

PANDA Symposium 2016

April 16th 2016

MORNING

8:30-8:45

Welcome Remarks

PANDA SYMPOSIUM V

PPP and FDA in Anesthesia Neurotoxicity Research (via video)

Lena Sun

Janet Woodcock

8:45-10:15

The PANDA Study (Moderator-Ezra Susser)

Designing the Study and the Journey of Implementation
Recruitment Challenges of Ambi-directional Cohort Design
The PANDA Study Neuropsychological Battery

Presentation of Main Findings

Lena Sun

Tonya Miller

Cynthia Salorio

Jerilynn Radcliffe

Lena Sun

Panel Q&A and Discussions

10:15-12:00

Update of Pre-clinical Studies (Moderator-Rick Levy)

The roles of mTOR and ER-stress in isoflurane induced neurotoxicity
Insufficient Astrocyte-Derived BDNF Contributes to Propofol-Induced Neuronal Death
Anesthetics Disruption of Dendrite Development via Effects on the mTOR Signaling Pathway
Long-term Changes in GABAA Receptor Function After Anesthesia
Developing GABAergic Networks and General Anesthesia
Effects of Neonatal Anesthesia on Cognitive Function in Nonhuman Primates: An Update
Persistent Functional Changes in Juvenile Non-human Primates After Neonatal Isoflurane Anesthesia
Cognitive/Socioemotional Development After Repeated Sevoflurane Exposure in Infant Monkeys
Lost in Translation? - Bridging the Gap Between Basic and Clinical Research Into the Effects of Anesthetics on the Developing Brain

Philip Morgan

Zeljko Bosnjak

David Mintz

Beverly Orser

Laszlo Vutskits

Merle Paule

Ansgar Brambrink

Mark Baxter

Andreas Loepke

Panel Q&A and Discussions

PANDA Symposium 2016

AFTERNOON

12:00-12:30 PM

Research in Drug Safety & Anesthetic Neurotoxicity

Bruce Psaty

12:30-1:30 PM

LUNCH

1:30-2:45 PM

Update of Clinical Studies (Moderators-Randall Flick & David Warner)

The T-Rex Trial

The UCSF Human Trial

The MASK Study

The GAS Trial

Newborn Brain Volumes Following Regional Anesthesia During Labor & Delivery

Dean Andropoulos

Jeff Sall

Danqing Hu

Mary Ellen McCann

Marisa Spann

3:30-5:00 PM

What Next in Anesthetic Neurotoxicity Research (Small Group Discussions)

(1) Pre-clinical Studies (mechanisms of neurotoxicity, mitigating influences)

(2) Cohort Studies and Clinical Trials (CER, vulnerable populations, enrichment strategies)

(3) Translational Studies (biomarkers, genetic and epigenetic studies)

Beverly Orser

Mark Baxter

Virginia Rauh

David Warner

Frank McGowan

Julie Herbstman

Zelko Bosnjak

Co-Sponsored By



**Department of Anesthesiology
Columbia University Medical Center**

 **New York-Presbyterian
Morgan Stanley Children's Hospital**



SmartTots

Funding anesthesia research to ensure pediatric safety.

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SmartTots Update

Alex Evers

8:45-11:30

Lessons Learned: Studying the Vulnerable Brain (Moderator- Lena Sun)

Overview of Normal Brain Development and Its Relevance to Exposure Science
The Vulnerable Adolescent Brain
Development of the CHD Brain Connectome Across the Lifespan
The Relation of Childhood Physical Activity to Brain, Cognition, and Learning

Bradley Peterson
Catherine Hartley
Ashok Panigrahy
Charles Hillman

Panel Q&A and Discussions

11:30 AM-12:30

LUNCH/PHOTO

AFTERNOON

12:30-2:00

The Way Forward in Anesthetic Neurotoxicity Research (Moderator: Vesna Jevtovic-Todorovic)

Reports from Day 1 small group discussions

Beverly Orser
Frank McGowan
David Warner

Support For Future Research

PPP- Experience with ACTION
NIH
Crafting and Communicating the Message

Robert Dworkin
Tracy King (NICHD)
Sharon Hertz (FDA)

2:00-5:00

Engaging Stakeholders Panel Discussions (Moderators: Jayant Deshpande/Lynne Maxwell)

Report of PALC/PAPDA Survey

Christopher Ward

Panel Discussion I. Optimal Timing for Surgical Procedures

The AAP Task Force on Optimal Timing for Surgical Procedures
Panel Discussants: Steven Stylianos (Pediatric Surgery), Sara Lambert (Pediatric Urology)
Richard Anderson (Neurosurgery) and Pamela Gallin (Ophthalmology)

Constance Houck

Panel Discussion II: Use of Anesthesia in Imaging Studies and Interventional Procedures in Children

Panel Discussants: Lynne Ferrari, (Anesthesia) Lisa States (Radiology), Al Mencin (Gastroenterology)
Sumit Gupta (Oncology), Ira Parness (Cardiology) and Steve Kernie (Pediatric Critical Care)