

Fifth Annual
**Cardiac Neurodevelopmental
Symposium**



June 1 – 3, 2016

**Ruth and Tristram Colket, Jr.
Translational Research Building**



The Children's Hospital
of Philadelphia®

chop.edu/cme

Program

Wednesday, June 1, 2016
2 – 5 p.m.
Meeting of Subcommittees

Thursday, June 2, 2016

8 a.m.	Registration and Continental Breakfast
8:30 a.m.	Welcome and Introduction <i>David J. Goldberg, M.D.</i>
8:40 – 10:30 a.m.	The At-risk Brain
8:40 a.m.	Blood Flow and Oxygen Transport in the Fetus with Congenital Heart Disease <i>Michael Seed, M.D.</i>
8:55 a.m.	Brain Development in CHD: What Do We Know and What Does It Mean? <i>Shabnam Peyvandi, M.D.</i>
9:10 a.m.	Pre-operative Lesion: How and Why They Appear and Do They Matter <i>Daniel J. Licht, M.D.</i>
9:25 a.m.	Operative Strategies; The Limits of Cerebral Perfusion and Total Circulatory Arrest <i>Christopher Mascio, M.D.</i>
9:40 a.m.	Impact of Length of Stay and Exposure to ECMO on Developmental Outcomes <i>Matthew J. O'Connor, M.D.</i>
9:55 a.m.	Cerebral Perfusion in the Toddler with Single Ventricle Heart Disease: Links to Brain Lesions and Hemodynamics and Possible Effects on Neurodevelopmental Outcome <i>Mark Fogel, M.D., F.A.C.C., F.A.H.A., F.A.A.P.</i>
10:10 a.m.	Panel Discussion
10:30 a.m.	Break
10:45 a.m. – noon	Can We Change the Substrate?
10:45 a.m.	Fetal Hyperoxia, Middle Cerebral Artery Flow and Neurodevelopmental Outcomes: Putting the Pieces Together <i>Anita Szawast, M.D.</i>
11:05 a.m.	Neuroprotective Strategies for the Fetus <i>J. William Gaynor, M.D.</i>
11:25 a.m.	Anesthetic Management to Prevent Ischemic Neurological Injury <i>Kenneth Brady, M.D.</i>
11:45 a.m.	Panel Discussion
Noon	Lunch
1 – 3 p.m.	The Post-hospital Phenotype
1 p.m.	How to Address Developmental Needs in the ICU/CCU <i>Barbara Medoff-Cooper, Ph.D., B.S.N., M.S., F.A.A.N.</i>
1:20 p.m.	Neurodevelopmental Outcomes/Challenges in the Pre-school Years <i>Karen Uzark, P.N.P., Ph.D.</i>
1:40 p.m.	The Grade School Years: Lessons from the SVR Cohort <i>Caren Goldberg, M.D.</i>
2 p.m.	The Adolescent Brain and the Impact of Congenital Heart Disease <i>Jane Newburger, M.D., M.P.H.</i>
2:20 p.m.	Psychosocial Predictors of Quality of Life in CHD Survivors <i>Bradley Marino, M.D., M.P.P., M.S.C.E.</i>
2:40 p.m.	Panel Discussion
3 p.m.	Break
3:20 – 4:20 p.m.	The Impact of Genetics on Neurodevelopmental Outcomes
3:20 p.m.	Genetic Modifier of Neurodevelopmental Outcomes <i>Ryan Davies, M.D.</i>
3:40 p.m.	Neurodevelopmental Outcomes in Children with CHD Due to a Chromosome 22q11.2 Deletion <i>Donna McDonald-McGinn, M.S., L.C.G.C.</i>
4 p.m.	Panel Discussion
4:20 p.m.	Closing Remarks <i>David J. Goldberg, M.D.</i>
4:30 p.m.	Reception

Friday, June 3, 2016

8 a.m.	Registration and Continental Breakfast
8:30 a.m.	Welcome and Introduction <i>David J. Goldberg, M.D.</i>
8:40 – 10 a.m.	Special Session on Feeding and Nutrition
8:40 a.m.	Difficulties Optimizing Nutrition for Post-operative Patients <i>Melanie Savoca, M.S., R.D., C.N.S.C., L.D.N.</i>
9 a.m.	Do Infants with CHD Grow Normally, and Does It Matter? <i>Kevin D. Hill, M.D., M.S.</i>
9:20 a.m.	The Stomach and the Brain: The Relationship Between Growth and Neurodevelopmental Outcomes <i>Chitra Ravishankar, M.D.</i>
9:40 a.m.	Panel Discussion
10 a.m.	Break
10:15 – 11 a.m.	Roundtable Discussion Experience from 10 Years of Cardiac Neurodevelopmental Follow-up Programs <i>Jennifer L. Butcher, Ph.D.</i> <i>Dawn Ilardi, Ph.D., A.B.P.P.-C.N.</i> <i>Kathleen Mussatto, Ph.D., R.N.</i> <i>Gretchen Carroll, M.A.</i> <i>Alisa Burnham, M.D.</i> <i>Erica Sood, Ph.,D.</i>
11 a.m.	The Newburger – Bellinger Award <i>Steven P. Miller, M.D.</i>
11:45 a.m.	Update from the Steering Committee
Noon	Closing Remarks and Adjourn <i>David J. Goldberg, M.D.</i>



General Information

Overview

The 2016 Cardiac Neurodevelopmental Symposium will bring together leaders from across the United States to focus on the crucial issue of childhood development in children born with congenital heart disease. This two-day symposium will focus on risk factors for altered neuro-architecture, opportunities for intervention and current outcomes for this at-risk population. We will have a special section on the challenge of initiating and maintaining adequate nutrition and on special issues related to chromosomal differences. In addition, we will have a roundtable discussion focused on the challenges and opportunities for cardiac neurodevelopmental programs from around the country.

General information

The conference will be held in the Ruth and Tristram Colket, Jr. Translational Research Building at The Children's Hospital of Philadelphia. The registration fee is \$350 for physicians and \$250 for other healthcare professionals and includes continental breakfast, breaks, lunch, parking and syllabus material.

Course Objectives

- Discuss the types of risks encountered by a fetus, infant and child with congenital heart disease
- Explore ongoing research focused on improving the neurodevelopmental environment experienced by the patient with congenital heart disease through gestation and through the exposure to cardiac surgery and recovery
- Review the current neurodevelopmental outcomes for children with congenital heart disease
- Comprehend how differences in genetics may impact neurodevelopmental outcome within the group of patients with congenital heart disease

ACCME Accreditation Statement

The Children's Hospital of Philadelphia is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing education for physicians.

AMA Credit Designation Statement

The Children's Hospital of Philadelphia designates this live activity for a maximum of 9.50 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Nursing Accreditation Statement

The Children's Hospital of Philadelphia is an approved provider of continuing nursing education by the Pennsylvania State Nurses Association an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

Hotel Accommodations

A block of rooms has been reserved at reduced rates at The Sheraton Philadelphia Downtown. The group overnight rate is \$179 single and double occupancy plus a 15.5 percent room tax. Participants are required to make their own hotel reservations by calling the Sheraton directly at 1-800-325-3535. Please mention the name of the conference when making your reservation. A shuttle to and from the conference will be provided each day. The special room rate will be available until Monday, May 2. After that date, reservations will be accepted on a space and rate availability basis.

Cancellation and Refund Policy

The Children's Hospital of Philadelphia reserves the right to cancel or postpone any course due to any unforeseen circumstances. In the event of cancellation or postponement, The Children's Hospital of Philadelphia will refund any registration fees, less a \$40 service charge, but is not responsible for any related costs, charges or expenses to participants, including cancellation charges assessed by airlines or travel agencies. In order to process refunds for course withdrawals, cancellation must be received in writing by Monday, May 23, 2016. No refunds will be issued thereafter.

Services for People with Disabilities

If special arrangements are required for an individual with a disability to attend this meeting, please contact the Continuing Medical Education Department at 215-590-5263.

Course Faculty

Course Directors

David J. Goldberg, M.D.

Director, Cardiac Kids Developmental Follow-up Program

Attending Cardiologist

Assistant Professor of Pediatrics

J. William Gaynor, M.D.

Attending Cardiothoracic Surgeon

Director of Fetal Neuroprotection and Neuroplasticity Program

Professor of Surgery

Course Faculty

Alisa Burnham, M.D.

Co-Director, Cardiac Kids Developmental Follow-up Program

Medical Director, Special Babies Neonatal Follow-up Program

Attending Pediatrician

Hospital of the University of Pennsylvania

Mark A. Fogel, M.D.

Director, Cardiac Magnetic Resonance

Professor, Cardiology and Radiology

Daniel J. Licht, M.D., F.A.C.C., F.A.H.A., F.A.A.P.

Associate Professor, Neurology and Pediatrics

Director, Steve and June Wolfson Laboratory for Clinical and Biomedical Optics

Christopher Mascio, M.D.

Attending Cardiothoracic Surgeon

Assistant Professor of Clinical Medicine

Donna M. McDonald-McGinn, M.S., L.C.G.C.

Chief, Section of Genetic Counseling

Director, 22q and You Center

Associate Director, Clinical Genetics Center

Clinical Professor of Pediatrics

Barbara Medoff-Cooper, Ph.D, B.S.N., M.S., F.A.A.N.

Ruth M. Colket Professor in Pediatric Nursing

University of Pennsylvania School of Nursing Science

Matthew J. O'Connor, M.D.

Attending Pediatric Cardiologist

Assistant Professor of Pediatrics

Chitra Ravishankar, M.D.

Attending Pediatric Cardiologist

Associate Professor of Pediatrics

Melanie Savoca, M.S., R.D., C.N.S.C., L.D.N.

Clinical Dietitian

Anita Szwast, M.D.

Attending Pediatric Cardiologist

Assistant Professor of Pediatrics

Unless otherwise noted, faculty is from The Children's Hospital of Philadelphia and the Perelman School of Medicine at the University of Pennsylvania.

Guest Faculty

Kenneth Brady, M.D.

*Texas Children's Hospital
Associate Professor of Pediatrics and Anesthesia
Baylor College of Medicine*

Jennifer L. Butcher, Ph.D.

*Psychology Director
University of Michigan Congenital Heart Center
Neurodevelopmental Follow-up Program
Assistant Professor of Pediatrics
University of Michigan Medical School*

Gretchen Carroll, M.A.

*Education Diagnostician and School Liaison
Neurodevelopmental Education Clinic
The Heart Institute
Cincinnati Children's Hospital Medical
Center*

Ryan Davies, M.D.

*Attending Cardiothoracic Surgeon
Nemours/Alfred I. duPont Hospital for Children
Assistant Professor of Surgery
Thomas Jefferson University*

Caren Goldberg, M.D.

*Attending Cardiologist
C.S. Mott Children's Hospital
Clinical Professor of Pediatrics
The University of Michigan Health System*

Kevin D. Hill, M.D., M.S.

*Associate Professor of Pediatrics
Duke University Medical Center
Duke Clinical Research Institute*

Dawn Ilardi, Ph.D., A.B.P.P.-C.N.

*Neuropsychologist
Children's Healthcare of Atlanta*

Bradley Marino, M.D., M.P.P., M.S.C.E.

*Attending Cardiac Intensivist
Ann and Robert H. Lurie Children's Hospital
Professor of Pediatrics
Northwestern University Feinberg School of
Medicine*

Steven P. Miller, M.D.

*Head, Neurology
The Hospital for Sick Children
Senior Scientist, Neurosciences & Mental Health
Research Institute
Professor, Paediatrics
University of Toronto*

Kathleen Mussatto, Ph.D., R.N.

*Investigator
Herma Heart Center
Children's Hospital of Wisconsin*

Jane Newburger, M.D., M.P.H.

*Associate Cardiologist-in-Chief
Director, Cardiac Neurodevelopmental Program
Children's Hospital Boston
Commonwealth Professor of Pediatrics
Harvard Medical School*

Shabnam Peyvandi, M.D.

*Division of Pediatric Cardiology
Benioff Children's Hospital San Francisco
Assistant Professor of Clinical Pediatrics
University of California San Francisco*

Mike Seed, M.D.

*Staff Cardiologist/Cardiac Radiologist
The Hospital for Sick Children
Assistant Professor of Pediatrics and
Diagnostic Imaging
The University of Toronto*

Erica Sood, Ph.D.

*Director
Cardiac Learning and Early Development
(LEAD) Program
Pediatric Psychologist
Nemours/Alfred I. duPont Hospital for Children
Assistant Professor of Pediatrics
Thomas Jefferson University*

Karen Uzark, P.N.P., Ph.D.

*Advanced Practice Nurse
Department of Pediatrics
C.S. Mott Children's Hospital*

Registration

Cardiac Neurodevelopmental Symposium

Wednesday – Friday, June 1 – 3, 2016

Registration Deadline: Monday, May 23, 2016

Name _____

☐ M.D. ☐ D.O. ☐ C.R.N.P. ☐ R.N. ☐ Other _____

Specialty _____

Institution _____

Home Address _____

City _____ State _____ ZIP _____

Phone _____ Fax _____

Email _____

Conference Registration Fees:

Physicians \$350

Others \$250

Method of Payment

(Please make checks payable to The Children's Hospital of Philadelphia.)

☐ Personal check ☐ Institutional check ☐ Discover

☐ MasterCard ☐ American Express ☐ VISA

Credit Card # _____

Exp. Date _____

Mail or fax the completed registration form and payment to:

Ms. Micah Holliday
Continuing Medical Education
The Children's Hospital of Philadelphia
34th Street and Civic Center Boulevard
Philadelphia, PA 19104

215-590-5CME • Fax 215-590-4342 • hollidaydm@email.chop.edu

Register online at www.chop.edu/cme