
7. Any other business



Walk of IAPM fellows from hotel to Marin Držić Theatre, venue of the IAPM meeting



Prof. Kurjak reads welcome address from Mr. Stjepan Mesić, President of Republic of Croatia



Welcome address from Mr. Stjepan Mesić, President of Republic of Croatia



Fellows of IAPM in Marin Držić theater at the beginning of the meeting



In memoriam to Professor Angel Ballabriga presented by Luis Cabero, regular fellow of IAPM

New associate fellows:

1. Tao Duan (China)
2. Tuyomu Ikenoue (Japan)
3. Kohei Shiota (Japan)

Elected in New York but were not able to attend the New York meeting.



New associate fellows of IAPM reading the oath in front of IAPM secretary general JM Carrera

The President of Croatian Perinatal Society, Prof. Boris Filipović-Grčić, delivered the Special Diploma to Prof. Erich Saling, president of IAPM



The President of Croatian Perinatal Society, Prof. Boris Filipovic Grcic, delivered the **Special Diploma** to Prof. Erich Saling and **Honorary Membership** to Professors:

1. Frank Chervenak
2. Jose Maria Carrera
3. Xavier Carbonell
4. Roberto Romero
5. Aris Antsaklis



Fellows of IAPM with the president of Croatian Perinatal Society Prof. Boris Filipović-Grčić in Marin Držić theater after the ceremony of special diploma and honorary membership delivery



Fellows of IAPM in front of Marin Držić Theater after the IAPM ceremonial meeting



Asim Kurjak
Closing speech on the occasion of
IAPM administrative and ceremonial meeting

Marin Drzic Theater, Dubrovnik, Croatia
Saturday October 31, 2009

The aim of IAPM is to address the most pressing issues that medicine and health care systems will face over the next decade and beyond and to develop cogent and timely responses regarding the perinatal health of populations worldwide. It is our hope that the symposium's results and Declaration will serve political, economic, and health care decision-makers with their advice and function as a roadmap for the future. In this way and as a global medical forum, the IAPM aims at high visibility and sustainability.

We need cogent and timely responses to the urgent questions arising from worldwide demographic trends, the financing of medical progress and innovation, the understanding of the potentials of medical research and health economy, and to emerging medical issues. Among these are health-related consequences of climate change, international pandemic strategies, and the impact of the financial crisis on global health and health care.

The time is right to start this initiative now. We are in the midst of a financial crisis under conditions of global interdependency. The relatedness of economic stability and national and individual health is well known. We have to face the consequences that lie ahead. We have to be aware of this potential and the responsibilities which go along with it. We face a rapid development of new technologies and at the same time a closer inter-relationship between medical research and economic forces and technology. We must confront many complex questions: how much medical progress can our health care systems cope with and what are the consequences and implications of that progress? Health is on the public agenda more than ever in the history of mankind but what can we afford? We draw upon and benefit from human and material resources from all over the world – but how can we best sustain and regenerate these valuable and necessary assets?

Dear members of IAPM, we ask you to join us in this quest as we face the challenges, search for answers, and develop a vision of global proportions.

Progress in medical care and medical research is developing with enormous speed. Pharmacotherapy and molecular medicine are moving towards a personalized approach opening new possibilities to tailor treatment to individual needs; modern neuroscience has opened the way to a completely novel understanding of diseases of the brain as new IT-based technology allows microsurgery and remote telemedical patient care systems.

Scientific progress is costly. New possibilities bring along new obligations to distribute the results of medical progress to every patient. The question remains

urgent and open if and how we can afford an equal translation of progress to all parts of the population. At the same time, the financial crisis and macroeconomic factors such as an aging population and insufficient public funding emerge as growing challenges for health care providers and for society in general.

We need new models of promoting and insuring perinatal health, and for delivering care. This task can only be solved by joint effort of those who produce medical progress, those who pay for it, those who market health and those who develop political and economic strategies for health care and research.

IAPM should become global medical forum, together with many partners from governments, industry and non-governmental organizations worldwide. It is in our common interest to solve the questions which arise by medical progress in a globalized world. We need to clarify the prerequisites for continuing our scientific work and for delivering its fruits to expectant mothers and their unborn and newborn children.

With its integrative character established to have an advisory role for governments, business, policy makers, and health-care professionals.

Reports at our Academy scientific meeting are providing the best scientific information available on how to improve their health and reduce the risk of illness and injury. Prematurity and its prevention is well suited to fit these criteria. It is hoped that Dubrovnik declaration will have high visibility and highlights critical areas of public health, with many ways to communicate the findings.

Almost all speakers have outlined gaps and recommended steps that must be taken. It is now up to the Academy and profession to take the lead addressing this growing critical issue affecting the world, women, and children each day.

11:30 -20:00: SYMPOSIUM on PRETERM BIRTH: PREDICTION, PREVENTION AND OBSTETRIC AND NEONATAL TREATMENT

Place: Hotel Hilton Imperial

Chairpersons: F.A. Chervenak, B. Arabin, M.R.G. Carrapato

Welcome and introduction, greetings from the hosts

Asim Kurjak, Croatia

Opening Lecture

Erich Saling, Germany: **Current problems in prevention of premature birth**

Keynote Address

Roberto Romero, USA: **Mechanism of disease for preterm parturition**

Pedro Barri, Spain: **Reproductive medicine perspective: Single embryo transfer in the prevention of prematurity**

Frank Chervenak, USA: **Ethics of prematurity**

Chairpersons: L. Cabero, J.W. Dudenhausen, K. Maeda

Joseph Schenker, Israel:	The Frequency, Obstetrical circumstances and burden of disease
Joachim W. Dudenhausen, Germany:	The diagnosis of preterm labor with intact membranes
Birgit Arabin, The Netherlands:	Delayed interval delivery in multiple pregnancies
Zoltan Papp, Hungary:	Cervical cerclage for preventing preterm birth
Luis Cabero, Spain:	The Pessary for preventing preterm birth
Roberto Romero, USA:	Progestins in the prevention of preterm birth
Yves Ville, France:	The use of ultrasound in preterm labor
Robert Brent, USA:	Immunization of women in reproductive age and pregnant women: A strategy to prevent preterm birth and neonatal disease
Gian Carlo Di Renzo, Italy:	Tocolysis: when, which and to whom?
Giampaolo Mandruzzato, Italy:	Steroids: Single vs. repeat courses
Manuel R.G. Carrapato, Portugal:	Long-term outcome of the preterm neonate around the limits of viability
Chiara Benedetto, Italy:	Diagnosis of PROM: Newer approaches
Zehra Nese Kavak, Turkey:	PROM in multiple pregnancies
Radu Vladareanu, Romania:	The diagnosis of subclinical infection
Cihat Sen, Turkey:	How should the fetus with preterm PROM be monitored?
Anton Mikhailov, Russia:	The management of PROM between 22 and 26 weeks
Stephan Schmidt, Germany:	Caesarean section in cases with very early gestational age -- prospective trials
Radu Vladareanu, Romania:	Antibiotic administration in preterm PROM

20:30 -21:15: Folk Ensemble Lindo*Place:* Lazareti

Folk Ensemble Lindo performing in old Lazareti Palace

November 1, 2009

08:00 - 12:00: **SYMPOSIUM** on PRETERM BIRTH: PREDICTION, PREVENTION AND OBSTETRIC AND NEONATAL TREATMENT

Place: Inter-University Center

Chairpersons: A. Antsaklis, M. Stanojevic

- Xavier Carbonell-Estrany, Spain: **Pharma-economic concepts and evaluation of cost-effectiveness of RSV prophylaxis**
- Liliana S. Voto, Argentina: **Expectant management vs. induction of the patient with preterm PROM**
- Aris Antsaklis, Greece: **Selective reduction in twins and multiple pregnancies**
- Asim Kurjak, Croatia: **Fetal neurobehavior in threatened preterm labor**
- Serge Uzan, France: **Maternal cancer as a cause of preterm birth**
- Jose Maria Carrera, Spain: **Prematurity in developing countries. A challenge for all of us**
- Wolfgang Holzgreve, Germany: **Folate supplementations in premature labor and birth defects prevention: New concepts**
- Apostolos Papageorgiou, Canada: **Management and outcome of extremely low birth weight infants**
- Eduardo Bancalari, USA: **Perinatal factors and outcome in the extreme premature infant**
- Milan Stanojevic, Croatia: **Continuity in neurobehavior between preterm fetus and preterm newborn**
- Claudine Amiel Tison, France: **Neurological examination of neonates and long-term follow up**
- Dharmapuri Vidyasagar, USA: **Impact of transfer of technology on the outcome of premature infants in developing countries**
- Kazuo Maeda, Japan: **Fetal lung maturity assessed by GLHW - an ultrasonic tissue characterization**

08:00 - 12:00: **DUBROVNIK DECLARATION ON PREVENTION OF PREMATUREITY**



The Prediction and Prevention of Preterm Birth and its Consequences: An Unmet Challenge to Perinatal Medicine, Science and Society:

The Declaration of Dubrovnik

Preterm birth is the defining challenge to obstetrics and neonatology at the beginning of the XXI century. The advances in care of preterm neonates in the last decades has improved survival dramatically in developed and in developing countries, so that the definition of viability has been reframed. Yet, survival of the extreme premature neonate has come with high risk of long term disability. Therefore besides improved survival, the quality of life of these vulnerable infants should be emphasized by careful and lifelong evaluation of their progress. A legitimate question is whether neonatal medicine has approached the limit of intact extra-uterine life.

The success of neonatal medicine in treating the consequences of preterm birth has not been matched by the prevention of spontaneous or indicated preterm birth. The essential problem has been an incomplete understanding of the mechanisms of disease responsible for spontaneous preterm labor with intact or ruptured membranes or maternal and fetal disorders which result in indicated preterm delivery (e.g. preeclampsia and intrauterine growth restriction).

The taxonomy of obstetrical disorders responsible for preterm birth is in an early phase in which pathology is recognized by symptoms and signs rather the underlying mechanism of disease leading to these clinical manifestations. The time has come to use the tools of "discovery science" to indentify such mechanisms, as well as to find early biomarkers of risk and interventions aimed the prevention of preterm birth. It is now clear that preterm birth is not caused by only one pathologic process - but many. The naïve view that a single test and single intervention will prevent all cases of preterm birth should be recognized as an obstacle to progress. While infection/inflammation, vascular pathology and other mechanisms of disease have been identified, others remain to de discovered. A unique feature of pregnancy is the co-existence of two hosts in intimate contact with different genomes and environments. Moreover, while cooperation of the hosts should be expected, the biological interests of fetus and mother may not always coincide. Environmental exposures may have different effects on a mature host than in a developing organism. Viviparity has created conditions which allow for the potential development of unique pathologic process absent when there is not a symbiotic relationship and there yet unrecognized in medicine.

The identification of known (in other disciplines) and unknown mechanisms of diseases responsible for preterm birth represent the major challenge of perinatal medicine. Our discipline must commit itself to the use of the tools of "discovery science" and computational biology to meet this urgent need. This needs to be followed by rigorous translational science and ethically designed clinical trials.

At the same time, advances in understanding gained to date and the knowledge of promising clinically simple strategies to identify the patient at risk (e.g. vaginal pH testing to identify dysbiosis) and specific interventions to prevent preterm birth, deserve systematic and urgent rigorous testing because of their promise to achieve a dramatic and rapid reduction in the rate of this adverse pregnancy outcome.

The importance of behavioral, social and economic issues predisposing to prematurity, need to be recognized and addressed. We advocate adequate support and protection for pregnant women as an integral health promoting activity to prevent preterm birth in all cultures. Pregnant women in developing countries should be protected from hard work, mistreatment and any kind of exploitation as the causes of prematurity. Governments should encourage multidisciplinary approach in delivering care to pregnant mother and the newborn including at least obstetrical and neonatal care. This approach should be aimed to reduce perinatal and maternal mortality by up to 50 percent in the next ten years. It is also desirable to reduce prematurity rate between 32 and 36 weeks of gestation in developing countries by 50 percent within the next ten years.

Governments, scientific societies, funding bodies and charitable organizations which fund clinical and basic research need to realize the importance for society of the consequences of preterm birth. We believe that the prevention of preterm birth is possible if perinatal medicine, science and society give the necessary priority to this most urgent problem of maternal, fetal and neonatal patients.

The Dubrovnik Declaration on preterm birth adopted after IAPM meeting

Sixth meeting of the IAPM:

OSAKA, 22 – 24TH OCTOBER 2010

The meeting was organized by Professors Kazuo Maeda and Ritsuko Pooh in Kissyouden, Sumiyoshi shrine



Fellows of IAPM visiting Kissyouden, Sumiyoshi shrine in Osaka

October 22, 2010

09:30 - 11:30: **CEREMONIAL MEETING**

Place: Kisseyouden, Sumiyoshi shrine



Kazuo Maeda



Ritsuko Kimata Pooh



Chairpersons at meeting of IAPM in Osaka

From associate to regular fellows:

1. Xavier Carbonell-Estrany (Spain)
2. Anne Greenough (United Kingdom)
3. Tsuyomu Ikenoue (Japan)
4. Tao Duan (China)
5. Eberhard Merz (Germany)



New regular fellows of IAPM Anne Greenough, Xavier Carbonell-Estrany, and Tsuyomu Ikenoue with Claudine Amiel-Tison and Frank Chervenak as Godfathers

New associate fellows have been nominated:

1. Abdellatif Ashmaig (Sudan)
2. Te- Hung Bui (Sweden)
3. Cihat Sen (Turkey)
4. Bernat Serra (Spain)
5. Mirosław Wielgos (Poland)

By agreement of the Board of Directors of IAPM, Prof Abdellatif Ashmaig, Te Hung Bui, Cihat Sen and Mirosław Wielgos, will receive the nomination and diploma during the next meeting.



New associate fellow Bernat Serra

11:30 -12:30: ADMINISTRATIVE MEETING

Place: Kisseyouden, Sumiyoshi shrine

Agenda:

1. Minutes of the meeting held in Dubrovnik (J. M. Carrera)
2. Report of the President (E. Saling)
3. Report of the Secretary General (J. M. Carrera)
4. Report of Treasurer (B. Arabin)
5. Report of the Study Groups Activities (A. Kurjak)
6. Next Meetings of IAPM. Report of organizers
7. Any other business



Round table in Osaka: meeting of IAPM



Fellows of IAPM at the end of meeting in Osaka

22 October 2010

12:00-16:00 International **SYMPOSIUM** on Fetal Neurology – pre-congress session

16:30-20:00 Opening Ceremony - Welcome address, Osaka Declaration on Fetal Brain, Presidential Lecture, Keynote lectures

Place: International House Osaka, Main Hall

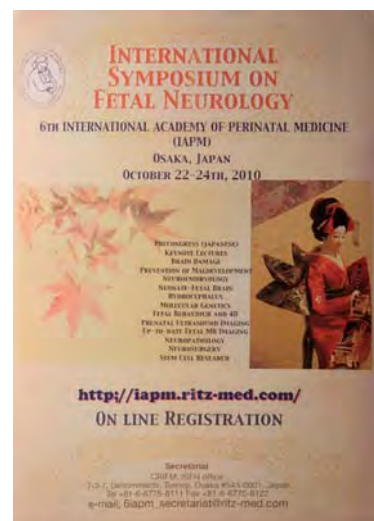
23 October 2010

08:45-18:00 International **SYMPOSIUM** on Fetal Neurology

Place: International House Osaka, Main Hall



Ritsuko Kimata Pooh opening of the symposium of IAPM on fetal neurology



Seventh meeting of the IAPM:

ATHENS, 3 – 4TH SEPTEMBER 2011

The meeting was organized by Professor Aris Antsaklis with following program:

3 September 2011

09:30-11:30 **CEREMONIAL MEETING**

Place: Historic Building of University of Athens



Meeting of IAPM in Athens Historic Building of University of Athens



New regular fellows in the middle Eberhard Merz and Tao Duan with Birgit Arabin, and Frank Chervenak as Godfathers



New associate fellows in the middle: Abdellatif Ashmaig, Cihat Sen, Miroslaw Wielgos with Godfathers Chiara Benedetto and Giancarlo Di Renzo

New Regular fellows of the Academy:

1. Tao Duan (China)
2. Eberhard Merz (Germany)

New Associate fellows:

1. Abdellatif Ashmaig (Sudan)
2. Cihat Sen (Turkey)
3. Mirosław Wielgos (Poland)



Administrative meeting of IAPM in Athens

12:30-13:30 ADMINISTRATIVE MEETING

Place: Historic Building of University of Athens

Agenda:

1. Minutes of the meeting held in Osaka (JM Carrera)
2. Report of the President (E. Saling)
3. Report of the Secretary General (JM Carrera)
4. Report of Treasurer (B. Arabin)
5. Report of the Study Group Activities (A. Kurjak)
6. Next Meetings of IAPM. Report of organizers
7. Any other business



Two photographs of IAPM fellows after the IAPM meeting in Athens

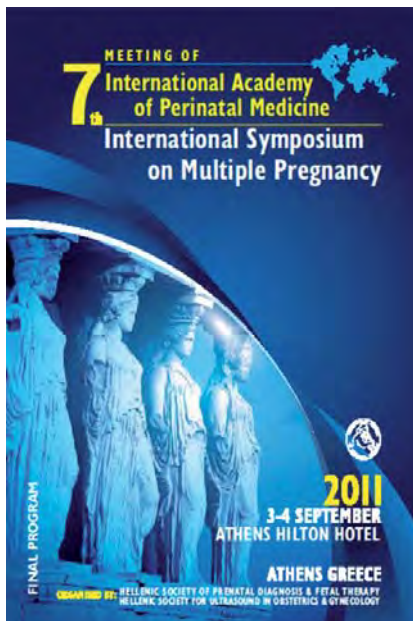
15:00-20:00 International **SYMPOSIUM** on Multiple Pregnancy

Venue: Hilton Hotel

4 September 2011

09:00-14:00 International **SYMPOSIUM** on Multiple Pregnancy

Venue: Hilton Hotel



*Eighth meeting of the IAPM:***PARIS, 6 – 7TH DECEMBER 2012**

The meeting was organized by Professors Serge Uzan and Yves Ville.



Serge Uzan and Yves Ville

December 6, 2012

09:30-11:30 ADMINISTRATIVE AND CONTRIBUTIVE MEETING

Place: Université Pierre et Marie Curie

Agenda:

1. Welcome words by President of IAPM
2. Minutes of the meeting held in Athens (J.M. Carrera)
3. Report of the President (Prof. E. Saling)
4. Report of the Secretary General (J.M. Carrera)
5. Report of the Treasurer (B. Arabin)
6. Report of the Study Group Activities (A. Kurjak)
7. Protocol for the nomination and election of new associate fellows (J.M. Carrera)
8. New regular and associate fellows proposed by Board of Directors and approved by International Council (J.M. Carrera)
9. Possible appointment of IAPM scientific collaborators (E. Saling)
10. Fulfilment of IAPM protocols in the Ceremonial and Scientific Meetings (F. Chervenak)
11. Meeting of IAPM in Istanbul; Report of the organizers (Zehra Nese Kavak and Cihat Sen)
12. Next meetings of IAPM. Candidatures: 2014 Buenos Aires (Liliana Voto), 2015 Khartoum (Ashmaig), 2015 Shanghai (Tao Duan).
13. Any other business
14. Questions and suggestions.

December 7, 2012

08:30-15:30 **SYMPOSIUM**

Place: CNIT – Paris – La Défense : 2 Place da la Défence 92053 Puteaux

Scientific program: MATERNO FETAL CONFLICT OF INTEREST (MFCI)

- 08:30-09:30** Introduction of Presidents
S. Uzan: Unforgettable experiences
C. Sureau: Was it necessary to kill the Child Foucault
Discussion: E. Saling, A. Kurjak
- 09:30-11:00** MFCI of fetal origin
Y. Ville: Placental surgery
K. Nicolaidis: Congenital diaphragmatic hernia
F. Chervenak: Ehics of fetal surgery. Spina bifida
I. Blickstein: Twin pregnancy, the materno-fetal and fetal-fetal conflict of interest
Discussion: Z. Papp, J. Schenker
- 11:00-11:30** Coffee break
- 11:30-12:30** MFCI of maternal origin, Part 1
R. Romero: Materno-fetal infection (maternal impact)
A. Papageorgiou: Neonatal impact of materno-fetal infection
M Dommergues: Getting pregnant with a severe heart disease: the most dangerous game
Discussion: T. Duan, B. Arabin
- 13:30-14:15** MFCI of maternal origin, Part 2
R. Rouzier: Cancer and pregnancy, French and international registers
P. Morice: Therapeutic choices in gynecologic cancer associated with pregnancy
Discussion: J. Dudenhausen, J.M. Carrera
- 14:15-15:30** MFCI due to materno-fetal „interaction“
G.C. Di Renzo: Maternal mortality in the world
V. Tsatsaris: Pre-eclampsia
A. Greenough: Neonatal problems linked with extreme prematurity
S. Aractingi: Microchimerism and delayed maternofetal conflict
Discussion: E. Bancalari, X. Carbonell

18:30-20:00 **CEREMONIAL MEETING**

Place: Val-de-Grâce Military School of Medicine

New regular fellows:

1. Ritsuko Kimata Pooh (Japan)

New associate fellows:

1. Takashi Okai (Japan)
2. Alexandra Matias (Portugal)



Fellows of IAPM at Paris meeting at Val-de-Grâce Military School of Medicine



Asim Kurjak, Ritsuko Kimata
Pooh and Frank Chervenak at
Paris Ceremonial Meeting



Associate fellows Takashi Okai and
Alexandra Matias with Godfathers

20:00 CONCERT

Place: L'eglise du Val-de-Grâce



Serge Uzan, regular fellow of IAPM, conducting at concert during IAPM meeting in Paris

*Ninth meeting of the IAPM:***ISTANBUL, 5 – 7TH SEPTEMBER 2013**

The meeting was organized by Professor Zehra Nese Kavak

September 5, 2013

12:30-13:30 **ADMINISTRATIVE MEETING**

Place: Swissotel The Bosphorus, Zurich Meeting Room

Agenda:

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| <ol style="list-style-type: none"> 1. Welcome words by President of IAPM 2. Minutes of the meeting held in Athens (J.M. Carrera) 3. Report of the President (E. Saling) 4. Report of the Secretary General (J.M. Carrera) 5. Report of the Treasurer (B. Arabin) 6. Report of the Study Group Activities (A. Kurjak) 7. New associate fellows proposed by | <ol style="list-style-type: none"> Board of Directors and approved by International Council (J.M. Carrera) 8. New honorary fellows of IAPM 9. Meeting of IAPM in Buenos Aires; Report of the organizers (Liliana Voto) 10. Next meetings of IAPM. Candidatures: 2015 Khartoum (Abdellatif Ashmaig), 2016 Shanghai (Tao Duan). 11. Any other business 12. Questions and suggestions. |
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Chairpersons at the Istanbul meeting of IAPM

September 5, 2013

12:30-13:30 SYMPOSIUM

Place: Swissotel The Bosphorus, Neuchatel Meeting Room

Program:

09:00 - 09:20 Zehra Nese Kavak: Welcome Speech

Moderators: Zehra Nese Kavak, Ana Bianchi

09:20 - 09:50 Asim Kurjak: How Globalization influences perinatal care

09:50 - 10:10 Erich Saling: Prevention of preterm birth as a global problem

10:10 - 10:15 Questions and Answers

10:15 - 10:30 Coffee Break

Moderators: Alexandra Matias, Apostolos Papageorgiou

10:30 - 10:50 Milan Stanojevic: Neonatal problems in globalized world

10:50 - 11:10 Jose Ma Carrera: Africa - Only with global efforts we can improve with catastrophe

11:10 - 11:30 Frank A. Chervenak: Planned Home Birth: A Challenge for Perinatal Medicine in the developed world

11:30 - 11:50 Aris Antsaklis: Fetal MRI for perinatal diagnosis

11:50 - 12:10 Isaac Blickstein: MC Placentation as a major anomaly

12:10 - 12:30 Giovanni Monni: First trimester screening for aneuploidies and invasive prenatal procedures

12:30 - 12:50 Joseph Schenker: Preservation of fertility

17:00 CEREMONIAL MEETING

Place: Swissotel The Bosphorus, Gaja Hall

New honorary fellow:

1. Samuel Karchmer (Mexico)

New sssociate fellows:

1. Apostolos Athanasiadis (Greece)
2. Naima L. Bouazzaoui (Morocco)



The meeting hall: Istanbul IAPM meeting



Photo during reception after the meeting of IAPM in Istanbul

“IAPM and Global requirement for research“

**Speech of Prof. Asim Kurjak
on behalf of the International Council of Academy
at closing ceremony**

One of the major successes of perinatal medicine is prevention, early detection and treatment of malformations and genetic diseases. Indeed, statistics of developed countries show that mortality due to malformation has decreased substantially.

The potential health burden of congenital disorders can be greatly reduced by implementing basic reproductive health approaches, including family planning, adequate diet, prevention and management of maternal infections. This is information and services mothers cannot get from traditional providers.

Perinatal medicine is at a stage when we can only recognize clinical syndromes rather than distinct disease entities caused by specific pathological mechanisms.

This is true of each of the five conditions: premature labor/delivery, premature rupture of membranes, small for gestational age, congenital anomalies and pregnancy-induced hypertension.

It is now our task to apply the techniques of developmental biology to perinatology, for this is the only effective way to prevent and treat these disorders.

The biggest challenge is to define the pathophysiological mechanisms underlying our great obstetric syndromes at the molecular and cellular levels.

Only in this way can we hope to develop effective screening programs for the chronic intrauterine diseases that usually manifest themselves clinically in the third trimester, much too late in their natural history for us to alter perinatal outcome.

Comprehensive screening programs, eventually based on non-invasive alternatives to the invasive tests we have today, are required to identify mothers and fetuses des-

tinued to develop pre-eclampsia, premature labor, placental abruption, premature rupture of membranes and fetal growth retardation.

They must be identified early enough to allow intervention to prevent not only the clinical manifestation of disease but the long-term handicap it causes.

Traditionally, the major focus of obstetricians in genetic screening and diagnosis has been on chromosomal abnormalities.

In the past decade, major breakthroughs in molecular biological technologies have greatly enhanced understanding of the molecular basis of monogenic genetic diseases as well as many non-fatal or chronic diseases, which opens up the possibility of precise prenatal diagnosis of these conditions.

At the same time, the elucidation of the genetic basis of many chronic diseases or multifactorial diseases has put obstetricians in an increasingly difficult position with regard to the ethics of prenatal screening and diagnosis of these conditions.

There is no doubt that the most reliable and precise method of diagnosis and screening of a mutation or deletion is by molecular tests.

The major obstacle at present in molecular genetic screening and diagnosis is the high cost. However, as for any technology, this is unlikely to be the case in the future. Recent advances in molecular biology enable highly accurate detection of genetic abnormalities and therefore provide the perfect tool for genetic screening, provided the genetic abnormality is known.

Technologies develop so fast that our problem will no longer be what we can test for, but rather what we should test for.

There are still many unknown and much uncertainty in this area, and therefore any argument for genetic screening requires further and better scientific evidence. In the next decade, it is likely that there will be an exponential increase in the number of diseases and mutations that can be detected or diagnosed during pregnancy, not only using samples obtained by invasive tests such as amniocentesis and chorionic villus sampling, but also non-invasively by examining the cell-free DNA in the maternal plasma.

It is possible to make valid assumptions about brain function from observed behavior. Investigation of the central nervous system (CNS) in developing animals has shown that anatomical function occurs first in the caudal segments, then the rostral segments, similar to the development of the spinal cord, followed by the caudal brainstem. At birth, the brain is highly developed and capable of numerous functions, although anatomical and functional development continues for an additional year or two in humans. Several investigators have suggested that anatomical defects are manifested as functional defects. During the last 20 years, real-time ultrasound has facilitated *in vivo* observation of human fetal movements, and behavioral patterns *in utero* can be assessed as a one-to-one match between manifestation of an individual activity and corresponding CNS function.

However, to date no generalized antenatal screening system for fetal CNS function has been developed and validated.

Familial cerebral palsy was uncommon, and it accounted for 1.6% of all cerebral palsy cases. However, for parents who had had one affected child the risk of recurrence in another child was considerably increased.

We all should keep in mind the global perspective. The scope of improvements is impressive. And the results are invaluable. It can be counted in lives saved. Millions of women and infants who instead of facing death can hope for a healthy life.

At the time of fast globalization it is clear that no human endeavor is more adapted to the globalized world than science, for its very nature is global. The brotherhood of scientists is truly international. This is an immense privilege, but equally so an immense responsibility for the development of humanity.

Like art, it is a universal possession of humanity, one of its vital potentials. Yet, the scientist generating or transmitting new ideas has been and will remain the essence not only of scientific existence but also of the civilization of an environment. What is the basis on which we can and must rethink values, society, individually, and maybe even our concept of the human being?

Do globalization and the enormous acceleration of social, economic, and political transformation process demand a different kind of research?

With the rapid development of information and communications technologies, industrial nations are transforming into societies in which knowledge is the most contested and valuable good.

A person's knowledge becomes a museum piece several times in his or her life. Today, young Americans have to expect that in 40 years of professional life they will change their job 11 times and in the process renew their level of knowledge three times.

The increased speed at which we have to acquire new knowledge, insights, and abilities is forcing us to divide up learning into novel, shorter phases. The traditional choreography of learning with its long, rigid defined school, job, and university educational periods is already obsolete today. Self-organized, lifelong learning is becoming a must.

Since time immemorial, science has been competing for the best minds and the best conditions for them to work in.

While in the past the natural sciences primarily had a descriptive character, today they are becoming more and more synthetic and complex. Biology is a good example.

Good research organizations or universities are measured today according to whether they are in a position to build up such structures.

In addition to scientific excellence, standards of research can and must be viewed under the aspect of ethical requirements. Which standards does a community set itself and feel must be upheld? This issue can relate to questions of human dignity, as in the current debate about whether embryonic stem cells should be used in research and the cloning discussing. It can relate to ideal values such as peace and humanity, as in the 20th-century debate about atomic and hydrogen bombs.

Everyone knows that without the uncertainty of the new nothing new is possible. To try to prevent this in one way or another would be fatal for science, as well as for our society as a whole.

Research means thinking ahead. Research means recognizing challenges and taking responsibility for the new. The freedom needed for this is now the international standard, to which we have to adapt. The question of the development of such standards for research can therefore not be posed frequently and persistently enough.

On account of great increases in knowledge about the molecular bases of pathogenesis and the course of illnesses, new therapeutic approaches will be found almost per-force. Much more attention will be devoted to the subject of individual diagnostics and possibly personalized treatment, that is, treatment tailored to in-

dividual people, or better, a group of people with a similar clinical picture and a similar genetic background, than we can imagine today. But whether society will be in a position and have the will to pay for these therapies, is an open question.

And this Niagara of information had to be organized and codified. Early attempts at such codification resulted in various religious beliefs, and only later did these beliefs give rise to science. As we know, astronomy eventually arose from astrology, chemistry from alchemy, and history from mythology.

Since time immemorial, science has been competing for the best minds and the best conditions for them to work in.

While in the past the natural sciences primarily had a descriptive character, today they are becoming more and more synthetic and complex. Biology is a good example.

Good research organizations or universities are measured today according to whether they are in a position to build up such structures. Every country makes rules for itself which assure that standards in research and development can be maintained and checked.

Innovation arises in general through creative and very work-rich processes when dealing with scientific problems. These processes are extremely complex and require intensive cooperation between many different disciplines in the natural sciences.

These teams, their optimum composition, their necessary degrees of freedom, and their support are therefore the focus of every manager, and thus also the focus of the head of research.

This step will be challenging but not impossible.

I cannot imagine what the next century holds in terms of scientific advances.

In the area of research, we would like to do more to value and recognize the contribution of retired scientists. As well as continuing to use their intellect and knowledge, they can play various "ambassadorial" roles, and act as mentors for younger people.

In addition, facilitating the transfer of knowledge from one generation to the next is vital for achieving higher quality of life and promoting an inclusive society, an inclusive knowledge society. If we are to tackle global challenges, knowledge must flow across borders through international partnerships and coordination at the global level. IAPM and WAPM should aim to provide global leadership in all these areas and to do so in close cooperation with our partners around the world.

Science alone does not answer the question of what to do with the knowledge it generates – it is not in itself a moral value. Rather, the human cultural values in their ethical, legal, philosophical and often religious dimensions are the tools which help determine how to use knowledge for good purposes.

Hence, bioethics is by essence pluridisciplinary based on the interactive discussions between scientists, lawyers, philosophers, teachers of religions and public figures.

Perinatologists will certainly be among the first health-care professionals needing to face this difficult dilemma.

Tenth meeting of the IAPM:**BUENOS AIRES, 6 – 7TH NOVEMBER 2014**

The meeting was organized by Professor Liliana Voto.

6 November 2014

ADMINISTRATIVE MEETING**Agenda:**

- | | |
|--|--|
| 1. Welcome by President Erich Saling | 5. New associate fellows |
| 2. Minutes of Istanbul meeting (approval) | 6. Report of Liliana Voto regarding Buenos Aires meeting |
| 3. Report of Secretary General | 7. New IAPM publications |
| 4. Transition from associate to regular fellow | 8. Plans for 2015 IAPM meeting |

18:00-19:30 CEREMONIAL MEETING

Place: National Academy of Medicine of Buenos Aires

New regular fellow:

1. Milan Stanojevic (Croatia)

New associate fellows:

1. Javier Mancilla Ramirez (Mexico)
2. Alexander Makatsariya (Russia)



Chairpersons of IAPM meeting in Buenos Aires



Oath of new regular fellow Milan Stanojevic



Oath of new associate fellows of IAPM Javier Mancilla Ramirez and Alexander Makatsariya



IN MEMORIAM
Claudine Amiel-Tison

Secretary General of IAPM informed about the death of the regular fellow Claudine Amiel-Tison who passed away of terminal cancer in December 2013. Prof. Amiel-Tison was not only a great professional and excellent scientist, but also a good, friendly, unassuming person, full of personal virtues. Prof. Apostolos Papageorgiou said a few words in memoriam.

6 and 7 November 2014

09:00-17:00 SYMPOSIUM "Women's heart: hypertension and cardiovascular diseases"

Scientific program was made by local committee and international fellows from the Academy.



Successful end of the day at Buenos Aires meeting of IAPM

Eleventh meeting of the IAPM:

MADRID, 6 – 7TH NOVEMBER 2015

The meeting was organized by Professors Jose M. Carrera and Luis Cabero.

November 5, 2015

18:00-19:30 SYMPOSIUM: Future Challenges in Perinatal Medicine

Place: Room Madrid of the World Congress of Perinatal Medicine (Palacio Municipal de Congresos de Madrid)

Chairpersons: Erich Saling (President of IAPM),
José M. Carrera (Secretary General of IAPM)

Moderator: Bernat Serra (associate fellow of IAPM)

Program:

Aris Antsaklis:	The future of Cesarean Section
Luis Cabero:	The crucial role of perinatologists in the prevention of Non-Communicable Diseases (NCDs)
Eduardo Gratacós:	The future challenges in Fetal Medicine
José M. Carrera:	Academics of IAPM: Required Values

7 November 2015

09:00-10:30 ADMINISTRATIVE MEETING

Place: Pequeño Anfiteatro (Colegio de Médicos de Madrid)

Agenda:

1. Welcome words by President of IAPM
2. Minutes of the Meeting held in Buenos Aires
3. Renovation of the Board of IAPM: Election of new officers.
4. Words of the former President
5. Words of the President elect
6. Words of the former Secretary General
7. Words of the Secretary General elect
8. Report of the Treasurer
9. Report about Solidarity actions
10. Proposal to modify art 7 of our Constitution
11. Committee to elect new candidates
12. New regular fellow proposed by Board of Directors and accepted in Buenos Aires
13. New associate fellows proposed by Board of Directors and accepted in Buenos Aires
14. New honorary fellows proposed by Board of Directors
15. Next Meeting of IAPM. Candidatures: 2016 Tirana (Orion Gliozheni); 2017 Khartoum (AbdelLatif Ashmaig); 2018 Shanghai (Tao Duan), 2019 Frankfurt (Eberhard Merz).
16. Any other business
17. Questions and suggestions



Chairpersons during administrative meeting of IAPM in Madrid

One of the most important issues was renovation of the Board of IAPM: Election of new officers. Jose M. Carrera announced proposal of new officers:

President of IAPM:	Asim Kurjak
Vice-presidents:	Serge Uzan Ritsuko K. Pooh Eberhard Merz Apostolos Papageorgiou
Secretary General:	Frank Chervenak
Deputy Secretary General:	Milan Stanojevic
Treasurer:	Vincenzo D'Addario

11:00-13:00 CEREMONIAL MEETING

Place: Cajal Hall (Colegio de Médicos de Madrid)

Agenda:

1. Start of the academic act. Opening the ceremony. Welcome words by President
2. Reading of minutes of the last meeting (Buenos Aires)
3. Report of the President of the IAPM
4. In Memoriam of Prof. Shiro Kozuma. Laudatio
5. Reading of official designation of new regular fellows
6. Laudatio of the new regular fellows. Imposition of the academic medals
7. Reading of official designation of new associate fellows
8. Laudatio and oath of the new associate fellows. Reception of diplomas
9. Reading of official appointment of the new honorary fellows. Delivery of the diplomas.
10. Closing of ceremony



Ceremonial meeting of IAPM in Madrid

New regular fellows:

1. Dharmapuri Vidyasagar (USA)
2. Vincenzo D'Addario (Italy)
3. Marina Degtyareva (Russia)



Regular fellows of IAPM in Madrid with Godfathers

New associate fellows:

1. Kurt Hecher (Germany)
2. Renato Sa (Brazil)
3. Ernesto Fabre (Spain)
4. Rodrigo Ayala (Mexico)
5. Ivica Zalud (USA)
6. Aliyu Labaran Dayyabu (Nigeria)
7. Amos Grunebaum (USA)

New honorary fellows:

1. Robert Brent (USA)
2. Tsuyomu Ikenoue (Japan)
3. Kazuo Maeda (Japan)
4. Giampaolo Mandruzzato (Italy)



New associate fellows of IAPM in Madrid

Closing speech of President of IAPM Asim Kurjak

Members of Academy,

Any academy in the world is society of people of significant intellectual achievements (learned people). They are institutions of intellectual authority who are trying to advise decision makers, to produce views on different issues of science and to advise decision makers on issues related to science.

How and when academies act?

* At the request of decision makers (parliament, government, presidents) if they enjoy sufficient prestige, recognition and/or authority in the countries. In our case at the request from 4 organizers.

* At their own initiative, when they identify problems which need to be subject to the attention of the decision makers or the society in large.

Academies can and should have a presence in the life of society, without becoming part of politics, but providing expert advice when requested and by expressing competent opinions and reactions to events of global importance.

But, there is something else. One of the most disappointing field in Perinatal Medicine is lack of significant success in preventing preterm labor. Indeed, the advances in care of preterm neonates in the last decades has improved survival dramatically in developed and in developing countries, so that the definition of viability has been reframed.

Unfortunately, the success of neonatal medicine in treating the consequences of preterm birth has not been matched by the prevention of spontaneous or indicated preterm birth. The essential problem has been an incomplete understanding of the mechanisms of disease responsible for spontaneous preterm labor with intact or ruptured membranes or maternal and fetal disorders which result in indicated preterm delivery (e.g., preeclampsia and intrauterine growth restriction).

The taxonomy of obstetrical disorders responsible for preterm birth is in an early phase in which pathology is recognized by symptoms and signs rather the underlying mechanism of disease leading to these clinical manifestations. The time has come to use the tools of "discovery science" to identify such mechanisms, as well as to find early biomarkers of risk and interventions aimed the prevention of preterm birth.

I do not need to remind you that a unique feature of pregnancy is the co-existence of two hosts in intimate contact with different genomes and environments. Moreover, while cooperation of the hosts should be expected, the biological interests of fetus and mother may not always coincide. Environmental exposures may have different effects on a mature host than in a developing organism.

The identification of known (in other disciplines) and unknown mechanisms of diseases responsible for preterm birth represent the major challenge of perinatal medicine. Our discipline must commit itself to the use of the tools of "discovery science" and computational biology to meet this urgent need. This needs to be followed by rigorous translational science and ethically designed clinical trials.

Governments should encourage multidisciplinary approach in delivering care to pregnant mother and the newborn including at least obstetrical and neonatal care. This approach should be aimed to reduce perinatal and maternal mortality by up to 50 percent in the next ten years. It is also desirable to reduce prematurity rate between 32 and 36 weeks of gestation in developing countries by 50 percent within the next ten years.

Unfortunately, recent results published by UN are showing minimal achievements in reduction of prematurity and perinatal and maternal mortality. Every year, an estimated 15 million babies are born preterm, and this number is rising. Preterm birth complications are the leading cause of death among children under 5 years of age, responsible for nearly 1 million deaths in 2013. Three-quarters of them could be saved with current, cost-effective interventions. Across 184 countries, the rate of preterm birth ranges from low 5% to high 18% of babies born. According to the Millennium Developmental Goals maternal mortality, neonatal mortality, and mortality of the children up to 5 years of age should be decreased on annual basis from 1990 to 2012 for 4.2% and it reached only 2.6% for maternal, 2.0% for neonatal and 3.4% for child mortality. These data are discouraging and disappointing, meaning that much more should be done to improve world perinatal health.

Important question is the type of cooperation of IAPM and other learned societies. Of course, the main cooperation will be with WAPM and its sister societies Fetus as a Patient and Ian Donald School. Close cooperation will soon start with the World Academy of Human Reproduction which president is our distinguished colleague Joseph Schenker and several of us are regular fellows. We should organize panel of the experts from both academies on hot topics of mutual interest. First one will be panel on single embryo transfer and its possible role in reducing multiple pregnancies and their leading role in preterm labor. Both academies do have world experts in this important field, and I do welcome anyone of you who for many years have intensively been studying prevention of preterm labor. Joseph Schenker and his team will propose representative of World Academy of Human Reproduction.

Human beings change continuously as the results of biological and cultural evolutions. Human beings do change the world they live in, indeed so much that it has been suggested that the current geological epoch be named Anthropocene epoch. Since knowledge now increases exponentially with a doubling time of 5-10 years, education cannot be time limited, but it has to be life-long. The Millennium Development Goals state that by the year 2015 everybody should be educated. Perinatal education is not ectopic part of global education, contrary it is its integral part. Indeed, contemporary education is education of a person that is changing and for the world that rapidly changes.

The Triangle of Knowledge in modern society is composed of education, research and patents. A country aspiring to a good longtime standing in international arena should perform well in all three corners of this triangle. Governments, universities and firms together spend around \$1.4 trillion a year on R&D, more than ever before. World trends

in knowledge and new ideas creation demonstrate that EU has overtaken US in idea creation but is still lagging behind in patents and applied ideas. Asian countries are closing the gap rapidly and the world knowledge scene is witnessing an extremely competitive and interdependent race.

How much of what we formally learn is ever useful in real life? Some studies show that it's only between 8 and 12 percent. The existing educational system is not very useful as far as the quality of its outcome is concerned. Education is slow in moving from bureaucracy towards entrepreneurship and creativity; Separation between learning and working should be abandoned. Learning is important, but so is unlearning; Teachers must be able to teach the rational stuff in a cool and inspirational way; The students should be trained for attitude, not just knowledge and skills; Education must re-establish the lost connection between art and science, wisdom and practicality; Education should go lower on theory, and higher on applicability. If we want to create a better educational system, changing culture is by far more important than changing curricula.

It is puzzling however what kind of education system gave us Plato, Aristotle, Archimedes, Socrates? Their teaching makes the base of our civilization. Many of us wondered how this had happened, when they didn't have schools, black boards, computers, or notebooks.

In order to understand this approach, a reader has to learn two starting points. First, knowledge is individual - it is spread in head of individuals. There is no such thing as the collective knowledge! This is emphasizing the role of individual in education system, i.e. the need of education system to focus on an individual. Secondly, how can we understand knowledge from the perspective of individual and individual competences? In my opinion, knowledge is everything we have taken from other people. Knowledge is not something that comes out us; we are taking it from other people. We adopted our knowledge about relativity theory from Einstein; Pythagoras's theorem is taken from Pythagoras; knowledge about class struggle is taken from Marx; our knowledge about lighting rods comes from Benjamin Franklin... Thomas Man said "all I know is not mine, but it is mine "!

Education encompasses teaching and learning of knowledge, acquiring skills and values as well as mental, moral and aesthetic development of human beings. Right to education is one of the basic human rights as declared by the United Nations (UN) Universal Declaration of Human Rights.

Education has to focus primarily on how to research, how to ask questions, to stimulate participants to propose new, out-of-the-box ideas, often sounding crazy. Education has to stimulate paradigmatic changes, to think the unthinkable. Most important is that education is intellectually stimulating, fun, pleasure (1).

The IAPM was founded in 2004 on the initiative of presidents of four scientific societies: the World Association of Perinatal Medicine (WAPM), the European Association of Perinatal Medicine (EAPM), and the International Society "The Fetus as a Patient" (ISFAP) and Ian Donald.

The IAPM members have met in various capital cities all over the world, held scientific panels, and published declarations on current topics of perinatal research and patient care from a global point of view.

The aim of the IAPM is to provide a place for study, reflection, dialog, and for the promotion of perinatal medicine, especially in aspects such as bioethics, the appropriate use of technological advances, and the sociological and humanistic dimensions of the field.

More and more evidence now indicate that prenatal life is a major determinant of adult health and disease.

Members of Academy,

Now something personal. From today I will be succeeding our founding president, teacher and friend, Professor Erich Saling. I used the term succeeding, not replacing. Rightly so because it is impossible to replace a person like Erich Saling, one of the GREATS in clinical medicine in the world.

In true sense Erich Saling's life is characterized by series of successes approving the truth of aphorism saying that the man is born to succeed not to fail.

Most of Saling's contributions have global value and soon after this discovery do increase knowledge at each corner of the World.

In 1961 he developed fetal blood analysis from the scalp of the fetus during labor and impressively this was the first direct approach to the human fetus. It was the crystallization-point of perinatal medicine. The original publication "A new approach in examining the fetus during labour" Arch Gynaekol 1962;197:108 was classified as Citation Classic by the Institute of Scientific Information in 1984.

Since the first European congress of Perinatal Medicine in Berlin in 1968, more than anybody else in history of modern obstetrics Saling has made it manifest that perinatal medicine is now global area of study.

It is well recognized that there is no collective creativity. The idea is born in one head, but the team will put it into the practice. Erich Saling was fortunate enough to have from the beginning of his long journey excellent support from his closest coworkers like Joachim Dudenhausen, Birgit Arabin, etc.

For them as well as for many of us all over the World, Erich was true scientific leader and in this explosive accumulation of new knowledge resulting from scientific discoveries, the role of true leaders is particularly important.

I think it is not overstating the fact, and I believe that I speak for everyone here, when I say that Erich Saling's scientific contribution and pioneering work in perinatal medicine and above all education of so many of us the beauty of perinatal medicine, have made him a legend in his own lifetime.

The last 50 years have seen the founding of many national and international societies of perinatal medicine based on these principles, including the International Academy of Perinatal Medicine (IAPM), which was formed in 2005.

IAPM is an independent, non-profit institution with 50 permanent fellows from all over the world and owes its existence to the preparatory work done by the World Association for Perinatal Medicine. Initiator and person who contributed more than any one of us is charismatic scientific and education leader Jose Maria Carrera. Early steps in development of IAPM cannot be imagined without Carrera's vision and many pragmatic application of his and others ideas have been easily realized in the life of IAPM. Our distinguished colleague and friend, true scientific leader Jose Maria will stay with us because, I am sure I am speaking on behalf of every one of you, to state that IAPM is body of Jose Maria Carrera till the end of our lives. I propose that we appoint him as honorary secretary general of our Academy.

Dear Jose Maria, muchas gracias and fuerte abrazo.

Members of Academy,

We are living in global village. Obviously, global problems can be solved by global efforts. Even a modest personal contribution to this global tragedy will be our moral duty.

This will help to promote the idea that today's men and women are able to find mutual

support, understanding and encouragement in diversity as the best way to grow as people in a more equitable and supportive society, where no one is excluded.

The IAPM should be responsible for research, education, standards. It has the potential of being a leading influence in the world of perinatal medicine.

We represent the best the World has to offer in Perinatal Medicine. Let us work together to make the World of Perinatal Medicine a better place.

Permanent advantage of the Academy is the continuous availability of its leading and acting experts. This is a compensatory potential compared with societies where relatively frequent change of leading experts is common after only short intervals, in particular within their boards. Therefore, it is a good solution to have both; namely different societies with their specific character, and above them a kind of super-ordinated intellectual common home.

As Heraclitus of Ephesus said, "There is nothing permanent except change".

Never in mankind's history have we commanded so much knowledge about the reproductive process. The current information about maternal and infant medicine is quite simply overwhelming.

I believe it is best to conclude quoting the president of scientifically strongest country, USA, president Barak Obama, who once said "Under my administration the days of science taking back seat to ideology are over. Our progress as a nation - and our values as a nation- are rooted in free and open inquiry. To undermine scientific integrity is to undermine our democracy. It is contrary to our way of life."



At the end of Madrid meeting of IAPM

Twelfth meeting of the IAPM:**TIRANA, 26 – 27TH MAY 2016**

The meeting was organized in Tirana by Professor Orion Gliozheni with following program:

May 26, 2016

16:00-18:00 ADMINISTRATIVE MEETING

Place: City Hall

Agenda:

1. Welcome words by President of IAPM
2. Presentations:
 - The role of the neonatologist in the perinatal team – Ola Saugstad (30 min)
 - Single embryo transfer – new challenge in preventing pre-term delivery – Elisabet Clua and Pedro Barri (organized by IAPM and World Academy of Human Reproduction, president Joseph Schenker) (30 min)
3. Report of President
4. Report of Secretary General
5. Minutes of the meeting held in Madrid
6. Report of the Treasurer (Vincenzo D'Addario)
7. Report about Solidarity actions (Bernat Serra)
8. Report of proposed inter-academy activities (Marina Degtyareva)
9. New regular fellow proposed by Board
10. New associate fellows proposed by Board
11. New honorary fellows proposed by Board
12. Report on Tirana meeting (Orion Gliozheni)
13. Next meetings of IAPM candidatures:
 - Year 2017 Khartoum (AbdelLatif Ashmaig)
 - Year 2018 Shanghai (Tao Duan)
14. Other business

18:00-20:00 CEREMONIAL MEETING

Place: City Hall

Prof. Ola Saugstad received presidential award Golden Amnioscope.

Prof. Erich Saling gave laudatio.

New regular fellow

1. Manuel Sanchez Luna (Spain)

New associate fellows

1. Tuangsit Wataganara (Thailand)
2. Nikolaos Papantoniou (Greece)

3. Olus Api (Turkey)
4. Masayuki Endo (Japan)
5. Dorota Agata Bomba-Opon (Poland)
6. Jun Yoshimatsu (Japan)
7. Orion Gliozheni (Albania)
8. Dan Farine (Canada)

New honorary fellows

Galina Savelyeva (Russia)

Alexander Strizhakov (Russia)



New associate fellows of IAPM

May 27, 2016

08:30-18:00 SYMPOSIUM: Recent advances in perinatal medicine

Place: Tirana International Hotel

PROGRAM

SESSION 1

1. Erich Saling (Germany): Some future aspects within Perinatal Medicine considered by a senior fellow
2. Asim Kurjak (Croatia): Are we ready to investigate cognitive function of fetal brain. The role of advanced 4D sonography



Meeting Hall: ceremonial meeting of IAPM in Tirana

3. Frank Chervenak (USA): The perils of miscommunication: The beginnings of informed consent
4. Badreldeen Ahmed (Qatar): Role of ultrasound in the management of diabetic pregnancy
5. Aris Antsaklis (Greece): Maternal and perinatal mortality in the 21st century
6. Rodrigo Ayala (Mexico): Hypothyroidism in the 1st trimester

SESSION 2

7. Chiara Benedetto (Italy): Pregnancy after breast cancer
8. Vincenzo D'Addario (Italy): Mild ventriculomegaly: still a challenging problem
9. Joachim Dudenhausen (Germany): Epidemiology and prevention of fetal death and stillbirth
10. Eberhard Merz (Germany), Sonila Pashaj (Albania): Significance of 3D ultrasound in the assessment of fetal brain development

SESSION 3

11. Giovanni Monni (Italy): Clinical and social issues of NIPT
12. Ritsuko K. Pooh (Japan): Recent advances of 3D ultrasound, silhouette ultrasound and sonoangiogram in fetal neurology
13. Renato Sa (Brazil): Brazilian experience in antenatal correction of myelomeningocele by fetoscopy
14. Joseph Schenker (Israel): Assisted reproduction and preterm birth
15. Cihat Sen (Turkey): Fetal DNA screening: Where are we now?
16. Serge Uzan (France): Neonatal and pediatric outcome after a cancer treated during pregnancy



17. Mirosław Wielgos (Poland): Polish experiences with FETO procedure in congenital diaphragmatic haernia.
18. Ivica Zalud (USA): The pendulum swings: When to deliver IUGR baby?
19. Bernat Serra (Spain): Which tocolytic should be used

SESSION 4 – NEONATOLOGY

20. Marina Degtyareva (Russia): Maternal - fetal immune interactions and neonatal immune response: immaturity or wisdom of nature
21. Apostolos Papageorgiou (Canada): Cesarean section: Neonatal and postnatal impact
22. Ola Saugstad (Norway): Oxygen therapy of the newborn
23. Milan Stanojevic (Croatia): Early morbidity after term delivery: how should we respond?
24. Dharmapuri Vidyasagar (USA): Prevention of ROP and associated blindness: Need for a perinatal approach

Thirteenth meeting of the IAPM:

KHARTOUM, 17 – 18TH FEBRUARY 2017

The meeting was organized in Khartoum by Professor Abdel Latif Ashmaig and Dr. Sami Mahmoud Abdelkhair with following program:

February 17, 2017

08:00-12:00 ADMINISTRATIVE MEETING

Venue: Conference Hall of the Police Club, Khartoum

Agenda:

1. Welcome words (President of IAPM)
2. Minutes of the meeting held in Tirana (Frank Chervenak)
3. Report of the President of the IAPM (Asim Kurjak)
4. Report of the Treasurer (Eberhard Merz)
5. New regular fellows and new associate fellows proposed by Board (Frank Chervenak)
6. Establishing of Unit of Young Scientists (Asim Kurjak)
7. Establishing of Senate (Asim Kurjak)
8. Report from Khartoum meeting (Abdel Latif Ashmaig)
9. Next meetings of IAPM (Radu Vladareanu)
10. Report on Journal of Perinatal Medicine (Asim Kurjak)
11. How to protect perinatal concept (Asim Kurjak)
12. How to protect constitution in the life of Academy - some practical problems (Eberhard Merz, Asim Kurjak)
13. Other business



Chairing persons

12:00-14:00 CEREMONIAL MEETING

Venue: Conference Hall of the Police Club, Khartoum

Agenda:

1. Start of the academic act. Opening the ceremony. Welcome words by President
2. Ceremony of delivering Golden Amnioscope
3. Reading of minutes of the last meeting (Tirana)
4. Report of the President of the IAPM
5. Reading of official designation of new regular fellows
6. Laudatio of new regular fellows. Imposition of the academic medals
7. Reading of official designation of new associate fellows
8. Laudatio and oath of the new associated fellows. Reception of diplomas
9. Closing of ceremony

President of IAPM in the absence of Professor Erich Saling delivered the Golden Amnioscope Award to Frank Chervenak for his profound supporting activities for the development of Academy and for his overall contributions to perinatal medicine.

New regular fellows:

1. Ana Bianchi, Uruguay
2. Cihat Sen, Turkey
3. Giovanni Monni, Italy
4. Abdellatif Ashmaig, Sudan
5. Radu Vladareanu, Romania

New associate fellows:

- | | |
|--|-------------------------------------|
| 1. Liliana Kornhauser Cerar (Slovenia) | 4. Gordana Adamova (Macedonia) |
| 2. Aida Salihagić Kadić (Croatia) | 5. Julian Eason (UK / UAE) |
| 3. Alaa Ebrashy (Egypt) | 6. Dereje Negussie Tuije (Ethiopia) |

- | | |
|---------------------------------------|-------------------------------------|
| 7. Snežana Crnogorac (Montenegro) | 13. Boris Filipović-Grčić (Croatia) |
| 8. Aleksandar Ljubić (Serbia) | 14. Tanja Premru-Sršen (Slovenia) |
| 9. Sami Mahmoud AbdelKhair (Sudan) | 15. Ali Sungkar (Indonesia) |
| 10. Abdulfetaħ Abdulkhadir (Ethiopia) | 16. Eisa Osman El-Amin (Sudan) |
| 11. Abdallah Adra (Lebanon) | 17. Gwang-Jun Kim (Korea) |
| 12. Narendra Malhotra (India) | 18. Miguel Ruoti Cosp (Paraguay) |



Oath of new associate fellows of IAPM

Opening Ceremony

- 19:30-19:35 Holy Quran Dr. Abdel Hamid Ibrahim
 19:35-19:40 Welcome from the OGSS President Professor A/Latif Ashmaig
 19:40-19:45 President of Sudan Lesiation Group Dr. A/Rahman A/Magid
 19:45-19:50 President of International Academy of Perinatal Medicine (IAPM)
 Professor Asim Kurjak
 19:50-19:55 RCOG President Professor L. Regan
 19:55-20:00 WHO representative Dr. Naema Algasir
 20:00-20:15 OGSS documentary film
 20:15-20:20 Federal Minister of Health HE Mr. Bahar Abugerda
 20:20-20:25 Sudan Vice President HE Bakri Hassan Salih
 20:25-21:00 OGSS awards and recognition Dr. Safia Nor Eldeen
 21:00-23:00 Entertainment, Reception & Exhibition Sudan Music Band

February 18, 2017

08:00-12:00 SYMPOSIUM on RECENT ADVANCES IN PERINATAL MEDICINE

First Session: Plenary Session – Hall 1

Chairpersons: Asim Kurjak and Frank Chervenak

- 09:00-09:25 Significant advances in the assessment of fetal brain function by KANET test - Asim Kurjak
- 09:25-09:45 Limits of non-invasive testing - Frank Chervenak
- 09:45-10:00 Midline cystic anomalies of the fetal brain - Vincenzo D'Addario
- 10:00-10:20 Preterm labour and the role of ultrasound - Badreldeen Ahmed
- 10:20-10:40 3D/4D ultrasound: Imaging of fetal face anomalies - Eberhard Merz
- 10:40-11:00 Panel discussion
- 11:00-11:30 BREAKFAST

Second Session: Parallel session – Hall 1

Chairpersons: Aris Antsaklis and Badreldeen Ahmed

- 11:30-11:45 Intrauterine growth restriction: Impact of the newborn - Apostolos Papageorgiou
- 11:45-12:00 Improving the maternal mortality rate: an optimistic perspective - Aris Antsaklis
- 12:00-12:15 Pregnancy – an early but too rarely utilized window of opportunity to improve long-term health of mother and infants - Birgit Arabin
- 12:15-12:30 The first breath – techniques and oxygenation in the delivery room - Ola D. Saugstad
- 12:30-12:45 The dilemma of genetic sonogram - Olus Api
- 12:45-13:00 Reducing maternal mortality through ultrasound - Aliyu Labaran Dayyabu
- 13:00-13:10 DISCUSSION
- 13:10-13:30 Pray and coffee break

Second Session: Parallel session – Hall 2

Chairpersons: Giovanni Monni and Ivica Zalud

- 11:30-11:45 Selective feticide in triplets and in more than three fetuses - Giovanni Monni
- 11:45-12:00 How can we miss fetal heart defects? - Cihat Sen
- 12:00-12:15 Recent advances in agenesis of corpus callosum imaging and neonatal prognostic - Radu Vladareanu
- 12:15-12:30 Limit of neonatal viability in poor hospitals - Javier Mancilla
- 12:30-12:45 Preventive operative total cervix occlusion should receive more attention than cerclage in cases of recurrent late abortion - Erich Saling (lecture presented by Eberhard Merz)
- 12:45-13:00 Panel discussion
- 13:00-13:30 Pray and coffee break

Third Session: Parallel session – Hall 1

Chairpersons: A/Latif Ashmaig and Cihat Sen

- 13:30-13:45 Perinatal medicine: Passing the torch - Ivica Zalud
- 13:45-14:00 The role of fetal echocardiography in prenatal diagnosis - Ana Bianchi
- 14:00-14:15 Antenatal corticosteroid – benefits and hazards - Dorota Agata Bomba Opon
- 14:15-14:30 1st trimester screening for aneuploidies and preeclampsia - Nikolaos Papantoniou
- 14:30-14:45 Infection and preterm delivery - Orion Gliozheni
- 14:45-15:00 Training of nurse is neonatal at nursing care - Eisa O. El.Amin
- 15:00-15:15 Panel discussion and closing

Third Session: Parallel session – Hall 2

Chairpersons: Eisa O. El.Amin and Ilham M. Omer

- 13:30-13:45 Neonatal screening program for Sudan - Ilham M. Omer
13:45-14:00 Maternal treatment during preterm delivery and labour-impact on fetus and neonate - Marina Degtyareva
14:00-14:15 New data in invasive diagnostic procedure in pregnancy - Apostolos Athanasiadis
14:15-14:30 What neonatologist can learn from fetal neurology? - Milan Stanojevic
14:30-14:45 Help baby breath in Sudan - Abdulmonim Hamid
14:45-15:00 Panel discussion and closing
-

Fourteenth meeting of the IAPM:

BUCHAREST, 16 – 17TH MAY 2018

The meeting was organized in Bucharest by Professors Radu Vladareanu and Florin Stamatian with following program:

May 16, 2018

15:00-18:00 **ADMINISTRATIVE MEETING**

Place: Ghica Palace

Agenda:

1. Welcome words (Asim Kurjak, President of IAPM)
2. Minutes of the meeting held in Khartoum (Frank Chervenak)



Prof. Saling said few words at the beginning of administrative meeting

3. Report of the President of the IAPM (Asim Kurjak)
4. Report of the Treasurer (Vincenzo D'Addario)
5. New regular fellows, new associate fellows proposed by Board (Frank Chervenak)
6. Confirmation of the fellows of Unit of Young Scientists (Asim Kurjak)
7. Report about Bucharest meeting (Radu Vladareanu)
8. Next meetings of IAPM (Frank Chervenak)
9. Report on Journal of Perinatal Medicine (Asim Kurjak)
10. Report on young scientists' session in Belgrade and delivery of Academy prizes for young scientists (Eberhard Merz)
11. Other business

18:00-20:00 CEREMONIAL MEETING

Place: Ghica Palace

Agenda:

1. Start of the academic act. Opening the ceremony. Welcome words by President. Welcome by Prof. Saling, the Life-Long President of IAPM (2-3 minutes)
2. Reading of minutes of the last meeting (Khartoum)
3. Maternal and perinatal morbidity/mortality in the developing world – The role of IAPM ten years after the UN Millennium Declaration (power point presentation, Asim Kurjak)
4. Reading of official designation of new regular fellows
5. Laudatios and oath of new regular fellows. Imposition of the academic medals
6. Reading of official designation of new associate fellows
7. Laudatios and oath of new associate fellows. Reception of diplomas
8. Confirmation of the fellows of Unit of Young Scientists and reception of diplomas
9. Closing of ceremony



President, vice-presidents and treasurer of IAPM chair the meeting



Fellows of Academy

New regular fellows:

- | | |
|------------------------------|-----------------------------|
| 1. Jan A.M. Deprest, Belgium | 5. Zehra Nese Kavak, Turkey |
| 2. Arnaldo Acosta, Paraguay | 6. Miroslaw Wielgos, Poland |
| 3. Gennady Sukhikh, Russia | 7. Pranav P. Pandya, UK |
| 4. Mark Kurtser, Russia | |



Pranav Pandya receiving the medal as a regular fellow of IAPM



Oath of new regular fellows



Oath of new associate fellows

New associate fellows:

1. Vedran Stefanović, Finland
2. Victoria Bitsadze, Russia
3. Roberto Cassis Martinez, Ecuador
4. Thorsten Braun, Germany
5. Giuseppe Rizzo, Italy
6. Sonal Panchal, India
7. Hesham Arab, Saudi Arabia
8. Florin Stamatian, Romania



Young scientists: the future of IAPM



Young scientists: the future of IAPM

Young Scientists Unit

- | | |
|------------------------------------|---|
| 1. Themistoklis I. Dagklis, Greece | 7. Nicola Volpe, Italy |
| 2. Josip Juras, Croatia | 8. Przemyslaw Kosinski, Poland |
| 3. Ioannis Kyvernitakis, Germany | 9. Kelly Yamasato, USA |
| 4. Panos Antsaklis, Greece | 10. Sonila Pashaj, Albania |
| 5. Costin Berceanu, Romania | 11. Olga Grebennikova, Russia |
| 6. Sertac Esin, Turkey | 12. Selma Porović, Bosnia and Herzegovina |



Victoria Bitsadze playing piano after the ceremony



The artist plays the flute

May 17, 2018

08:30-19:05 **SYMPOSIUM** RECENT ADVANCES IN PERINATAL MEDICINE

Venue: Crowne Plaza Hotel, Bucharest

HALL 1

08:30-10:40 SESSION 1

Chair persons: Ritsuko Pooh (Japan) & Asim Kurjak (Croatia)

- 08:30-08:45 Fetal therapy: from surgery to medical therapy - Jan Deprest, Belgium
- 08:45-09:00 Screening for Down's syndrome - Pranav Pandya, UK
- 09:00-09:15 Endometriosis and pregnancy - Mirosław Wielgos, Poland
- 09:15-09:30 Early pregnancies and clinical findings, an update - Zehra Nese Kavak, Turkey
- 09:30-09:45 Mild to moderate ventriculomegaly before 22 weeks of gestation - what is a key for predicting unfavorable course? - Ritsuko Pooh, Japan
- 09:45-10:00 Cell technologies in perinatology: the present and the future – Gennady T. Sukhikh, Russia
- 10:00-10:15 The surgical management of placenta accreta – Mark Kurtser, Russia
- 10:15-10:30 Prediction of pre-eclampsia - Arnaldo Acosta, Paraguay
- 10:30-10:40 Discussion
- 10:40-10:55 Coffee Break

10:55-12:35 SESSION 2

Chair persons: Frank Chervenak (USA) & Eberhard Merz (Germany)

- 10:55-11:10 Do we have to screen for preeclampsia. What for? - Aris Antsaklis, Greece
- 11:10-11:25 Medical and ethical issues related to extreme prematurity - Apostolos Papageorgiou, Canada
- 11:25-11:40 Zika virus infection and perinatal health – Renato Sa, Brazil
- 11:40-11:55 Diagnostic work-up and clinical management of the malformed fetus - Vincenzo D'Addario, Italy
- 11:55-12:10 New revelations in neuro-vascular changes in eclampsia- Hisham Arab, Saudi Arabia
- 12:10-12:25 Recurrent pregnancy loss treatment. What is the evidence base? - Orion Gliozheni, Albania
- 12:25-12:35 Discussion
- 12:35-13:35 Lunch Break

13:35-15:15 SESSION 3

Chair persons: Giovanni Monni (Italy) & Apostolos Papageorgiou (Canada)

- 13:35-13:50 Counseling patients about placentophagy - Amos Grunebaum, USA
- 13:50-14:05 Ultrasonographic characteristics of embryonic heart - Gwang-Jun Kim, Korea
- 14:05-14:20 The assessment of fetal life by 3D-4D sonography - Asim Kurjak, Croatia
- 14:20-14:35 Extended reversed pyramid of perinatal care - is it the next step? - Aleksandar Ljubić, Serbia
- 14:35-14:50 Is 1st trimester screening still necessary after introduction of NIPT? - Eberhard Merz, Germany
- 14:50-15:05 Has prenatal invasive diagnosis by amniocentesis come to an end? - Giovanni Monni, Italy

- 15:05-15:15 Discussion
 15:15-15:30 Coffee Break

15:30-17:10 SESSION 4

Chair persons: Aida Salihagić Kadić (Croatia) & Vincenzo D'Addario (Italy)

- 15:30-15:45 New insights in recurrent pregnancy loss - Chiara Benedetto, Italy
 15:45-16:00 Violence against women in reproductive period: Characteristics of pregnant women as indicators of abuse - Tanja Premru-Sršen et al, Slovenia
 16:00-16:15 Humility: A neglected professional virtue in perinatal medicine - Frank Chervenak, USA
 16:15-16:30 Fetal cognitive functions - Aida Salihagić Kadić, Croatia
 16:30-16:45 Umbilical & Middle Cerebral artery Doppler at (28-40) week's gestation and its correlation with the perinatal outcome in Pregnancy induced Hypertension - Sami Mahmoud Abdelkhair, Sudan
 16:45-17:00 ART effect on the fetus - Joseph J. Schenker, Israel
 17:00-17:10 Discussion

17:10-19:05 SESSION 5

Chair persons: Serge Uzan (France) & Ana Bianchi (Uruguay)

- 17:10-17:25 How important is to look at the vermis in posterior fossa? - Cihat Sen, Turkey
 17:25-17:40 How related are macrosomia, shoulder dystocia and Cesarean section? - evidence based medicine - Radu Vladareanu, Romania
 17:40-17:55 Prediction and prevention of preeclampsia in Asian sub-population - Tuangsit Wataganara, Thailand
 17:55-18:10 Echocardiography in peripartum cardiomyopathy - Jun Yoshimatsu, Japan
 18:10-18:25 Why the implementation of fetal neuroprotection with magnesium sulphate limbs? - Vedran Stefanović, Finland
 18:25-18:40 Preconceptional and antepartum assessment of women with a previous Cesarean section - Bernat Serra, Spain
 18:40-18:55 Small for gestational age fetuses - an updated overview - AbdelLatif Ashmaig, Sudan
 18:55-19:05 Discussion

HALL 2

08:30-10:40 SESSION 6

Chair persons: Cihat Sen (Turkey) & Olus Api (Turkey)

- 08:30-08:45 The syndrome of short cervix - which intervention to choose to prevent preterm delivery - Gordana Adamova, Macedonia
 08:45-09:00 Reducing preterm birth in twins - Abdallah Adra, Lebanon
 09:00-09:15 Techniques (ART) and perinatal outcome - Themistoklis I. Dagklis, Greece
 09:15-09:30 First trimester assessment of placental function - Giuseppe Rizzo, Italy
 09:30-09:45 The effect of preeclampsia on the fetal heart - Olus Api, Turkey
 09:45-10:00 The reasons of regional differences in CS rates - Apostolos Athanasiadis, Greece
 10:00-10:15 Risks and benefits on determining hypothyroidism in early pregnancy - Rodrigo Ayala, Mexico
 10:15-10:30 Evaluation of fetal heart function in high risk pregnancy - Ana Bianchi, Uruguay
 10:30-10:40 Discussion
 10:40-10:55 Coffee Break

10:55-12:35 SESSION 7**Chair persons: Marina Degtyareva (Russia) & Aliyu Labaran Dayyabu (Nigeria)**

- 10:55-11:10 The impact of maternal diabetes on fetal development - Dorota Agata Bomba-Opon, Poland
- 11:10-11:25 Pregnancy associated cancer, influence on the fetus - Snežana Crnogorac, Montenegro
- 11:25-11:40 Cesarean section an epidemic of our time; Strategies to reverse the trend - Aliyu Labaran Dayyabu, Nigeria
- 11:40-11:55 Perinatal cytomegaloviral infection: prevention, treatment and outcomes - Marina Degtyareva, Russia
- 11:55-12:10 Changes in delivery room practices for newborn infants - Julian Eason, UK/UAE
- 12:10-12:25 Short cuts in fetal circulation of great significance - Alaa Ebrashy, Egypt
- 12:25-12:35 Discussion
- 12:35-13:35 Lunch Break

13:35-15:15 SESSION 8**Chair persons: Zoltan Papp (Hungary) & Alaa Ebrashy (Egypt)**

- 13:35-13:50 When to deliver the growth restricted fetus - Nikolaos Papantoniou, Greece
- 13:50-14:05 Controlling of the profuse pelvic haemorrhage - Zoltan Papp, Hungary
- 14:05-14:20 Understanding color Doppler waves in obstetrics - Narendra Malhotra, India
- 14:20-14:35 Immunological anergy to Leishmania could be due to the presence of parasites in placentas at endemic zone Tabasco - Javier Mancilla Ramírez, Mexico
- 14:35-14:50 Strategies to improve and sustain academic productivity - Ivica Žalud, USA
- 14:50-15:05 Vasa previa - how to diagnose and how to manage - Anton Mikhailov, Russia
- 15:05-15:15 Discussion
- 15:15-15:30 Coffee Break

15:30-17:25 SESSION 9**Chair persons: Narendra Malhotra (India) & Liliana Voto (Argentina)**

- 15:30-15:45 Extremely preterm infants - Slovene experience - Lilijana Kornhauser Cerar, Slovenia
- 15:45-16:00 Recurrent thrombotic and obstetric complications in patient with acquired ADAMTS-13 deficiency - Alexander D. Makatsariya, V.O. Bitsadze, Russia
- 16:00-16:15 Statins in preeclampsia - Liliana Voto, Argentina
- 16:15-16:30 Agenesis of ductus venosus revisited - Alexandra Matias, Portugal
- Young Scientists presentations**
- 16:30-16:45 Counselling at periviability: Can we do better? - Kelly Yamasato, USA
- 16:45-17:00 First trimester anomaly scan - Nicola Volpe, Italy
- 17:00-17:15 Controversies about the secondary prevention of preterm birth - Ioannis Kyvernitakis, Germany
- 17:15-17:25 Discussion

17:25-19:05 SESSION 10**Chair persons: Kelly Yamasato (USA) & Nicola Volpe (Italy)****Young Scientists presentations, cont...**

- 17:25-17:40 Prenatal diagnosis of fetal genitourinary system - Sonila Pashaj, Albania
- 17:40-17:55 Key points in multiple pregnancy management - Costin Berceanu, Romania

- 17:55-18:10 Neonatal status epilepticus in NICU patients - Olga Grebennikova, Russia
18:10-18:25 Oral health and pregnancy – Selma Porović, Bosnia and Herzegovina
18:25-18:40 The modification of formula for fetal weight assessment in GDM obese women – Josip Juras, Croatia
18:40-18:55 Assessment of fetal neurobehaviour – Panos Antsaklis, Greece
18:55-19:05 Discussion
-

Fifteenth meeting of the IAPM:

MOSCOW, 21 – 22ND MAY 2019

The meeting was organized in Moscow by Professors Gennady Sukhikh, Alexander Makatsariya and Marina Degtyareva with following program:

May 21, 2019

15:00-17:00 ADMINISTRATIVE MEETING

Place: Sovietsky Hotel

Agenda:

1. Welcome words (President of IAPM)
2. Asim Kurjak: Importance of scientometric evaluation of authors (power point presentation)
3. Reading of minutes of the meeting held in Bucharest (Frank Chervenak)
4. Report of the President of the IAPM (power point presentation)
5. Report of the Treasurer (Vincenzo D'Addario)
6. Reading the names of new regular fellows and new associate fellows proposed by Board (Frank Chervenak)
7. Reading the names of new fellows of Unit of Young Scientists (Frank Chervenak)
8. Report about Moscow meeting (Gennady Sukhikh)
9. Next meetings of IAPM (Frank Chervenak)
10. Report on preparatory work for Marrakech meeting in 2020 (Naima Lamdouar Bouazzaoui)
11. Report on Journal of Perinatal Medicine (Joachim Dudenhausen)
12. Other business

15:00-17:00 CEREMONIAL MEETING

Place: Sovietsky Hotel

Agenda:

1. Start of the academic act. Opening the ceremony. Welcome words by President
2. Welcome by Prof. Saling, the Life-Long President of IAPM
3. New regular fellows



- Reading of official designation of new regular fellows.
- Laudatios, oath of new regular fellows, imposition of the academic medals.
- 4. New associate fellows
 - Reading of official designation of new associate fellows:
 - Laudatios, oath of new associate fellows. Reception of diplomas.
- 5. Confirmation of the new fellows of Unit of Young Scientists and reception of diplomas
 - Introduction and delivery of the Global Maternity Prize to Gennady Sukhikh (Ob/Gyn) and Milan Stanojević (Neonatology)
 - a. Asim Kurjak: Introduction
 - b. Erich Saling and Marina Degtyareva: Global Maternity Prize - backgrounds and rules
 - c. Mark Kurtser: Laudatory speech for Gennady Sukhikh
 - d. Marina Degtyareva: Laudatory speech for Milan Stanojević
- 6. Closing of ceremony



Oath of new regular fellows

New regular fellows:

1. Giuseppe Rizzo (Italy)
2. Ivica Žalud (USA)
3. Amos Gruenebaum (USA)
4. Bernat Serra (Spain)
5. Liliana Voto (Argentina)
6. Badreldeen Ahmed (Qatar)

New associate fellows:

1. Ratko Matijević (Croatia)
2. Sabina Terzić (Bosnia and Herzegovina)
3. Irina Vladimirovna Ignatko (Russia)
4. Ebru Tarim (Turkey)
5. Esin Koc (Turkey)
6. Larisa Belotserkovtseva (Russia)
7. Elena Baybarina (Russia)
8. Attah Raphael Avidime (Nigeria)
9. Pramod Jog (India)
10. Josip Juras (Croatia)
11. Panos Antsaklis (Greece)
12. Sertac Esin (Turkey)
13. Olga Grebennikova (Russia)
14. Sonila Pashaj (Germany)
15. Selma Porović (Bosnia and Herzegovina)



Oath of new associate fellows



Sabina Terzić, Ratko Matijević and Selma Porović, new associate fellows

New members of Unit of Young Scientists

1. Fatima Usman (Nigeria)
2. Alexandra Zavadenko (Russia)



Fatima Usman and Alexandra Zavadenko, new members of Unit of Young Scientists

Delivery of the Global Maternity Prize to Gennady Sukhikh (Ob/Gyn) and Milan Stanojević (Neonatology)



Professor Erich Saling saying few words about Maternity Prize and two winners

Professor Gennady Sukhikh said a few words of thanks



Few words of thanks by professor Milan Stanojević





End of Ceremonial meeting. Performance of the choir.

May 21, 2019

15:00-17:00 **SYMPOSIUM** on RECENT ADVANCES IN PERINATAL MEDICINE

Place: National Medical Research Center for Obstetrics, Gynecology and Perinatology

HALL A

SESSION 1 - Young Scientists Unit

- 08:30-08:40 Panos Antsaklis - Neurological assessment of the fetus
- 08:40-08:50 Costin Berceanu - Morphological and ultrasound findings in the placenta of type 1, type 2, and gestational diabetes mellitus
- 08:50-09:00 Themistoklis I. Dagklis - First trimester diagnosis of congenital defects - reaching a consensus
- 09:00-09:10 Sertac Esin - Is prenatal diagnosis possible for BRCA 1 and BRCA 2 carrier mothers? Methods and Pregnancy Termination Options
- 09:10-09:20 Josip Juras - Prevention and early prediction of preeclampsia
- 09:20-09:30 Przemyslaw Kosinski - Cervical length measurements to prevent preterm delivery after FETO procedure
- 09:30-09:40 Ioannis Kyvernitakis - Combined treatment for the prevention of preterm birth: A chance for pregnancies at high risk
- 09:40-09:50 Sonila Pashaj, Eberhard Merz - 3D ultrasound for the correct demonstration of the nasal bones in the first trimester
- 09:50-10:00 Selma Porović - Influence of chemical agents on fetal face development



- 10:00-10:10 Fatima Usman - Paralysis of upward gaze as a predictor of Acute bilirubin encephalopathy in term neonates
 10:10-10:30 Discussion
 10:30-11:00 Coffee break

SESSION 2 - Regular and Associate Fellows

- 11:00-11:15 Asim Kurjak - Cerebral palsy – obstetrician’s responsibility
 11:15-11:30 Alaa Ebrashy - Fetal Brain and face sonoembryology and 13 wk scan
 11:30-11:45 Cihat Sen - 3VT view for fetal heart examination: How difficult?
 11:45-12:00 Giovanni Monni - Vanishing twin: effects on fetal outcome
 12:00-12:15 Pranav Pandiya - Implementation of cell free DNA in a National Programme
 12:15-12:30 Aris Antsaklis - Maternal mortality. What are pregnant women dying from
 12:30-13:00 Discussion
 13:00-14:00 Lunch
 14:00-14:15 Gennady Sukhikh - Innovative solutions for challenging conditions in perinatology
 14:15-14:30 Frank Chervenak - Violence against Healthcare Professionals
 14:30-14:45 Giuseppe Rizzo - An update on the use of ultrasound in labor
 14:45-15:00 Olus Api - Has the time come to use of cell free fetal DNA test for predicting adverse pregnancy outcomes?
 15:00-15:15 Vincenzo D’Addario - Fetal ventriculomegaly: diagnosis and counseling
 15:15-15:30 Orion Gliozheni - Cesarean delivery – What’s going on?

- 15:30-15:45 Birgit Arabin - Overweight, obesity and weight gain in singleton and twin pregnancies: incidence, risks and meta-analysis of different life style interventions for future generations
- 15:45-16:00 Ivica Žalud - Strategies to improve and sustain academic productivity
- 16:00-16:30 Discussion
- 16:30-17:00 Coffee break
- 17:00-17:15 Snežana Crnogorac - Influence of the mother's malignancy on the perinatal outcome
- 17:15-17:30 Aida Salihagić Kadić - The fetus and stress
- 17:30-17:45 Aliyu Labaran Dayyabu - Congenital fetal anomalies as cause of ruptured uterus: A call for mandatory ultrasound prenatal diagnosis in sub-Saharan Africa
- 17:45-18:00 Miroslaw Wielgos - Spina bifida - minimally invasive prenatal surgery
- 18:00-18:15 Gordana Adamova - 3D ultrasound in the differentiation of cyst and cyst-like findings in the posterior fossa
- 18:15-18:30 Rodrigo Alaya - Gestational Diabetes or C-section rates in Latin America
- 18:30-18:45 Ana Bianchi - Diagnosis of rare cardiopathies
- 18:45-19:00 Discussion

HALL B

SESSION 3 - Neonatologists

- 08:30-08:45 Ola Saugstad - Short- and Long-Term Effects of Neonatal Intervention: From intrapartum events to degenerative diseases
- 08:45-09:00 Apostolos Papageorgiou - Medical and ethical issues at the limits of viability
- 09:00-09:15 Lilijana Kornhauser Cerar - Late preterm deliveries and newborns in Slovenia (analysis of data for Slovenia for 10 years period)
- 09:15-09:30 Marina Degtyareva - Perinatal cytomegalovirus infection: prevention, diagnostics and treatment
- 09:30-09:45 Milan Stanojević - Limits of viability: what brings the future?
- 09:45-10:00 Olga Grebennikova (Young Scientists Unit) - Features of EEG patterns of neonatal seizures in neonates of different gestational age
- 10:00-10:30 Discussion
- 10:30-11:00 Coffee break

SESSION 4 - Regular and Associate Fellows

- 11:00-11:15 Eberhard Merz, Sonila Pashaj - 3D ultrasound - Detection of isolated limb malformations
- 11:15-11:30 Ritsuko Pooh - Neurosonogenetics - Detection of fetal cortical maldevelopment and genetic causes
- 11:30-11:45 Alexandra Matias - Monochorionic twins: the issue of growth
- 11:45-12:00 Amos Grunebaum - What you can do now to prevent maternal mortality
- 12:00-12:15 Sonal Panchal - Impact of the follicular monitoring on congenital fetal anomalies in the ART pregnancies
- 12:15-12:30 Abdallah Adra - Thrombophilia & Placental-Mediated Pregnancy Complications: What is Next?

- 12:30-13:00 Discussion
- 13:00-14:00 Lunch
- 14:00-14:15 Alexander Makatsariya - Fetal thrombotic vasculopathy and neonatal thrombosis. Pathogenesis and prevention
- 14:15-14:30 Apostolos Athanasiadis - Prenatal diagnosis: cfDNA vs Amniocentesis!
- 14:30-14:45 Dorota Bomba - Fetal response to maternal physical activity during pregnancy
- 14:45-15:00 Roberto Cassis Martinez - Ultrasound Markers of viral infections in the fetus
- 15:00-15:15 Jun Yoshimatsu - Evaluation of the Fetal cardiac function by ultrasound and MRI
- 15:15-15:30 Thorsten Braun - Stress in pregnancy – the role for fetal programming
- 15:30-15:45 Nikolas Papantoniou - Early detection of preeclampsia with advanced biochemical and genetic tools (mRNAs – Proteomics)
- 15:45-16:00 Vedran Stefanović - Why do we still need ultrasound in the era of Non-Invasive Prenatal Screening?
- 16:00-16:30 Discussion
- 16:30-17:00 Coffee break
- 17:00-17:15 Victoria Bitsadze - Obstetric antiphospholipid syndrome
- 17:15-17:30 Zoltan Papp - How to avoid hysterectomy in cases of profuse postpartum hemorrhage
- 17:30-17:45 Ali Sungkar - How to deal Preterm labour in Low resource Setting
- 17:45-18:00 Joseph Schenker - Pre-Embryo as a Patient – Medical, Legal and Ethical Aspects
- 18:00-18:15 Tanja Premru-Sršen, Vesna Fabjan Vodusek, Kristina Kumer, Joško Osredka - Uterine artery Doppler and the sFlt-1/PIGF ratio in different phenotypes of hypertensive disorders in pregnancy
- 18:15-18:30 Narendra Malhotra - Prenatal diagnostic test – Which? Why? When?
- 18:30-18:45 Liliana Voto - When and how to deliver gestational and pre-existing diabetic pregnancies
- 18:45-19:00 Discussion



Sixteenth meeting of the IAPM:

MARRAKECH

The sixteenth meeting of IAPM was planned to be held in Marrakech, Morocco, in April 2020 with Professor Naima Lamdouar Bouazzaoui as organizer and under the High patronage of His Majesty The King Mohammed VI.

The meeting had to be postponed due to the COVID-19 pandemics

Under the High patronage of His Majesty The King Mohammed VI



International Academy of Perinatal Medicine (IAPM)
& Association Casablancaise des Pédiatres Privés (ACPP)

Organize in collaboration with

Société Marocaine de Néonatalogie (SMN)
& Société Marocaine de Pédiatrie (SMP)

16th Meeting
of the International
Academy of Perinatal
Medicine

5th African Meeting
of Pediatrics paired with
Spring days of ACPP

16 - 19 April 2020 — Marrakesh

Program

Presidents of the congress :
ASIM KURJAK & MY SAID AFIF

Vice President of the Congress :
NAIMA LAMDOUAR BOUZZAOUI

IAPM organization committee :

- IAPM Council
 - President : ASIM KURJAK
 - Secretary General : FRANK A. CHERVENAK
 - Vice-President I : SERGE UZAN
 - Vice-President II : RITSUKO K. POOH
 - Vice-President III : EBERHARD MERZ
 - Vice-President IV : APOSTOLOS PAPAGEORGIOU
 - Treasurer : VINCENZO D'ADDARIO
 - Life-long President : ERICH SALING
 - Life-long Secretary General : JOSE MARIA CARRERA
- Membre :
Naima LAMDOUAR BOUZZAOUI

Local organization committee :

- ACPP Members :
 - President : My SAID AFIF
 - Secretary General : DALILA BENLAHCENE
 - Treasurers : MOHAMED DADOUN, YOUSSEF TAZI
- AMINA BARKAT & NAIMA LAMDOUAR BOUZZAOUI

Secretary :
IAPM : JADRANKA CEROVEC
ACPP : DALILA BENLAHCENE, AMINA BARKAT

Organizing Agency : Octay Tour
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INTERNATIONAL ACADEMY OF PERINATAL MEDICINE

**16TH MEETING OF THE
INTERNATIONAL ACADEMY OF PERINATAL MEDICINE**

Marrakesh, Morocco - 16-17 April 2020

Venue: Kenzi Rose Garden Farah Marrakech Hotel, address: Avenue President Kennedy

1st DAY

15:00-18:00	Administrative meeting. Attendance: regular, associate and honorary members
18:00-20:00	Ceremonial meeting. Attendance: regular, associate and honorary members. New members. Members of Young Scientists group. Guests.

2nd DAY

Symposium

HALL A

Topic: Why are we so unsuccessful in fulfilling millennium meeting recommendation – is education proper role of our Academy		
08:30-08:40	Asim Kurjak, Croatia	Why are we so unsuccessful in fulfilling millennium meeting recommendation – is education proper role of our Academy
08:40-08:50	Aris J. Antsaklis, Greece	Inter-relationship between obesity, overweight with the presence of preeclampsia
08:50-09:00	Birgit Arabin, Germany	Mind the gaps – open the windows
09:00-09:10	Abdellatif Ashmaig, Sudan	Improving the quality of training and service in obstetrics and gynecology practice
09:10-09:20	Chiara Benedetto, Italy	Empowerment as a tool to improve the health of mothers-to-be
09:20-09:30	Discussion	
09:30-09:40	Frank Chervenak, USA	Risks to professionalism of unrealistic and alienating health care goals
09:40-09:50	Amos Grunebaum, USA	Should every patient be delivered by 39 weeks?
09:50-10:00	Eberhard Merz, C. Thode, E. Huda, S. Pashaj, S. Wellek Germany	12 years successful prenatal risk calculation according to the PRC program of FMF Germany
10:00-10:10	Zoltan Papp, Hungary	Reduction of maternal mortality by prevention and controlling the postpartum hemorrhage
10:10-10:20	Ola D. Saugstad, Norway	How to reduce newborn mortality. Lessons from Mali
10:20-10:30	Discussion	
10:30-11:00	Coffee break	
11:00-11:10	Joseph J. Schenker, Israel	Future training – specialization in perinatal medicine
11:10-11:20	Serge Uzan, France	Telemedicine and artificial intelligence
11:20-11:30	Gordana Adamova, Macedonia	Maternal mortality in Nord Macedonia: where are we?
11:30-11:40	Abdallah Adra, Lebanon	Pregnancy as a window to future health: The Era of CardioObstetrics
11:40-11:50	Discussion	
11:50-12:00	Raphael Avidime Attah, Nigeria	Maternal mortality in sub Saharan Africa: What is the way forward?
12:00-12:10	Naïma Lamdouar Bouazzaoui, Morocco	Perinatal Mortality in Morocco
12:10-12:20	Lilijana Kornhauser Cerar, Slovenia	Management of periviable infants in Slovenia
12:20-12:30	Discussion	
12:30-13:30	LUNCH	
13:30-13:40	Aliyu Labaran Dayyabu, Nigeria	Millennium Development Goals achievable or a mirage: An insight from Sub-Saharan Africa
13:40-13:50	Narendra Malhotra, India	Prenatal screening which tests, why and when
13:50-14:00	Raiko Matijevic, Croatia	Vaccination in pregnancy
14:00-14:10	Vedran Stefanovic, Finland	The role of ultrasound in screening, prediction, prevention and management of pre-eclampsia – Evidence-Based Medicine and its implementation in developing countries
14:10-14:20	Fatima Usman, Nigeria	Preventable morbidities and mortality in African neonates: Are we achieving the SDG targets?
14:20-14:30	Discussion	
14:30-14:40	Sidi Mohamed Tahar Alaoui, Morocco	Situation of maternal mortality in Morocco
14:40-14:50	Aicha Kharbach, Morocco	The role of Cesarean section in reducing maternal mortality
14:50-15:00	Mostafa Mokhtari, Morocco	Provisions of neonatal care and neonatal mortality in Morocco
15:00-15:10	Zubaida Faruk, Nigeria	Emerging Pattern of Antibiotic Resistance in Blood Stream Bacterial Infection Among Neonates at Aminu Kano Teaching Hospital
15:10-15:20	Discussion	
15:20-15:50	Coffee break	
Topic: Recent advances in perinatal medicine		
15:50-16:00	Badreideen Ahmed, Qatar	STIC during routine fetal anomaly scan improves rate of completion of fetal cardiac examination and decreases referral for fetal echocardiogram
16:00-16:10	Ana Bianchi, Uruguay	ECOESTREAM, a new methodology to teach in Uruguay
16:10-16:20	Vincenzo D'Addario, Italy	Interhemispheric supratentorial cysts
16:20-16:30	Marina Degtyareva, Russia	Magnesium for fetal and neonatal neuroprotection: pros and cons
16:30-16:40	Discussion	
16:40-16:50	Jan A.M. Deprest, Belgium	Case selection for fetal surgical conditions (dedicated to severity assessment)
16:50-17:00	Giovanni Monni, Italy	Criticisms and advantages of cell-free fetal DNA prenatal test for aneuploidies
17:00-17:10	Pranav P. Pandya, UK	Screening for congenital cardiac defects – a national programme
17:10-17:20	Apostolos Papageorgiou, Canada	Hydrocortisone (HC): Efficacy on ventilated infants less than 28 weeks of GA and outcome at 22 months
17:20-17:30	Discussion	
17:30-17:40	Ritsuko Pooh, Japan	Fetal Ultrasound meets Genetics
17:40-17:50	Giuseppe Rizzo, Italy	Update in ultrasound in labor room
17:50-18:00	Manuel Sanchez Luna, Spain	Personalized milk bank for premature newborns, a new approach of personalized nutrition
18:00-18:10	Cihat Sen, Turkey	Fetal heart should be checked every trimester by obstetrician, not just by expert
18:10-18:20	Discussion	

2nd DAY

HALL B

Topic: Recent advances in perinatal medicine		
08:30-08:40	Bernat Serra, Spain	A new model for screening for early onset preeclampsia
08:40-08:50	Liliana Voto, Argentina	Prenatal corticoids at different gestational ages: is that feasible?
08:50-09:00	Mirosław Wielgos, Poland	Physical and sexual activity in pregnancy – facts and myths
09:00-09:10	Ivica Zalud, USA	3D Doppler and placenta
09:10-09:20	Sami Mahmoud Abdelkhair Morim, Sudan	Cesarean myomectomy: Does it have a place in current practise
09:20-09:30	Discussion	
09:30-09:40	Panos Antsaklis, Greece	Fetal brain function – what we have learned and what is future challenge
09:40-09:50	Olus Api, Turkey	NIPT use for adverse pregnancy outcome prediction
09:50-10:00	Apostolos Athanasiadis, Greece	The use of corticosteroids in late preterms
10:00-10:10	Rodrigo Ayala, Mexico	Identifying molecular targets of metformin, establishing new molecular targets for treatment of various obstetric conditions
10:10-10:20	Dorota Bomba-Opon, Poland	Intrapartum assessment of fetal wellbeing
10:20-10:30	Discussion	
10:30-11:00	Coffee break	
11:00-11:10	Alaa Ebrashy, Egypt	Fetal cranium and face in 13 week scan: update
11:10-11:20	Sertac Esin, Turkey	Uterine artery Doppler and preeclampsia/IUGR. Which gestational week is the best?
11:20-11:30	Orion Gliozheni, Albania	Cesarean delivery. What's going on?
11:30-11:40	Olga Grebennikova, Russia	Brain monitoring in NICU. Where are we now
11:40-11:50	Discussion	
11:50-12:00	Pramod Jog, India	1000 days - the window of opportunity
12:00-12:10	Gwang-Jun Kim, Korea	Ultrasonographic characteristics of embryonic heart
12:10-12:20	Josip Juras, Croatia	Perinatal leukomalacia and it's risk factors – the role of antibiotic treatment
12:20-12:30	Discussion	
12:30-13:30	LUNCH	
13:30-13:40	Esin Koc, Turkey	Jaundice at the beginning of life. When to worry?
13:40-13:50	Aleksandar Ljubic, Serbia	Biological therapy in perinatal medicine
13:50-14:00	Alexandra Matias, Portugal	Why are monozygotic twins different
14:00-14:10	Anton Mikhailov, Russia	Multiple pregnancy patients blood management
14:10-14:20	Sonal Panchal, India	Doppler and 3D power Doppler assessment of the endometrium and its correlation to abortion rates
14:20-14:30	Discussion	
14:30-14:40	Nikolaos Papanтониου, Greece	Therapeutic use of Laser in Obstetrics
14:40-14:50	Sonila Pashaj, Eberhard Merz, Germany	Why is 3D ultrasound assessment of the fetal brain circulation important?
14:50-15:00	Tanja Premru-Srsen, Keli Hočevar, Aleš Maver, Marijana Vidmar Šimic, Alenka Hodžič, Alexander Haslberger, Borut Peterlin, Slovenia	Vaginal microbiome signature in a Slovenian cohort of women with preterm delivery
15:00-15:10	Renato Sa, Brazil	Repercussions on the newborn of the maternal metabolic syndrome
15:10-15:20	Discussion	
15:20-15:50	Coffee break	
15:50-16:00	Aida Salihagic Kadic, Croatia	Neuromotor and neurosensory development of the fetus
16:00-16:10	Ali Sungkar, Indonesia	Microelement and micronutrient in pregnancy: How big is the role in preparing a better generation?
16:10-16:20	Ebru Tarim, Turkey	The corpus calosum: only agenesis?
16:20-16:30	Tuangsit Wataganara, Thailand	Simulation training in fetal surgery
16:30-16:40	Discussion	
16:40-16:50	Themistoklis I. Dagklis, Greece	The effect of modifiable risk factors in pregnancy outcome in high-income countries: The case of Greece
16:50-17:00	Ioannis Kyvernitakis, Germany	Novel indications for pessary treatment to prevent spontaneous preterm birth: the role of the uterocervical angle
17:00-17:10	Nicola Volpe, Italy	Ultrasound assessment of threatened preterm labor
17:10-17:20	Amina Barkat, Morocco	Essential care for newborns and Kangaroo Mother Care (KMC): Simple actions save lives
17:20-17:30	Discussion	
17:30-17:40	Rachid Bezaad, Morocco	The quality of maternal and neonatal care for universal health coverage
17:40-17:50	Jun Yoshimatsu, Japan	Estimation of myocardial conduction by the cardiac wall movement recorded by speckle tracking method
17:50-18:00	Florin Stamatiu, Romania	Fetal heart block – diagnosis and management
18:00-18:10	Masayuki Endo, Japan	Personal Health Record with information bank in obstetrics management in Japan
18:10-18:20	Discussion	

chapter 10

STATEMENTS OF IAPM

Among the proper activities of the IAPM, «the preparation of STATEMENTS about specific issues related to Perinatal Medicine» is outstanding, according to article 4 of the Constitution.

These Statements are intended not only to the perinatologist but also to the authorities and the people in general. Its aim is to orientate these collectives concerning themes of the scientific and social interest, promoting the dialogue and reflection about the same.

Up to now, four Statements have been published coinciding with each of the four Plenary Meeting of the IAPM.

FOUNDATIONAL STATEMENT

of the International Academy of Perinatal Medicine:

THE ROLE OF THE ACADEMY

Barcelona, May 25, 2005

Perinatal Medicine is among the most challenging and beautiful areas of study and practice. It deals with events before birth, when the fetus is a patient and during the immediate neonatal period. The newly formed IAPM is dedicated to the study of all aspects of perinatal biology, physiology, screening, diagnosis, management and ethics, with the goal of continuous quality improvement in the care of maternal, fetal and neonatal patients.

The role of the «International Academy of Perinatal Medicine» is guided by the international ethical concept of fiduciary responsibility to protect and promote the health of pregnant women, fetal patients and newborns globally. In furtherance of this role, to promote knowledge of Perinatal Medicine and its clinical and technological applications, placing special emphasis on its social, ethical and anthropological dimensions.

The main objectives of the «International Academy of Perinatal Medicine» must be: to promote research and education in the field of reproductive health (Forums, Symposiums, Courses, etc.), to develop and improve the exchange of information and dialogue, to foster international aid to developing countries, and specially the application of values, style and outstanding academic principles in the field of Perinatal Medicine.

The present generation of perinatologists is enjoying two of the most beneficial transformations in human history: a revolution in life expectancy and the liberation of women from the burden of their biology. But, there is something else.

Birthrates in developed countries from Italy to South Korea have sunk below the levels needed for their populations to replace themselves.

Where did those billions go? Millions of babies have died, a sizable fraction of them from AIDS, far more from malaria, diarrhea, pneumonia, and even measles. Millions more have been aborted, either to avoid birth or, as in China and India, to avoid giving birth to a girl.

However, the real missing billions are the babies who were simply never conceived.

Our Academia is founded at the beginning of the third millenium with all of the challenges which living generations are expected.

Undoubtedly, Perinatal Medicine is now a global area of study. The bonds that link perinatologists together transcend geographic, political, religious and lingual differences, resulting in a globalisation that optimizes clinical care.

Some health impacts of globalisation can already be defined as positive such as telemedicine, that could help in the provision of antenatal services in remote areas.

At the time of fast globalisation it is clear that no human endeavor is more adapted to the globalized world than science, for its very nature is global. The brotherhood of scientists is truly international. This is an immense privilege, but equally so an immense responsibility for the development of humanity. Like art, it is a universal possession of humanity, one of its vital potentials and the scientist generating or transmitting new ideas has been and will remain the essence not only of scientific existence but also of the civilization of an environment.

We firmly believe that the globalized world will be run by those who know how to synthesize; that is people able to put together the right information at the right time, think critically about it, and make important choices wisely.

Many of the most important questions in medicine are hard to quantify and therefore tend to get ignored; and many of the answers we seek come in the form of anecdotal



Reading of Foundational Statement by Prof. A. Kurjak (Barcelona, May 25, 2005).

evidence. We do not need to remind you that medicine is an art as well as a science and that every patient is a unique individual who does not necessarily conform to the conclusions of a meta-analysis. Our serious warning is that if our profession is not careful, the freedom to use clinical judgment will be steadily eroded by administrators and others concerned mainly with economic factors advised by statisticians and others who worship at the altar of evidence-based medicine.

All members of Academia should recognize that time is running out. Indeed, we should all be proud of the extraordinary progress made in perinatal medicine over the last 45 years. But there is still much to do, particularly in the developing world. We have to stress that the work of the international community has begun to show that even an extremely difficult and logistically complex problem, such as that of ensuring safe motherhood for all women of the planet, can be tackled and eventually resolved: if there is a will, there is a way.

*Prepared by A. Kurjak with the acquiescence of the Foundational Committee of IAPM
(Professors Erich Saling, Asim Kurjak, Frank Chervenak, Aris Antsaklis and José M. Carrera)*

BARCELONA STATEMENT of the International Academy of Perinatal Medicine

GLOBALISATION AND PERINATAL HEALTH

Barcelona, November 25, 2006

GLOBALISATION AND HEALTH

In last decade globalisation created new ground for scientific and technological achievements based on rapid economic and social transformation, deregulation of national markets, new trade regiment and revolutionary communication possibilities.

Three types of changes characterize the process: spatial changes which affects how people perceive and experience physical or territorial space; temporal changes affects how they perceive time and cognitive one brings new impact on our cultures, values, beliefs and knowledge. All of them have the impact on health and human wellbeing.

By changing the burden and disease pattern and rapid spread out around the world it was recognised that globalisation has a complex influence on health: developed countries become again more vulnerable for communicable diseases (SARS, viral and bacterial infections caused by antibiotic resistant strains, MDRTB, AIDS/HIV) and developing countries faced by numerous communicable diseases start to suffer more and more from non communicable diseases (diabetes, cardiovascular disorders) which become unsustainable for their health system and economy.

Therefore today's problems of economic development are inevitably discussed together and in association with health indicators like life expectancy at birth, child and maternal mortality. The free movement of capital and advantages that will bring better standards of living and health, undoubtedly interfere with an increase in the inequality gap between the world's of rich and poor. Moreover, it is now widely accepted that disease control is not just a health sector issue, but one that involves inputs of multisector approach: from education to trade, knowledge management to policy and economy.

THE IMPACT OF GLOBALISATION ON PERINATAL MEDICINE

Health as a global public good become necessary investment for development process especially in developing countries. It was shown that human development index depends to a great extent on life expectancy at birth, but indirectly on perinatal and childhood losses as well as maternal mortality rate. There is no doubt that continuous rise in life expectancy is not spread out equally and differences among regions in the world even rise.

Despite the magnificent progress made in past decades, today's perinatologists have great concern on two problems: 1) declining fertility rates in developed world below the levels needed for their population replacement and 2) high maternal and perinatal mortality in developing countries.

Declining birthrates have been registered in all parts of our world, in developed countries to roughly 1.6 children per woman and developing to 3 in 2001. The future threat for those countries where fertility rate is below replacement level is not only population and demographic issue, but to a large extent threat for economy and development. The challenge for professionals is in creating health policy to answer and acting in favor of such level of fertility which is balanced with replacement at least.

But in spite of decrease in perinatal mortality in general there are still between 7 and 8 million perinatal deaths mostly in developing countries, and it is not known exactly how many are stillbirths and how many are early neonatal deaths. Most of neonatal and perinatal deaths in developing countries are preventable and the result of poor maternal health and inadequate care during pregnancy and delivery.

The current rate of HIV/AIDS infection in young women is accelerating (one half of infections in developing countries occur between ages 15-19 and 47% of them are women). Rising awareness of critical role of this disease on reproductive choices is not only challenge but even more duty for health profession. The real challenge for members of our profession is to widen and follow best practices and global strategy for declining perinatal mortality.

Maternal mortality rate differs to a greatest extent among developed and developing world. The average risk for women in developing countries of dying in childbirth is 1 in 60, but it can go as high as 1 in 10 in the least developed countries. In comparison, in Western Europe, the risk is 1 in 10,000. Maternal, infant and child mortality illustrate the largest gaps between the rich and the poor in today's world. The data on maternal mortality in poor countries are shocking. Every year more than half million women die in pregnancy, during childbirth or from unsafe abortions, 97% of those deaths are in de-

veloping countries. The major direct causes of maternal deaths are related to severe bleeding, infection, eclampsia, obstructed labor, unsafe abortion and other curable and preventable conditions. The reason is mainly due to lack of access to basic medical and obstetric care.

This situation is unacceptable for us as professionals and scientists, members of IAPM.

GLOBALISATION AS A SOURCE OF CHANGES - FOCUS ON SPECIFIC STRATEGIES BY GLOBAL FORCES

At the Millennium Summit in New York heads of states of the world together with UN and WHO, in 2000, declare Millennium Development Goals (MDG). By 2015 the target is to reduce by two thirds perinatal mortality rate and by three quarters the maternal mortality rate. By 2003 all major organisation active in the field of maternal health joined forces and launched in Kuala Lumpur Partnership for Maternal and Neonatal Health (PMNH).

International Organisation of Gynecology and Obstetrics (FIGO) and World Association in Perinatal medicine (WAPM) become and serve as leading organisation for further implementation of strategies identified to achieve safer pregnancies and deliveries. Matres



Reading of the Barcelona Statement about «Globalisation and Perinatal Health», by Prof. Asim Kurjak (Barcelona, November 25, 2006).

Mundi International (MMI) as international non governmental organisation founded in Barcelona with special aim to improve the reproductive conditions needed in any part of the world act now as associate agency of WAPM and IAPM. All named stakeholders together with governments, other supportive agencies and private institutions form a network to reach the MDGS goals of safe pregnancies and deliveries.

We members of IAPM commit ourselves through our action to fasten all actions and specific strategies to meet the health needs of most vulnerable population on our world, women in reproductive age and children. We will work in partnership with relevant national and international bodies and organisations to ensure equity, maternal and child health gain and better quality of care during pregnancy and labour (including reduced inequalities in its infrastructure, gap in professional knowledge). We will collaborate on specific issues in some regions at risk, including harmonisation of policies, legislation and information systems, institutional capacity building and networking to pursue regional goals and building safe world for those in needs. We will meet the health needs of target population mobilizing human and financial resources to the extent possible to:

- Improve antenatal care.
- Increase skilled attendance at the birth.
- Increase basic emergency care in peripheral units.
- Intensify the comprehensive emergency obstetric care.
- Strengthen rapid transport of women in need of special care.
- Fasten the global approach in implementation and follow up of above and other programs.
- Increase engagement not only doctors and midwives, but all involved in public health policies, financing and organisation of health systems.
- Strengthen intersectoral collaboration for access to affordable and safe environmental conditions for women and children.
- Establish networks and systems for collection and exchange of experiences and professional knowledge.

We see globalisation as an accelerating process in flow of information, technology, goods and services. Using global goods it is possible to create challenges for the governance of global maternal and child health, including the need to form a network of international organisations capable to respond to global threats to public health. The rapid development in prenatal diagnosis (molecular, ultrasound etc.) urged to develop and create programs for distribution of essential knowledge and services to medical professionals in cooperation with network of international stakeholders. Facilitating flow of information through IT, rapid transportation, knowledge, telemedicine, globalisation might be beneficial to all countries in need to improve maternal and child health. We members of IAPM request partnership and support of all previously recognised international organisations in next meeting to monitor and evaluate progress achieved by such partnership for maternal and child health.

BUDAPEST STATEMENT
of the International Academy of Perinatal Medicine

ETHICAL CHALLENGES OF GENOMICS FOR PERINATAL MEDICINE

Budapest, November 23, 2007

The new genomics will greatly expand the type and amount of diagnostic information about the fetus. This expanded diagnostic capacity will create ethical challenges for perinatologists. To inform clinical judgment and decision making, the Academy offers the following ethical framework.

Obtaining genomic information about the fetus is medically reasonable and therefore should be offered nondirectively to all pregnant women, depending on availability, as a matter of fiduciary responsibility. The opportunity to obtain this information will enhance the pregnant woman's autonomy. The pregnant woman should be encouraged to share this information with her genetic partner. Disclosure of information about genomic assessment should be guided by the reasonable person standard. This standard is met when the physician provides the pregnant woman with information that a competent perinatologist would judge to be clinically important.

The ethics of first- and second-trimester risk assessment currently provides a model for decision making with and by pregnant women about genomic assessment of the fetus. It has been demonstrated that pregnant women can make sophisticated decisions, which are consistent with scientifically derived information, about the use of risk-assessment information in subsequent decisions about invasive diagnosis. Pregnant women, with the support of an appropriate informed consent process, should be expected to make similarly sophisticated decisions about genomic assessment of the fetus.

The policy for disclosure of the results of genomic assessment should be that information about genetic conditions and carrier status will routinely be disclosed. Information about later-onset conditions is controversial. Therefore, it is permissible but not obligatory to provide such results. Results of uncertain or unknown clinical significance today should not be disclosed.

There is strong ethical consensus that genomic information, like all medical information, should be protected by the professional obligation of confidentiality. Perinatologists should advocate for public policy that protects the confidentiality of genomic information about the fetus.

Depending on associated costs, patents on genomic tests may create significant economic barriers to fetal genomic assessment and may impede research. Perinatologists



Reading of the Budapest Statement on «Ethical Challenges of Genomic for Perinatal Medicine» (Budapest, November 23, 2007)

should advocate for public policy, appropriate to their national setting, that reduces or eliminates these barriers and fosters research in perinatal medicine.

In conclusion, ethics is an essential component of genomic assessment of the fetus. Perinatologists have resources in medical ethics adequate to guide them in leading responsible change. These resources include the ethics of informed consent, the enhancement of the pregnant woman's autonomy, protection of professional integrity, fiduciary responsibility to pregnant and to fetal patients and the persons they will become, and advocacy for access to fetal genomic assessment.

Prepared by Prof. Z. Papp with the acquiescence of the board of Directors and support of:

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NEW YORK STATEMENT

of the International Academy of Perinatal Medicine

WOMEN AND CHILDREN FIRST

New York, The United Nations, July 7, 2008

THE ETHICAL PRINCIPLE OF JUSTICE AND THE RESPONSIBLE ALLOCATION OF HEALTHCARE RESOURCES

A major concern of public policy in all countries is the responsible allocation of healthcare resources. Justice is the ethical principle that requires fairness in such allocations. Without justice, allocation of healthcare resources can be arbitrary and injure the inter-

ests of many. Justice must guide healthcare allocation so that it is reasoned and fair, thus protecting and promoting the interests of all who are affected.

SUBSTANTIVE AND PROCEDURAL JUSTICE

The principle of justice has a substantive and a procedural component. Substantive justice requires that the *outcomes* of priority setting in the allocation of healthcare resources reasonably protect and promote the interests of all of those with a stake in the priorities that are actually set. *Procedural justice* requires that the interests of everyone with a stake in the outcomes of priority setting in the allocation of healthcare resources be taken into account in the decision-making process.

JUSTICE-BASED RESPONSES TO ETHICAL CHALLENGES IN ALLOCATING PERINATAL HEALTHCARE RESOURCES

The first ethical challenge in allocating resources for perinatal healthcare is *economic and political bias*. In many countries and cultures, women and children do not control economic resources and political power to the same extent as adult men. Allocation of healthcare resources that favors only those with economic and political power violates substantive justice. The response of justice is to emphasize that allocation of healthcare resources should also benefit those who are vulnerable as a result of economic or political bias.

The second challenge is *age bias*. In many countries, there is a bias in allocation of healthcare resources toward adults. This reflects the fact that adults will never again be fetal or neonatal patients but will become patients themselves as they age and experience chronic illnesses and disability. Such bias can be stronger in societies with a low population-replacement rate. Age bias in the allocation of healthcare resources violates substantive justice. The response from justice should be the life-cycle principle that requires that all should have the opportunity to live and develop through all stages of life. Specifically, the younger one is, the more years one is expected to live, creating an increased priority of healthcare resources for fetal patients and children.

The third challenge is the *bias in favor of persons*. In the language of philosophical ethics, persons are human beings with independent moral status and autonomy, which occurs only after birth. Fetal patients are therefore not persons. Bias in favor of persons violates procedural justice by not taking into account the interests of fetal patients, who undeniably have a stake in the allocation of healthcare resources. The response of justice derives from the ethical concept of the fetus as a patient. This concept is an accepted component of perinatal ethics, which emphasizes that a human being does not need to be a person in order to be a patient. Allocation of healthcare resources should take account of the needs of all patients, not just persons.

The fourth challenge is *bias against those who cannot speak for themselves*. Fetal patients and children have a stake in the allocation of healthcare resources but cannot speak for themselves in the political process. This is also true of women in some countries. If no one speaks for those who cannot speak for themselves, their interests may not be taken into account in healthcare allocation decisions. This violates procedural justice. The response of justice relies on the professional, fiduciary role of perinatologists. They are clinicians and scientists with expertise in the medical care of fetal, neonatal, and preg-

nant patients. As their fiduciaries, perinatologists should speak and advocate for the interests of fetal, neonatal, and pregnant patients in the process of making healthcare allocation decisions.

IMPLICATIONS FOR HEALTH POLICY LEADERS

Health policy leaders should make decisions about allocation of healthcare resources for fetal, neonatal, and pregnant patients on the basis of the requirements of justice. The expert judgments of perinatologists constitute invaluable but sometimes underutilized resources in this process. Health policy leaders should also support the development and implementation of well founded perinatal medicine as the means for eliminating to the greatest extent possible national, regional, and international variation in the processes and outcomes of perinatal care. International collaborative research and global perinatal education are essential components of this effort.

*Prepared by Prof. Frank A. Chervenak et al.
with the acquiescence of the members of the International Council.*



United Nations. New York.



DUBROVNIK STATEMENT

of the International Academy of Perinatal Medicine

THE PREDICTION AND PREVENTION OF PRETERM BIRTH AND ITS CONSEQUENCES: AN UNMET CHALLENGE TO PERINATAL MEDICINE, SCIENCE AND SOCIETY

THE DECLARATION OF DUBROVNIK

Dubrovnik, November 1, 2009

Preterm birth is the defining challenge to obstetrics and neonatology at the beginning of the XXI century. The advances in care of preterm neonates in the last decades has improved survival dramatically in developed and in developing countries, so that the definition of viability has been reframed. Yet, survival of the extreme premature neonate has come with high risk of long-term disability. Therefore, besides improved survival, the quality of life of these vulnerable infants should be emphasized by careful and lifelong evaluation of their progress. A legitimate question is whether neonatal has approached the limit of intact extra-uterine life.

The success of neonatal medicine in treating the consequences of preterm birth has not been matched by the prevention of spontaneous or indicated preterm birth. The essential problem has been an incomplete understanding of the mechanisms of disease responsible for spontaneous preterm labor with intact or ruptured membranes or maternal and fetal disorders which result in indicated preterm delivery (e.g. preeclampsia and intrauterine growth restriction).

The taxonomy of obstetrical disorder responsible for preterm birth is in an early phase in which pathology is recognized by symptoms and signs rather the underlying mechanism of disease leading to these clinical manifestations. The time has come to use the tools of “discovery science” to identify such mechanisms, as well as to find early biomarkers of risk and interventions aimed the prevention of preterm birth. It is now clear that preterm birth is not caused by only one pathologic process – but many. The naïve view that a single test and single intervention will prevent all cases of preterm birth should be recognized as an obstacle to identified, others remain to be discovered. A unique feature of pregnancy is the co-existence of two hosts in intimate contact with different genomes and environments. Moreover, while cooperation of the hosts should be expected, the biological interests of fetus and mother may not always coincide. Environmental exposures may have different effects on a mature host than in a developing organism. Viviparity has created conditions which allow for the potential development of unique pathologic process absent when there is not symbiotic relationship and there yet unrecognized in medicine.

The identification of known (in order disciplines) and unknown mechanisms of diseases responsible for preterm birth is the major challenge of perinatal medicine. Our discipline must

commit itself to the use of the tools of “discovery science” and computational biology to meet this urgent need. This needs to be followed by rigorous translational science and ethically designed clinical trials.

At the same time, advances in understanding gained to date and the knowledge of promising clinically simple strategies to identify the patient at risk (e.g. vaginal pH testing to identify dysbiosis) and specific interventions to prevent birth, deserve systematic and urgent rigorous testing because of their promise to achieve a dramatic and rapid reduction in the rate of this adverse pregnancy outcome.

The importance of behavioral, social and economic issues predisposing to prematurity, need to be recognized and addressed. We advocate adequate support and protection for pregnant women as an integral health promoting activity to prevent preterm birth in all cultures. Pregnant women in developing countries should be protected from hard work, mistreatment and any kind of exploitation as the causes of prematurity. Governments least obstetrical and neonatal care. This approach should be aimed to reduce preinatal and maternal mortality by up to 50 percent in the next ten years. It is also desirable to reduce prematurity rate between 32 and 36 weeks of gestation in developing countries by 50 percent within the next ten years.

Governments, scientific societies, funding bodies and charitable organizations which fund clinical and basic research need to realize the importance for society of the consequences of preterm birth. We believe that the prevention of preterm birth is possible if perinatal medicine, science and society give the necessary priority to this most problem of maternal, fetal and neonatal patients.



Reading of the Dubrovnik statement by Professor Asim Kurjak.

OSAKA STATEMENT

of the International Academy of Perinatal Medicine

**IAPM OSAKA DECLARATION
"FETAL NEUROLOGY"**

Osaka, October 22, 2010

Despite the fetal central nervous system progresses remarkably during pregnancy, the disturbances of functional, psychological or motor function and congenital central nervous system lesions have been relied mainly on the postnatal diagnosis and conservative treatment as well as its training after the birth, Consequently the developmental mechanism of central nervous system abnormality has been hardly clarified in the period of fetal age.

Since diagnostic technology has been exceedingly developed in perinatal medicine, the fetal diagnostic abilities depending on imaging by ultrasound and magnetic resonance, precise investigation on developmental structures of central nervous system including fetal brain and spinal cord have been enormously progressed resulting in the assessment of immature function of fetal central nervous system. Also, the genetic approach to the neurological abnormalities has disclosed various causative genes to the disorders. These progresses of diagnostic technologies have made it possible to gradually clarify the prenatal mechanism of fetal central nervous system disorders. Furthermore, the application of multipotential iPS stem cells has opened a new era in the treatment of fetal central nervous system disorders.

The solution of still vague problems in neurological embryology, imaging and the progress of neuro-genetics as well as the regenerative medicine definitely will contribute to supporting parents who have children with unsolved congenital neurological disorders or retarded psychomotor function of unknown causes, and also providing very supportive information to the parents who aware the birth of handicapped children.

The comprehensive discussion on the state-of-art investigations in multiple fields on the new "fetal neurology" will cast the light of aspiration to the person or society of neurological disorders by the future development on early detection and treatment or prophylaxis in the fetuses of prenatal stage.

The international Symposium on Fetal Neurology was organized with these purposes by the support of 6th International Academy of Prenatal Medicine meeting held in Osaka, Japan in October 2010.

PARIS STATEMENT

of the International Academy of Perinatal Medicine

MATERNO -FETAL CONFLICT OF INTEREST: A CHALLENGING SITUATION FOR THE OBSTETRICIAN

Paris, September 24, 2012

ETHICAL FRAMEWORK

1. The physician, when dealing with a woman whose pregnancy is going to term, has professional responsibility for the pregnant and fetal patients. The physician has beneficence-based and autonomy-based obligations to pregnant patients. The physician has beneficence-based obligations to fetal patients. All three obligations shape the physician's professional responsibility. Respect for autonomy requires the physician to act according to the pregnant woman's beliefs as much as possible; nevertheless, the physician must never forget his or her obligation to protect the life and health of pregnant, fetal, and neonatal patients.
2. The nature of the pregnant woman-fetal patient relationship should be respected in her personal, familial, and social contexts under applicable law.
3. Pregnant women who have decided to take their pregnancy to term owe a reasonable duty to their fetuses to try to prevent disease or disability. However, given the uncertainties of modern perinatal medicine, and in case of low level of evidence in the physicians' decisions or the lack of adequate prenatal care, the pregnant woman's informed requests should be given serious consideration.
4. Resolution of maternal-fetal conflicts should focus on mutual needs of pregnant women and fetal patients rather than on their mutually exclusive rights. Conflicts between pregnant women and their fetuses should be considered in a way that emphasizes moral relationships rather than rights. This should help moving law and policy away from criminalization and toward prevention of perinatal harm.

MATERNAL-FETAL INTERVENTION FOR FETAL BENEFIT

5. Decisions to undertake fetal therapy involve a complex assessment of the best interests of the fetal patient, a pregnant woman's interest in her own health, and her autonomy-based right to make informed decisions. In recommending fetal or postnatal therapy of proven efficacy, physicians should present a fair and multidisciplinary assessment of the problem. Maternal choice and assessment of risk should be respected. In addition, fetal therapy of unproven efficacy should be undertaken only as part of an approved research protocol and with the informed consent of the pregnant woman. The pregnant woman's partner or husband should be encouraged to participate in the process with the woman's consent and should respect and support the pregnant woman's decision-making role. The situation of maternal brain death is highly specific.

MANAGEMENT OF PREGNANCY

6. Occupational exposures to teratogenic or fetotoxic agents can adversely affect fetal outcome. In the context of workplace exposures pregnant women should be offered realistic alternatives in work opportunities and should not be held responsible or penalized for situations that are due largely to employers' or society's shortcomings.
7. The occurrence of malignancies that be effectively treated during pregnancy has increased over the past several decades. Malignancies complicate approximately 1 per 1000 pregnancies. Beneficence-based obligations to the pregnant woman and the fetal patient can become discordant. Immediate treatment may be needed to benefit the pregnant woman. At the same time chemotherapy, radiotherapy, or surgery may impose substantial risks for the fetal patient. Decision making requires a collaborative and interdisciplinary approach among gynecologists, oncologists, obstetricians, geneticists, teratologists, surgeons, neonatologists, psychologists, nursing staff and other disciplines.
8. The mode of delivery for a fetal patient with a malformation can create a conflict between beneficence-based obligations to the fetal patient and beneficence-based obligations to the pregnant woman. Decision making should be guided by the best available data and the informed consent process. Unless the data are highly reliable, the informed decision of the pregnant woman should guide selection of mode of delivery.

NEONATAL CARE

9. Life-sustaining treatment is sometimes justifiably withdrawn or withheld from critically ill newborn infants with very poor prognoses. Parents' views about treatment may be relevant to an assessment of the infant's interests and they may also affect those interests. The interests of the infant in his or her future can be reduced by developmental immaturity or a severe anomaly. In such clinical circumstances, the physician should take account of parents' concerns about the burdens of caregiving.

PERINATAL HEALTH POLICY

10. Health policy should identify and correct inequities in the provision of perinatal health-care. Protecting the best interests of pregnant, fetal, and neonatal patients should be the priority for perinatal health policy. Perinatal health policy should focus on correcting the lack of resources for perinatal healthcare and support for children with disabilities and not be distracted with futile debate over clashing fetal and maternal rights. Perinatal health policy should also recognize and enhance the social roles of women in all cultures.

Prepared by Serge Uzan, Yves Ville, and Frank Chervenak



WORD OF EDITORS

PRESIDENTIAL MESSAGE

by Prof. Asim Kurjak.

PREFACE TO THE FIRST EDITION

by Prof. Erich Saling.

FOREWORD TO THE FIRST EDITION

by José M. Carrera.

INTRODUCTION

Foundations of IAPM.

CHAPTER 1

The History of Perinatal Medicine.

CHAPTER 2

The fathers of Perinatal Medicine:
the academic medals.

CHAPTER 3

Identity and mission of International
Academy of Perinatal Medicine (IAPM).

CHAPTER 4

History of International Academy
of Perinatal Medicine (IAPM):
the foundation.

CHAPTER 5

Constitution of IAPM and By-Laws.

CHAPTER 6

Basic Organization of the IAPM.

CHAPTER 7

The International Council:
Regular Fellows of IAPM.

CHAPTER 8

Honorary Members, Associate Fellows
of IAPM and Young Scientists Unit.

CHAPTER 9

Activities of IAPM.

CHAPTER 10

Statements of IAPM.



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