

COURSE AGENDA
2012 SPECIALTY REVIEW
IN NEONATOLOGY/PERINATOLOGY 2.0

A PATHOPHYSIOLOGY AND PROBLEM-BASED REVIEW

DAY 1 – THURSDAY, FEB 23, 2012

INTRODUCTION TO THE COURSE

| Time | Topic | Speaker |
|-----------------|--|--|
| 8:00 am–8:10 am | Welcome and Overview of Course | Dharmapuri Vidyasagar and David L. Weisoly |
| 8:10 am–9:00 am | Placental Transport and Maternal Disorders Affecting the Fetus | David Burchfield |

Maternal-Fetal Medicine

| Time | Topic | Speaker |
|----------------------------------|---|------------------------------------|
| 9:00 am-10:00 am | Maternal-Fetal Medicine High Yield Problem Based Review: Part 1 | Sean Blackwell |
| 10:00 am-10:30 am | <i>Break & Exhibits</i> | |
| 10:30 am-11:30 pm 11:30-12:00 | Maternal-Fetal Medicine High Yield Problem-Based Review: Part 2 NPM Certifying Exam Content, Time Management, Testing Success and Strategy | Sean Blackwell David L. Weisoly |
| 12:00-12:30 | <i>History of the Specialty Review Course</i> | Dharmapuri Vidyasagar |
| 12:30 pm-1:30 pm | | |

General Care of the Neonate / Fluids & Electrolytes / Growth and Nutrition

| Time | Topic | Speaker |
|-------------------|---|----------------------------------|
| 1:30 pm-2:15 pm | Extrauterine Adaptation: Birth Transition/Asphyxia/Neonatal Resuscitation | Lucky Jain |
| 2:15 pm-3:30 pm | Problem-Based Review and Tutorial: Thermoregulation / Heat Loss, Water Balance and Electrolytes, Acid Base (Problems and Questions) | Dr. Fernando Moya. |
| 3:30 pm – 4:00 pm | Fetal and Neonatal Growth/Quiz on Aberrant Growth States: a Problem-Based Review | David L. Weisoly |
| 4:00 pm-4:30 pm | <i>Break & Exhibits</i> | |
| 4:30 pm-6:00 pm | Special Interactive Session I: Nutrition Problems and Calculations for the Neonatologist, Human Milk and Formula Components, Neonatal Trace Elements and Micronutrients - An Interactive High Yield Tutorial | James Moore and David L. Weisoly |
| 6:00 pm -7:00 pm | <i>Welcome Reception / Exhibits Open</i> | |

DAY 2 – FRIDAY, FEB 24, 2012

NEONATAL RESPIRATORY SYSTEM

| Time | Topic | Speaker |
|-------------------|--|---|
| 8:00 am-8:45 am | Review of Lung Development, Lung Fluid Composition, Lung Fluid Clearance | Lucky Jain |
| 8:45 am-9:30 am | RDS, Surfactant and Surfactant Proteins, Surface Tension and Balloon Problems | Lucky Jain |
| 9:30 am-10:00 am | Break & Exhibits | |
| 10:00 am-11:00 am | Respiratory Mechanics: Respiratory Physiology, Pulmonary Function Testing | David Burchfield |
| 11:00 am-11:45 am | Pulmonary Hypertension: Hypoxic Respiratory Failure/MAS/PHN and Intrinsic Pulmonary Disorders or anomalies resulting in PPHN | David Burchfield |
| 11:45 am-12:30 pm | Problem Based Review of O ₂ and CO ₂ Physiology, Alveolar Gas equation, Bohr Effect | Martin Keszler |
| 12:30 pm-1:30 pm | Lunch & Exhibits | |
| 1:30 pm-2:15 pm | Physiology of Mechanical Ventilation: Modes, Loops, and Curves | Martin Keszler |
| 2:15 pm-3:45 pm | Pulmonary Problem Solving Workshop/Tutorial I | Lucky Jain and Martin Keszler |
| 3:45 pm-4:15 pm | Break | |
| 4:15 pm-5:15 pm | Pulmonary Problem Solving Workshop/Tutorial II | Lucky Jain and Martin Keszler |
| 5:15 pm-6:30 pm | Special Interactive Session II: Classic Neonatology Problems and Associations - An Interactive High Yield Review for Neonatologists | Matthew Saxonhouse and David L. Weisoly |
| 6:30 pm | Adjourn | |
| 7:00 pm | Legends of Neonatology Gala | |

DAY 3 – SATURDAY, FEBRUARY 25TH 2012

NEONATAL CARDIOVASCULAR SYSTEM

| Time | Topic | Speaker |
|-------------------|--|------------------|
| 7:30 am-8:05 am | Cardiovascular Physiology of the Fetus | Dara Brodsky |
| 8:05 am-8:45 am | Cardiac Hemodynamics in the Newborn | Dara Brodsky |
| 8:45 am-9:15 am | Review of the Pathophysiology and Medical Management of Neonatal Shock | Dara Brodsky |
| 9:15 am-9:45 am | Break & Exhibits | |
| 9:45 am-10:30 am | The Physiology of Congenital Heart Disease and Patent Ductus Arteriosus – Part I | J. Deane Waldman |
| 10:30 am-11:15 am | The Physiology of Congenital Heart Disease – Part II | J. Deane Waldman |
| 11:15 am-12:00 pm | The Physiology of Congenital Heart Disease – Case-Based Examples | J. Deane Waldman |
| 12:00 pm-1:00 pm | Lunch & Exhibits | |
| 1:00 pm-1:45 pm | Dysrhythmias and Electrocardiography: A Case-Based Review | Arwa Saidi |

Central Nervous System Part I / Neonatal Radiology

| Time | Topic | Speaker |
|-----------------|---|-----------------------------|
| 1:45 pm-2:30 pm | Pathophysiology Review of Cerebral Blood Flow, Intracranial Pressure, and Intraventricular Hemorrhage | Michael Weiss |
| 2:30 pm-3:15 pm | Pathophysiology, Diagnosis, and Staging of Hypoxic Ischemic Encephalopathy, Mechanism of Cerebral/White Matter Injury, Intracranial and Extracranial Hemorrhage | Michael Weiss |
| 3:15 pm-3:45 pm | Break & Exhibits | |
| 3:45 pm-5:00 pm | Neonatal Radiology Challenge: An Interactive and Problem Based Tutorial (Audience Participation) | Jon Williams |
| 5:00 pm-6:30 pm | Cardiovascular Physiology Problem Solving Tutorial | Dara Brodsky and Arwa Saidi |
| 6:30 pm | Dinner on your own | |

DAY 4 – SUNDAY, FEBRUARY 26TH 2012

Core Scholarly Activities and Biostatistics for the Neonatologist

| Time | Topic | Speaker |
|-----------------|---|---------------|
| 7:30 am-9:00 am | Review of Core Scholarly Activities and Biostatistics for the Neonatologist | John Zupancic |
| 9:00 am-9:30 am | Break & Exhibits | |

Neonatal Gastroenterology

| Time | Topic | Speaker |
|-------------------|---|-----------|
| 9:30am-11:45 pm | Problem-Based GI Review: Includes GI Embryology, Congenital GI Anomalies, NEC Pathophysiology, Congenital and Acquired Liver Disease, GI Meds | Jim Moore |
| 11:45 am-12:45 pm | Lunch & Exhibits | |

Neonatal Infectious Diseases / Central Nervous System Part II / Neurodevelopment

| Time | Topic | Speaker |
|------------------|--|--------------------------------|
| 12:45 pm-2:15 pm | Neonatal Bacterial, Viral, and Fungal Infections – High-Yield Review | Suma Pyati and Robert Lawrence |
| 2:15 pm-2:45 pm | Break & Exhibits | |
| 2:45 pm-3:45 pm | I.D. Clinical Dilemmas and Photographic Tutorial | Suma Pyati and Robert Lawrence |
| 3:45 pm-5:00 pm | Question-Based High Yield Review of Neonatal Neurologic Disorders, Neonatal Seizures, Neurodevelopment/CP, Milestones, Primitive and Evolving Reflexes, Developmental Outcomes and Evolution of Intracranial Lesions | Pedro Mancias |
| 5:00 pm-5:30 pm | Break & Exhibits | |

Genetics and Inborn Errors of Metabolism

| Time | Topic | Speaker |
|-----------------|---|------------------|
| 5:30 pm-6:30 pm | High Yield Review of Inborn Errors, Enzymatic and Metabolic Disorders | Michael Gambello |
| 6:30 pm-7:30 pm | Chromosomal Disorders High Yield Rapid Review | Michael Gambello |
| 7:30 pm | Dinner on your own | |

DAY 5 – MONDAY, FEBRUARY 27TH 2012

Endocrinology/ Calcium and Phosphorus/ Glucose Metabolism

| Time | Topic | Speaker |
|-------------------|--|-----------|
| 7:30 am-8:15 am | Neonatal Thyroid disease/Pituitary Disorders | Tandy Aye |
| 8:15 am-9:00 am | Adrenal Gland Disorders/Steroid Pathways and Congenital Adrenal Hyperplasia Review | Tandy Aye |
| 9:00 am-9:45 am | Calcium and Phosphorus Metabolism and Disorders | Tandy Aye |
| 9:45 am-10:15 am | Break | |
| 10:15 am-11:00 am | Pathophysiology of Glucose Metabolism and Homeostasis | Tandy Aye |

Neonatal Nephrology

| Time | Topic | Speaker |
|-------------------|--|----------------|
| 11:00 am-11:30 am | Normal and Abnormal Renal Development and Function, Acute Renal Failure in the Newborn | David Askenazi |
| 11:30 am-12:30 pm | Nephrology Equations and Dilemmas and Problem Solving Tutorial | David Askenazi |
| 12:30 pm-1:15 pm | Lunch | |

Neonatal Immunology

| Time | Topic | Speaker |
|-----------------|---|------------|
| 1:15 pm-2:15 pm | High Yield Immunology for the Neonatologist | James Wynn |

Neonatal Hematology/Bilirubin

| Time | Topic | Speaker |
|-----------------|--|--------------------|
| 2:15 pm-4:15 pm | All About Hematology: Review of Hematopoiesis, Hemoglobin and Red Cell Disorders | Matthew Saxonhouse |
| | Review of Platelets and Coagulation | Matthew Saxonhouse |
| | Pathophysiology, Prevention, and Management of Bilirubin, Jaundice, and Kernicterus | Matthew Saxonhouse |
| 4:15pm | Closing Remarks Adjournment of Course CME/Course Evaluations Specialty Review 2.0 Course Post-Test to be emailed to attendees | |