

# NPMF 2019



7-10 March

«NEONATAL/PERINATAL MEDICAL FORUM»  
SCIENTIFIC PROGRAM

Latvia, Riga



Supported by



# LATVIA

## Official Name:

Latvijas Republika

short form: Latvija

international long form: Republic of Latvia

international short form: Latvia



national flag

## Time:

Time Zone: Eastern European Time (EET)

Local Time = UTC +2h

**Country Calling Code:** +371

**Capital City:** Riga (pop. 1.15 million metro area)



flag of the capital

## Other Cities:

Daugavpils (113 000); Liepaja (87 000); Jelgava (66 000); Jurmala (55 000); Ventspils (44 000); Rezekne (38 000).

## Government:

Type: Parliamentary Democracy.

Constitution: The law "On the Republic of Latvia Status as a State," passed by Parliament on 21 August 1991, provided for the reinstatement of the 1922 constitution.

## Geography:

Location: Eastern Europe, bordering the Baltic Sea, between Estonia and Lithuania.

Area: 64,589 km<sup>2</sup> (24,937 sq. mi.)

Terrain: Fertile low-lying plains predominate in central Latvia, highlands in Vidzeme and Latgale to the east, and hilly moraine in the western Kurzeme region. Forests cover one-third of the country, with over 3 000 small lakes and numerous bogs.

## Climate:

Temperate, maritime; wet, with four seasons of almost equal length.

January temperatures average -5°C (23°F); July 17°C (63°F).

## People:

Nationality: Latvian(s).

Population: 1.95 million (2017)

GNI per capita PPP. \$ 12 886 (year)

Religions: Lutheran, Orthodox, Roman Catholic.

Languages: Latvian. Russian also is spoken by most people.

Literacy: 99%

**Currency:** Euro (EUR)

# introduction

The human intellectual potential has never been more cherished an asset as it is in our modern society.

As specialists of perinatal and neonatal health, we are not only the safeguards of the human body, but we are also the protectors of this precious asset and its tremendous potential during its most vulnerable and risky period.

This forum serves as a critical platform to enhance the improvement of knowledge and skills in this medical field, enabling professionals to share and learn as we advance our understanding of human life at its inception.

I heartily welcome you as invaluable contributors to the Neonatal/Perinatal Medical Forum in Riga!

Warmest regards.  
Sincerely,



Latvijas Ārstu biedrība

**Ass. Prof. Ilze Kreicberga, MD, MBA**  
**Chairman NPMF 2019**



**09:00-09:15** «Daugava», 1st floor

WELCOME  
BY CHAIRMAN

Successes and Challenges of Childbirth Care in Latvia  
**Ilze KREICBERGA**

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**09:15-10:00** «Daugava», 1st floor

LECTURE

Ventilation and Physiology Based Cord Clamping  
**Rangasamy RAMANATHAN**

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**10:10-11:40** «Daugava», 1st floor    «Venta», 2nd floor    «Abava», 2nd floor    «Amata», 2nd floor

WORKSHOP

Optimizing the Perinatal Management of the Preterm Infant

**Virgilio CARNIELLI & Tiziana FRUSCA**

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The Benefits of Early Enteral Nutrition

**Alison LEAF**

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INSURE or LISA?

**David SWEET & Boris KRAMER**

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Congenital Viral Infections – Controversies in Prevention, Diagnosis & Management from Pregnancy to Childhood

**Dymtro DOBRYANSKY & Gabor SZIRKO**

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**11:40-12:00** COFFEE BREAK

**12:00-13:30** «Daugava», 1st floor    «Venta», 2nd floor    «Abava», 2nd floor    «Amata», 2nd floor

WORKSHOP

Improving Care for Newborns Receiving Intensive Care – Small Changes Make a Difference

**Vera DEMYANKOVA & Merran THOMSON**

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Hypoxemic Respiratory Failure (HRF) with or without Persistent Pulmonary Hypertension (PPHN)

**Rangasamy RAMANATHAN**

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Anaesthetics and the Developing Brain

**Dick TIBBOEL**

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Medical and Ethical Decisions and Dilemmas at the Verge of Viability

**Arunas LIUBSYS**

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**13:30-14:30** LUNCH

**14:30-16:00** «Daugava», 1st floor    «Venta», 2nd floor    «Abava», 2nd floor    «Amata», 2nd floor

WORKSHOP

HIE-Diagnosis and Outcome Prediction

**Katrin KLEBERMASZ-SCHREHOF & Oleg IONOV**

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Respiratory Technologies of the Delivery Room: from CPAP to HFV

**Alexei MOSTOVOI & Anna KARPOVA**

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Diagnosis and Management of Early and Late Onset Sepsis

**Mark PRUTKIN**

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From Science to Practice in Neonatal Resuscitation

**Daniele TREVISANUTO & Virgilio CARNIELLI**

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**16:00-16:30** COFFEE BREAK

**16:30-18:30** «Daugava», 1st floor

SESSION

Present Your Own Case! – Neonatal Potpourri 1

chaired by **Boris KRAMER & Rangasamy RAMANATHAN**  
co-moderation by all speakers of the day

Ivan Anikin, G. Ayush / P.Tuul, Artem Batmanov / Umida Nasirova, Rasa Brinkis, Aniko Manea / Oana Costescu, Gabriela Ildiko Zonda, Maria Livia Ognean, Krešimir Perković / Mirta Starčević, Talgat Tolykbaev, Olga I. Sapun

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**08:00-09:00** «Daugava», 1st floor

SESSION

Present Your Own Case! - Neonatal Potpourri 2  
chaired by **Boris KRAMER & David SWEET**  
co-moderation by all speakers of the day

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Botakoz Abentayeva, Ligia Blaga, Cristina Buzduga, Darjan Kardum, Marat Satrutdinov

**09:00-09:35** «Daugava», 1st floor

LECTURE

The Alternative Golden Hour-Individualised Neonatal Care  
**Merran THOMSON & Katrin KLEBERMASZ-SCHREHOF**

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**09:35-10:05** «Daugava», 1st floor

LECTURE

Towards the Holy Grail of Nebulised Surfactant  
**Federico BIANCO**

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**10:10-11:40** «Daugava», 1st floor    «Venta», 2nd floor    «Abava», 2nd floor    «Amata», 2nd floor

WORKSHOP

May the Evidence  
Be With You ...

**Boris KRAMER  
& Rangasamy  
RAMANATHAN**

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Respiratory  
Technologies of  
the Delivery Room:  
from CPAP to HFV  
**Alexei MOSTOVOI  
& Anna KARPOVA**

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Diagnosis and  
Management of  
Early and Late  
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From Science to Practice  
in Neonatal  
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WORKSHOP

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**16:30-18:30** «Daugava», 1st floor

SESSION

Present Your Own Case! – Neonatal Potpourri 3  
chaired by **Virgilio CARNIELLI & Merran THOMSON**  
co-moderation by all speakers of the day

Artem Batmanov / Umida Nasirova, Albina Dzihoyeva, Daniela Iacob, Tijana Jovanovic,  
Ch. Narantsetseg, Mariana Martian, Natalya Martyanova, O.V. Vorobiova, Gabriela C. Zaharie ➔ PAGE 18



**POST-SESSION** Park Inn By Radisson Valdemara, Riga, LV

**09:15-10:00**

**Invasive Candidiasis of Newborns. Diagnostics, Treatment and Prevention**



**Dr. Oleg Ionov, MD**

Head of NICU named by Prof. A.G. Antonov  
"National Medical Research Center for Obstetrics, Gynecology and Perinatology  
named by V.I. Kulakov"  
Ministry of Health  
Moscow, Russia

**10:00-12:00**

**LISA Technique Experiences in Russian NICUs.  
Standardization of LISA Method and Development of Local Guidelines**



Introduction by the Chairman

**Dr. Oleg Ionov, MD**

Head of NICU named by Prof. A.G. Antonov  
"National Medical Research Center for Obstetrics, Gynecology and Perinatology  
named by V.I. Kulakov"  
Ministry of Health  
Moscow, Russia



**Review of European and Russian Guidelines. The Role of Less Invasive  
Surfactant Treatment LISA in the International Guidelines**

**Prof. Marina Degtyareva, MD, PhD, DSci**

Head of Department of Neonatology, Faculty of Postgraduate Education  
Pirogov Russian National Research Medical University  
Moscow, Russia



**LISA Techniques Experience in Russian NICUs**

**Olga Sapun, MD**

Chief neonatologist of Krasnodar Region  
Head of NICU at Krasnodar Region Perinatal Center  
Krasnodar, Russia



**Less Invasive Strategies: LISA vs InSurE**

**Marat Satrutdinov, MD**

Head of NICU Children's Clinical City Hospital  
Ministry of Health of Tatarstan Republic  
Kasan, Russia



## Successes and Challenges of Childbirth Care in Latvia



WELCOME BY CHAIRMAN

### Ass. Prof. Ilze Kreicberga, MD, MBA

Faculty of Medicine, Department of Obstetrics and Gynecology  
Pauls Stradiņš Clinical University Hospital  
Riga, Latvia

## Ventilation and Physiology Based Cord Clamping



Delayed cord clamping (DCC) costs nothing and has been shown to be beneficial in term and preterm infants by increasing the amount of placental blood received. Placental transfusion, whether by DCC or Umbilical Cord Milking (UCM), has been shown to reduce IVH, the need for transfusions and inotropes, and necrotizing enterocolitis in preterm infants and improve iron stores in the first 6 months of age for term infants. However, benefits of DCC in preterm infants needing resuscitation at birth remain controversial. DCC is generally defined as umbilical cord clamping performed 30-60 s after birth. Neither of these definitions takes into consideration the physiologic status of neonate and hemodynamic changes during fetal to neonatal transition. Physiologically based cord clamping (PBCC) refers to delaying the cord clamping until pulmonary transition, that is, lung aeration is established.

Evidence is emerging that PBCC may reduce mortality and morbidity. Experimental studies in lambs have shown that clamping the cord before ventilation is established results in a sudden decrease in left ventricular output. The left ventricular preload occurs from two sources: umbilical venous return through the FO shunt (predominant source during fetal life) and pulmonary venous return (main source after birth). An intact umbilical cord allows continuous umbilical venous flow to the ventricles while respirations are being established. With the concomitant initiation of breathing through crying or positive pressure ventilation, pulmonary vascular resistance decreases allowing increased blood flow to the lungs (decreased right to left shunt through the ductus arteriosus as well as increased venous return to the left ventricle. The unclamped umbilical arteries prevent a sudden increase in left ventricular afterload).

Systematic review and meta-analysis of 18 trials in 2,834 infants <37 weeks and 3 trials in 996 infants <29 weeks showed relative risk of mortality reduction by 32 %, and in infants <30 weeks, DCC would result in 10,000 to 40,000 less deaths globally each year. DCC is safe for the mother.

**"Wait a Minute"**

### Prof. Rangasamy Ramanathan, MBBS, MD

Division Chief, Division of Neonatal Medicine, LAC+USC Medical Center  
Director, NPM Fellowship Program and NICU  
Keck School of Medicine of USC  
Los Angeles, California, USA



## The Alternative Golden Hour-Individualised Neonatal Care



Extremely preterm birth brings many challenges; not least how best to care for the baby and family immediately after birth. By focussing on the “golden hour”, teams can reduce hypothermia, secure the airway, support breathing and stabilise the baby prior to safe transfer to the neonatal unit. Simulation based training and checklists help standardise the process and have become embedded into everyday clinical practice. The “golden hour” is now considered “standard of care” within many neonatal services; but despite wide spread improvements in care many extremely preterm babies still need intubation and invasive respiratory support. Why? Could there be an alternative approach to enable the extremely preterm baby to better transition to extra-uterine life? Can a model of care that focuses on “developmental care from birth”, reduces stress, and allows a “gentler transition” work?

In this session, using a combination of video, slides and audience participation, the speakers will present the case for an alternative individualised “golden hour”.

### **Dr. Merran Thomson, MB ChB, FRCPCH, MRCP**

Honorary Consultant Neonatologist

The Hillingdon Hospital

London, United Kingdom



### **Assoc. Prof. Katrin Klebermass-Schrehof, MD, PhD**

Deputy Head, Department of Neonatology, Pediatric Intensive Care and Neuropediatrics  
Medical University Vienna

Vienna, Austria

## Towards the Holy Grail of Nebulised Surfactant



In the past decade many efforts have been done to study new techniques to deliver surfactant that could be less invasive without the need of intubating the patient. The LISA technique is becoming more and more common and can be considered an important step forward. Nevertheless, such technique is still considered somehow invasive. For this reason the research is still focusing of the possibility to nebulise surfactant despite failures experienced in the past. New evidences have shown that “common” nebulisers are not efficient in aerosolizing viscous substances such as surfactants. Advances in technology have improved the efficiency of nebulisers and different alternatives have been developed to nebulise surfactant, some of which are already being tested in clinical trials.

Chiesi is developing technique based on a mesh vibrating nebuliser that is currently investigated in a phase 2 trial in Europe. In order to get approval to study this approach in premature infants several in vitro and in vivo experiments have been performed to study the lung deposition and the clinical efficacy of nebulised Curosurf in several animal models. The presentation is aimed at describing the very positive outcomes obtained in the preclinical models that have enabled the possibility to test this approach in premature infants.

### **Federico Bianco, PhD**

Project Leader

Chiesi Corporate Research and Development

Parma, Italy





## Optimizing the Perinatal Management of the Preterm Infant



Recently acquired knowledge about prevention of spontaneous preterm labor will be discussed. Neuroprotection with magnesium sulfate, delay in cord clamping and/or milking as well as thermoprotection are part of a good prenatal care of preterm babies.

Neurological outcome in preterm growth restricted newborns is greatly improved and timing of delivery in early severe growth restriction will be presented based on the European trial TRUFFLE.

### **Prof. Virgilio P. Carnielli, MD, PhD**

Professor of Neonatal Pediatrics

Director of the Division of Neonatal Medicine

G. Salesi Hospital and Polytechnic University of Marche  
Ancona, Italy



### **Prof. Tiziana Frusca, MD, PhD**

Head of Obstetrics and Gynecology University Hospital of Parma

Director of the School of Specialization in Obstetrics and Gynecology

University of Parma

Parma, Italy

## The Benefits of Early Enteral Nutrition



Establishing safe and effective enteral nutrition is critical for the survival of preterm infants. However, as they are born at a time of rapid growth and with immature organ development, this can be challenging.

This workshop will cover when to introduce milk feeds and how to progress, using evidence from recent clinical trials. The advantages of breast milk will be discussed, including the protective effect against necrotising enterocolitis and potential benefits for neuro-development. We will look at recent recommendations for nutrient intakes and address strategies to achieve these, including the use of nutrient supplements and infant formula. We will explore how to develop systems to ensure good nutritional support within the neonatal unit, including the role of standardised guidelines and nutrition assessment tools. The importance of measuring growth and plotting on growth charts will be discussed. Participants will be encouraged to reflect on how nutrition is supported within their own neonatal unit and what steps can be taken to improve this.

### **Dr. Alison Leaf, MD, FRCPCH, MBChb, BSc**

Honorary Consultant Neonatologist

Department of Child Health

University of Southampton

Southampton, United Kingdom



## INSURE or LISA?



Surfactant administration requires an experienced practitioner with intubation skills and ability to provide mechanical ventilation if required. Most surfactant clinical trials to date have used tracheal intubation, bolus administration with distribution of surfactant using intermittent positive pressure ventilation, either manually or with a ventilator, followed by a period of weaning from mechanical ventilation as lung compliance improves.

The IN-SUR-E technique, initially described in Scandinavia in the 1990s showed that surfactant could be given without ongoing mechanical ventilation, and clinical trials of IN-SUR-E showed that ventilation could be avoided altogether with a subsequent reduction in air leaks and chronic lung disease. In the last decade new methods for administering surfactant via a fine catheter placed in the trachea under direct or video-laryngoscopy, with the infant maintained spontaneously breathing on CPAP, have been described, thereby potentially avoiding any exposure to positive pressure ventilation.



The LISA (Less Invasive Surfactant Administration) method developed in Cologne, and widely adapted by the German Neonatal Network involves placing a flexible fine catheter in the trachea using Magill forceps. The MIST (Minimally Invasive Surfactant Treatment) method, developed in Hobart, Tasmania uses a more rigid fine catheter that can be placed directly in the trachea under direct vision, and specialised catheters specifically designed for this method are now commercially available.

Outcomes of recent meta-analyses suggest that LISA/MIST is superior to IN-SUR-E in terms of reducing need for mechanical ventilation and the combined outcome of death or BPD. However these meta-analyses include some studies that are potentially open to bias, and many of them might not be suitable for inclusion if undergoing more rigorous systematic review. Some units also employ strategies of prophylactic LISA for the smallest babies, with excellent outcomes, although this has not yet been tested in randomised controlled trials.

We offer a workshop to practice both methods using mannequins and videolaryngoscopes.

### **Dr. David Sweet, MD, FRCPCH**

Consultant Neonatologist  
Royal Maternity Hospital, Belfast  
Northern Ireland, United Kingdom

### **Prof. Boris W. Kramer, MD, PhD**

Neonatologist, Professor of Experimental Perinatology  
Director of Pediatric Research  
Maastricht University Medical Center  
Maastricht, Netherlands



## Congenital Viral Infections – Controversies in Prevention, Diagnosis & Management from Pregnancy to Childhood



This workshop will focus on **congenital/perinatal CMV, HSV and Parvovirus infections**.

These infections acquired during pregnancy and labour can be challenging to diagnose, but may have a serious impact on a foetus and newborn. Therefore it is very important for physicians to be well aware of how to suspect, diagnose and manage affected pregnancies, foetuses and infants.

In our workshop, we will discuss which women and newborns are at particular risk of being affected, when and how to use diagnostic tools to recognize infection, what interventions are necessary, when and how to apply them and how to evaluate treatment effectiveness to achieve optimal outcomes.



### **Prof. Dmytro Dobryansky, MD, PhD**

Professor of Pediatrics/Neonatology, Department of Pediatrics No2  
Danylo Halytsky Lviv National Medical University  
Lviv, Ukraine

### **Dr. Gabor Szirko, MD**

Obstetrician-Gynecologist, Women's Clinic  
East-Tallinn Central Hospital  
Tallinn, Estonia



### **Dr. Tuuli Haabpiht, MD**

Obstetrician-Gynecologist, Women's Clinic  
East-Tallinn Central Hospital  
Tallinn, Estonia



## Improving Care for Newborns Receiving Intensive Care – Small Changes Make a Difference



Neonatal intensive care is a stressful experience for the baby and their families. Conventional pharmacological interventions (analgesia and sedation) provide limited stress relief for the baby and are associated with unwanted side effects and possible long term adverse outcomes. The parents often experience a sense of helplessness and become “observers” rather than “providers” for their baby. This sense of helplessness increases levels of stress and anxiety and affects the parents’ interaction with their baby, each other, other family members and the staff of the neonatal unit.

Alternative strategies, often referred to as “developmental care”, reduce stress in the baby, parents, and staff, the need for analgesic and sedative medication and improves long term outcome. However, to achieve these benefits, doctors must champion the adoption of developmental care into everyday clinical practice and facilitate the training and development of their nursing staff.

In this workshop we will discuss how care is organised in our units and highlight the “little things” that parents and nurses can do to improve the wellbeing of the baby. There will be plenty of opportunity for discussion.



### **Dr. Vera Demyankova, MD**

Health Center, Policlinic «Bredängs Vårdcentral»  
Stockholm, Sweden

### **Dr. Merran Thomson, MB ChB, FRCPCH, MRCP**

Honorary Consultant Neonatologist  
The Hillingdon Hospital  
London, United Kingdom



## Hypoxemic Respiratory Failure (HRF) with or without Persistent Pulmonary Hypertension (PPHN)



Hypoxemic respiratory failure (HRF) affects 2 % of all live births and is responsible for more than one third of all neonatal deaths. Persistent Pulmonary Hypertension (PPHN) complicates the course of approximately 10 % of infants with HRF and can lead to severe respiratory distress and hypoxemia associated with considerable mortality and morbidity.

Recent estimates suggest an incidence for PPHN of 1.9/1000 live births. Newborns with PPHN are at risk for severe asphyxia and its complications, including death, chronic lung disease, neurodevelopmental sequelae, and other problems. PPHN is a cardiopulmonary disorder characterized by labile systemic arterial hypoxemia secondary to elevated pulmonary vascular resistance in relation to systemic vascular resistance with resultant right-to-left shunting through persistent fetal channels such as the ductus arteriosus and foramen ovale, bypassing the lungs. Inadequate pulmonary blood flow leads to refractory hypoxemia, respiratory distress, and finally acidosis.

Principles of management include optimizing oxygenation and hemodynamics, while minimizing hyperoxemia, use of pulmonary vasodilators, and consideration for hydrocortisone for pulmonary vasodilator resistant PPHN.

### **Prof. Rangasamy Ramanathan, MBBS, MD**

Division Chief, Division of Neonatal Medicine, LAC+USC Medical Center  
Director, NPM Fellowship Program and NICU  
Keck School of Medicine of USC  
Los Angeles, California, USA

## Anaesthetics and the developing brain



Over the last decade many publications have pointed at the potential negative effects of anaesthetics on the developing brain. This has resulted in 2016 in an official warning from the FDA that general anaesthesia should be prevented in all children less than 3 years of age.

In contrast to this opinion in the USA in Europe we take a more modest approach against the background that the neuropathological features consisting of increased neuro-apoptosis is only observed in animal studies including primates.

A significant effect of drug exposure is the length of anaesthesia. A critical evaluation of the literature and the potential consequences for daily clinical practice will be highlighted. New ways of neuroprotection in the context of randomized controlled trials will be discussed and future developments

### **Prof. Dick Tibboel, MD, PhD**

Director of Research  
Erasmus MC – Sophia Children Hospital  
Rotterdam, The Netherlands



## Medical and Ethical Decisions and Dilemmas at the Verge of Viability



Advances in perinatal and neonatal medicine resulted in increasing survival of extremely low birth weight infants including those at the threshold of viability. However, survival of the babies in this particular group is still challenging for medical staff and parents and many medical and ethical issues remain unsolved.

The concept of viability itself is still not clearly defined, therefore ethical dilemmas associated with resuscitation decision making at the delivery room are prominent in clinical practice. How, when, and what decisions should be made, who participates in the decision making process, what criteria are used to decide whether to resuscitate or not, what is role of the parents, and many other important issues are still under discussions.

Uncertainty about long-term prospective for an infant's health complicates the understanding and definition of the "best interest of the patient" among medical professionals and parents. When to draw the line and not prolong a situation in which resuscitation would be futile or result in unnecessary pain and suffering of the infant and family remaining an open question.

### **Prof. Arunas Liubsys, MD, PhD**

Director of Neonatal Centre of Vilnius University  
Children's Hospital, Affiliate of Vilnius University Hospital Santaros Klinikos  
Vilnius, Lithuania

## HIE-Diagnosis and Outcome Prediction



Hypoxic-ischemic encephalopathy (HIE) remains one of the most important morbidities in term infants. As therapeutic hypothermia evolved as a standard treatment within the last decade, classification and especially early outcome prediction in these infants remains challenging. Within this workshop incidence, definition and standardized treatment protocols including hypothermia will be discussed. Especially different examinations important for diagnosis and classification of severity of HIE and their value for outcome prediction will be discussed (lab results, clinical neurological examination, aEEG/EEG, cerebral ultrasound, magnetic resonance imaging and near-infrared spectroscopy). After a theoretical background clinical cases will be discussed with the participants.

### **Assoc. Prof. Katrin Klebermass-Schrehof, MD, PhD**

Deputy Head, Department of Neonatology, Pediatric Intensive Care and Neuropediatrics  
Medical University Vienna  
Vienna, Austria



### **Dr. Oleg Ionov, MD**

Head of NICU named by Prof. A.G. Antonov  
«National Medical Research Center for Obstetrics, Gynecology and Perinatology  
named by V.I. Kulakov»  
Ministry of Health  
Moscow, Russia



## Respiratory Technologies of the Delivery Room: from CPAP to HFV



About 10 % of newborns need resuscitation in the delivery room, which is about 100 million worldwide annually. Technologies, including the appointment of positive pressure ventilation, the use of high oxygen concentrations, in most cases can lead to the restoration of the vital functions of the patient, but are potentially dangerous to the lungs themselves.

We will discuss the most common techniques of respiratory therapy in the delivery room. Also we will talk about the pros and cons of different approaches of maintaining the respiratory status of prematurity after birth. We will touch upon the possibilities of monitoring respiratory function of children in the delivery room during the resuscitation.



### **Prof. Aleksei Mostovoi, MD, PhD**

Head of the Neonatal Intensive Care Unit, Regional Perinatal Center Kaluga  
Associate Professor of the Institute of Postgraduate Education  
of Yaroslavl State Medical University  
Chief Neonatologist, Ministry of Health in the North Caucasian Federal District  
Kaluga, Russia

### **Prof. Anna Karpova, MD, PhD**

Deputy Chief Doctor for Childhood of the Kaluga Regional Clinical Hospital  
Associate Professor of the Institute of Postgraduate Education  
of Yaroslavl State Medical University  
Chief Neonatologist of the Kaluga Region  
Kaluga, Russia

## Diagnosis and Management of Early and Late Onset Sepsis



Despite significant achievements in neonatology sepsis remain a major cause of morbidity and mortality of neonates. This problem seems to be more critical in ELBW infants.

There are still a lot of controversies about criteria of early neonatal sepsis and what neonatal population will benefit of antibiotic administration. If to say on late neonatal sepsis, it seems to me important to discuss is it a curse or fully preventable disease, what should we focus on when we develop a nosocomial infection prevention program. We will also discuss congenital and nosocomial infection and how we should define appropriate antibiotics for empirical therapy in a certain unit.

### **Dr. Mark Prutkin, MD**

Head of NICU, Regional Perinatal Center, Regional Children Hospital #1  
Director of Medicos Ltd. Ekaterinburg, Russia  
Ekaterinburg, Russia



## From Science to Practice in Neonatal Resuscitation



The objective of the session will be to present and discuss with participants the gaps of knowledge of the ongoing Consensus on Science on Neonatal Resuscitation that will be the basis for the 2020 edition of the International Guidelines for Neonatal Resuscitation.

Videos on real-life neonatal resuscitation/stabilization will be presented to participants. Each video will be followed by a structured debriefing on technical and non-technical skills with active interaction of participants. "Things well done" and "things not well done" will be detected and discussed by participants under the supervision of the faculty.



### Assoc. Prof. Daniele Trevisanuto, MD, PhD

Department of Woman's and Child's Health  
University of Padova  
Padova, Italy

### Prof. Virgilio P. Carnielli, MD, PhD

Professor of Neonatal Pediatrics  
Director of the Division of Neonatal Medicine  
G. Salesi Hospital and Polytechnic University of Marche  
Ancona, Italy

## May the Evidence Be With You ...



We present the case of a pregnant woman who is about to give birth prematurely. We will discuss with the audience practical aspects of the patient "journey" comprising:

- Antenatal counseling
- Periviability (Threshold of viability)
- Transfer in utero
- Physiology based Cord Clamping
- Resuscitation
- Transfer to NICU
- Starting enteral nutrition
- Parenteral nutrition
- Antibiotics and microbiology
- Ventilation strategies
- Caffeine
- Iron supplementation
- Head ultrasound scans...



The aim of this session is to review recommendations and see if they are locally applicable.

### Prof. Boris W. Kramer, MD, PhD

Neonatologist, Professor of Experimental Perinatology  
Director of Pediatric Research  
Maastricht University Medical Center  
Maastricht, Netherlands

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## Present Your Own Case!

Case reports of unfinished, complex cases out of local practice have been submitted from participants of the NPMF and were reviewed by the Scientific Board. The topics cover a wide range of clinical problems as infections, feeding intolerance, oxygen therapy or neonatal seizures. The authors will give 7 min presentations (time control!), and the audience will then discuss the case for 5 min.

### Neonatal Potpourri 1

#### moderated by Boris KRAMER & Rangasamy RAMANATHAN

Clinical management of newborns with VACTER- association

Dr. Ivan Anikin, PhD, Zaporizhzhya, Ukraine

Clinical case with respiratory failure & abdominal distention

Dr. G. Ayush/Dr. P.Tuul, Ulaanbataar, Mongolia

Non-stop bleeding after capillary blood sampling for the newborn screening test

Dr. Artem Batmanov/Dr. Umida Nasirova, Tashkent, Uzbekistan

PPHN in a very premature newborn

Dr. Rasa Brinkis, Kaunas, Lithuania

Premature newborn with severe RDS developing infectious endocarditis during hospitalization

Ass. Prof. Dr. Aniko Manea/Dr. Oana Costescu, Timisoara, Romania

A diagnosis challenge in severe perinatal asphyxia

Lecturer Dr. Gabriela Ildiko Zonda, Iasi, Romania

Respiratory distress syndrome in term infants – diagnostic and therapeutic challenges

Assoc. Prof. Dr. Maria Livia Ognean, Sibiu, Romania

Congenital myotonic dystrophy with symptomatic but undiagnosed mother

Dr. Krešimir Perković/Dr. Mirta Starčević, Zagreb, Croatia

Primary adrenal insufficiency. Hypoadosteronism

Dr. Talgat Tolykbaev, Taraz, Kazakhstan

Clinical case of a newborn with idiopathic pulmonary hypertension

Dr. Olga I. Sapun, Krasnodar, Russia

### Neonatal Potpourri 2

#### moderated by Boris KRAMER & David SWEET

Clinical case of a newborn child with Galen vein aneurysm

Dr. Botakoz Abentayeva, Astana, Kazakhstan

Inborn error of protein metabolism?

Ass. Prof. Dr. Ligia Blaga, Cluj-Napoca, Romania

Chronic lung disease

Dr. Cristina Buzduga, Bucharest, Romania

Congenital chylothorax presenting with hydrops fetalis

Dr. Darjan Kardum, Osijek, Croatia

Case of meningitis in a neonate caused by an ESBL-producing strain of hypervirulent *Klebsiella pneumoniae*

Dr. Marat Satrutdinov, Kasan, Russia



### Neonatal Potpourri 3

#### moderated by **Virgilio CARNIELLI & Merran THOMSON**

Transfusion related acute lung injury in a neonate

[Dr. Artem Batmanov/Dr. Umida Nasirova, Tashkent, Uzbekistan](#)

Chronic Myelomonocytic Leukemia in newborn children (CMML)

[Dr. Albina Dzhoyeva, Minsk, Belarus](#)

Harlequin-type ichthyosis

[Assoc. Prof. Dr. Daniela Iacob, Timisoara, Romania](#)

Neonatal lupus

[Dr. Tijana Jovanovic, Belgrade, Serbia](#)

Clinical case with sepsis & feeding intolerance

[Dr. Ch. Narantsetseg/Dr. B.Tsolmontuya, Ulaanbataar, Mongolia](#)

RDS - standardized or individualized treatment?

[Dr. Mariana Martian, Bucharest, Romania](#)

Clinical case of management of a baby with short bowel syndrome

[Dr. Natalya Martyanova, Mykolaiv, Ukraine](#)

Bloch-Sulzberger syndrome (familial incontinentia pigmenti)

[Prof. Dr. O.V. Vorobiova, Kiev, Ukraine](#)

Transient nonketotic hyperglycinemia

[Prof. Dr. Gabriela C. Zaharie, Cluj-Napoca, Romania](#)



People and ideas for innovation in healthcare





**MEDICAL  
PARTNER**



**NPMF 2019**



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