Objectives
IPOKRaTES seminars provide high-quality postgraduate education that enable professionals to keep abreast of the most recent developments, and offers participants the opportunity to discuss clinical problems or scientific issues personally with international experts. To facilitate the audience’s understanding of the concepts and retention of the information discussed, the majority of the presentations will be case-based with major sections of each talk introduced by a real or simulated case. In addition, the afternoon presentations on Day #1 will be case discussions as well and there will be quiz-type case presentations in the afternoon of Day #3. Exception to the case-based approach is the talk introducing the principles of developmental hemodynamics.

1. **Case-based teaching** applied to train participants to solve practical problems using cognitive flexibility and other teaching approaches.
2. **Problem-based teaching**, aimed at improving understanding of the etiology and mechanisms of disease processes (pathophysiology) will be used to facilitate the establishment of diagnoses and the understanding of the mechanisms of action of treatment modalities.

Lecturers
- **Gorm Greisen** MD, PhD: Professor; University of Copenhagen, Copenhagen, Denmark
- **Martin Kluckow** MBBS FRACP PhD: Associate Professor; University of Sydney, Australia
- **Shahab Noori** MD, RDCS: Associate Professor of Pediatrics; Children’s Hospital Los Angeles, University of Southern California, Los Angeles, CA, USA
- **Istvan Seri** MD, PhD, HonD (Course Director): Professor of Pediatrics; Children’s Hospital Los Angeles, University of Southern California, Los Angeles, CA, USA

Limited Number of Participants: 70
Please Note: Only registered participants, NO on site registration!
Please register via internet: http://www.ipokrates.info

Program Design
Seri I, Los Angeles, USA

Target Groups
Doctors, nurses and affiliates of university and non-university hospitals in the field of neonatology and intensive care, anesthesia, pediatric cardiology and related specialties.

Major Sponsors
Dräger, Elsevier, Nestlé Nutrition Institute, Heinen + Löwenstein

Local Sponsors

Local Organizer
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**Dayana Eddy (KKH)**, Email: Dayana.Eddy@kkh.com.org

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Travel
VISA required, each participant is responsible for his/her VISA, and IPOKRaTES assumes NO liability.

Participation Fees
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<th>before July 15, 2014</th>
<th>after July 16, 2014</th>
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<tr>
<td>Single Person</td>
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DAY #1 – Tuesday, September 23, 2014

Morning Session
Theme: Introduction To Developmental Hemodynamics And Methods Of Monitoring Cardiovascular Function

8:00 Introduction of faculty and discussion of course agenda
8:10 Principles of Developmental Cardiovascular Physiology
   Question-Answer Session
   Istvan Seri
8:50 Introduction to Functional Echocardiography (fECHO):
   Clinical Applications, Training, and Accreditation
   Question-Answer Session
   Martin Kluckow
9:45 Break
10:00 Methods of Cardiac Output Measurements in Neonates in the NICU: An Overview
   Question-Answer Session
   Shahab Noori
10:55 Comprehensive Hemodynamic Monitoring in Neonates
   Question-Answer Session
   Istvan Seri
11:50 Organ Blood Flow Measurements at the Bedside using Near-Infrared Spectroscopy (NIRS)
   Question-Answer Session
   Gorm Greisen
12:45 Lunch Break

Afternoon Session
Theme: Case Presentation

14:15 Cardiovascular Factors Affecting Outcomes in the VLBW Neonate during Transition:
   Pathophysiology and Treatment of P/IVH Case Presentations
   Question-Answer Session
   Shahab Noori
15:20 Organ Blood Flow Monitoring using NIRS: Case Presentations
   Question-Answer Session
   Gorm Greisen
16:25 Break
16:45 Use of of point of care fECHO in the NICU:
   Case Presentations with a Focus on Systemic Blood Flow during Transition
   Question-Answer Session
   Martin Kluckow
17:50 Adjourn

Day #2 – Wednesday, September 24, 2014

Morning Session
Theme: Neonatal Shock: Pathophysiology, Treatment And Study Design (I)

08:00 Definition Neonatal Hypotension (including case presentations)
   Question-Answer Session
   Istvan Seri
09:10 Developmentally Regulated Mechanisms of Action of Vasopressors, Inotropes, and Lusitropes
   (including case presentations)
   Question-Answer Session
   Istvan Seri
10:20 Break
10:40 Pathophysiology and Treatment of Low Systemic Blood Flow and Hypotension
   in VLBW Neonates during the first Postnatal Week (including case presentations)
   Question-Answer Session
   Martin Kluckow
11:50 Clinical Trial Design in Neonatal Hemodynamics
   Question-Answer Session
   Gorm Greisen
13:00 Lunch Break
Day #2 – Wednesday, September 24, 2014

Afternoon Session  
Theme: Neonatal Shock: Pathophysiology, Treatment And Study Design (2)

14:30   Vasopressor-Resistant Hypotension in the Neonate: Etiology and Treatment (including case presentations)  
         Istvan Seri
Question-Answer Session

15:30   Pathophysiology, Hemodynamics, and Management of Persistent Pulmonary Hypertension of the Neonate (PPHN) (including case presentations)  
         Martin Kluckow
Question-Answer Session

16:30   Break

16:50   Impact of Changes in Blood Pressure, pCO₂, O₂ Saturation, Hemoglobin, Concentration, and Positive End-Expiratory Pressure on Cerebral Blood Flow and Oxygen Delivery (including case presentations)  
         Gorm Greisen
Question-Answer Session

17:50   Adjourn

DAY #3 – Thursday, September 25, 2014

Morning Session  
Theme: PDA

08:00   Pathophysiology and Hemodynamics of VLBW Neonates with Patent Ductus Arteriosus  
         Martin Kluckow
Question-Answer Session

09:30   Patent Ductus Arteriosus: To Treat or Not To Treat?  
         Shahab Noori
Question-Answer Session

11:00   Break

11:20   Impact of Neonatal Hypotension and Impaired Systemic and Cerebral Blood Flow and PDA on Neurodevelopmental Outcome in the VLBW Neonates  
         Shahab Noori
Question-Answer Session

12:30   Lunch Break

Afternoon Session

14:00   Hemodynamics During Therapeutic Hypothermia in the Neonate with Hypoxic-Ischemic Encephalopathy  
         Shahab Noori
Question-Answer Session

15:00   “Quiz” Case Presentations: (20-minute case presentations by each faculty with audience-participation)  
         Greisen, Noori, Kluckow, Seri

16:00   Final Discussion

16:30   Adjourn