





# DIVISION OF NEWBORN MEDICINE

## Mission

The mission of the Division of Newborn Medicine at UPMC is:

- To provide high-quality, state-of-the-art clinical care to high-risk neonates admitted to the Neonatal Intensive Care Units (NICUs) at Magee-Womens Hospital of UPMC, Children's Hospital of Pittsburgh of UPMC, UPMC Hamot, UPMC Mercy, and UPMC Horizon
- To provide educational and clinical service needs to community hospitals in the tristate region with which the division has partnered, such as Wheeling Hospital, Excelsa Westmoreland Hospital, and Washington Hospital.
- To perform basic and clinical research studies at the leading edge of neonatal research
- To provide first-rate medical education and teaching to all levels of students in the University of Pittsburgh School of Medicine, pediatric house officers, and neonatal-perinatal medicine fellows from the Accreditation Council for Graduate Medical Education (ACGME)-accredited UPMC medical education program, as well as to regional obstetricians, pediatricians, and family-practice physicians who care for high-risk mothers and neonates

## FACULTY

**Richard A. Saladino, MD**

Interim Chief, Division of  
Newborn Medicine  
Director, Neonatal-Perinatal Medicine  
Fellowship Program

**Abeer Azzuqa, MD**

Assistant Professor of Pediatrics  
Associate Clinical Director, NICU,  
Magee-Womens Hospital of UPMC  
Medical Director, UPMC Advanced  
Practice Provider Neonatal  
Residency Program

**Arcangela Balest, MD**

Assistant Professor of Pediatrics

**Michael J. Balsan, MD**

Associate Professor of Pediatrics  
Clinical Director, NICU,  
UPMC Hamot

**Charles V. Bender, MD, MJ**

Associate Professor of Pediatrics  
Associate Professor of Obstetrics,  
Gynecology, and Reproductive  
Sciences  
Assistant Chief, UPMC Newborn  
Medicine Program

**Beverly S. Brozanski, MD**

Professor of Pediatrics  
Professor of Obstetrics, Gynecology,  
and Reproductive Sciences  
Clinical Director, NICU, Children's  
Hospital of Pittsburgh of UPMC

**Justin R. Buland, DO**

Assistant Professor of Pediatrics

**Carmela Coppola, MD**

Clinical Assistant Professor of  
Pediatrics, UPMC Mercy

**Sean A. Frederick, MD**

Assistant Professor of Pediatrics

**Carol Gilmour, MD, MPH**

Assistant Professor of Pediatrics,  
Obstetrics, Gynecology, and  
Reproductive Sciences  
Clinical Director, NICU and Newborn  
Services, UPMC Mercy

**Misty Good, MD**

Assistant Professor of Pediatrics

**C. Miles Harmon, MD**

Assistant Professor of Pediatrics

**James Kiger, MD**

Assistant Professor of Pediatrics

**Jennifer Kloesz, MD**

Assistant Professor of Pediatrics  
Assistant Program Director,  
Neonatal-Perinatal Medicine  
Fellowship Program  
Clinical Director, NICU, Magee-  
Womens Hospital of UPMC

**Burhan Mahmood, MD**

Assistant Professor of Pediatrics  
Assistant Professor of Obstetrics,  
Gynecology, and Reproductive  
Sciences  
Clinical Director, Extracorporeal  
Membrane Oxygenation (ECMO)  
Program, NICU, Children's Hospital  
of Pittsburgh of UPMC

**William McCarran, MD**

Assistant Professor of Pediatrics

**Brock Medsker, MD**

Assistant Professor of Pediatrics

**Sharmilarani Nanda, MBBS**

Clinical Assistant Professor  
of Pediatrics  
Clinical Director, University of  
Pittsburgh Physicians Special  
Care Nursery, Excelsa  
Westmoreland Hospital

**Ifeyinwa Nwankwor, MD**

Assistant Professor of Pediatrics

**Brigid O'Donnell, MD**

Assistant Professor of Pediatrics

**Karin P. Potoka, MD**

Assistant Professor of Pediatrics

**Mohammad Riaz, MD**

Assistant Professor of Pediatrics

**Melissa Riley, MD**

Assistant Professor of Pediatrics  
Medical Codirector, Neonatal  
Transport Services, Children's  
Hospital of Pittsburgh of UPMC  
Associate Clinical Director, NICU,  
Children's Hospital of Pittsburgh  
of UPMC

**Anthony Rudine, MD, MBA**

Assistant Professor of Pediatrics

**Richard Telesco, MD**

Assistant Professor of Pediatrics  
Associate Clinical Director, NICU,  
UPMC Hamot

**Amy M. Urban, DO, MPH**

Assistant Professor of Pediatrics  
Assistant Professor of Obstetrics,  
Gynecology, and Reproductive  
Sciences  
Clinical Director, Interoperability

**Kalyani Vats, MD**

Assistant Professor of Pediatrics  
Director, Triage and Antenatal  
Consult Services

**Jon F. Watchko, MD**

Professor of Pediatrics  
Professor of Obstetrics, Gynecology,  
and Reproductive Sciences

**Toby Debra Yanowitz, MD, MS**

Associate Professor of Pediatrics  
Assistant Professor of Obstetrics,  
Gynecology, and Reproductive  
Sciences  
Assistant Investigator

## OVERVIEW OF DIVISION

**T**he division's major clinical responsibilities include: (a) availability of around-the-clock consultations for high-risk obstetrical patients, including inpatients and outpatients seen in the Fetal Diagnostic and Treatment Center and more than 9,600 well babies admitted this year to the Well Baby Nurseries at Magee-Womens Hospital of UPMC, as well as delivery-room resuscitative support for high-risk newborns at Magee-Womens Hospital of UPMC and 24-hour-a-day clinical care for approximately 2,000 high-risk neonates admitted this year to the Magee-Womens Hospital of UPMC NICU (average daily census of 70 infants); (b) around-the-clock coverage for the NICU at Children's Hospital of Pittsburgh of UPMC, including clinical care for more than 1,200 neonatal medical and surgical patients per year (average daily census of 50 patients); (c) consultative services for infants in the Cardiac Intensive Care Unit at Children's Hospital of Pittsburgh of UPMC; (d) 24-hour-a-day clinical care, along with consultative and resuscitative services, for both high-risk neonates and well babies admitted to the UPMC Mercy NICU and Newborn Nursery; (e) 24-hour-a-day clinical care for approximately 310 high-risk neonates at UPMC Hamot Women's Hospital this year (average daily census of 14), in addition to delivery-room resuscitative support for high-risk newborns, developmental follow-up services, and a 24/7 ground and air transport team; and (f) management of infants seen for follow-up at the High-Risk Infant Follow-Up Clinic, which provides support for infants on home monitors and for those with chronic lung disease, as well as long-term neurodevelopmental and nutritional follow-up care of NICU graduates. The Developmental Services team saw more than 700 neonates in the hospital this year for developmental assessments prior to discharge. The Division of Newborn Medicine continued to be responsible for neonatal ECMO. This program continues to develop detailed clinical consensus protocols and intensive training for all involved faculty, fellows, and neonatal nurse practitioners.

The community neonatology arm of the division played an active role in outreach education and services, including: (1) around-the-clock care of more than 180 infants transferred this year to the Children's Home of Pittsburgh's level II facility from the NICUs at Magee-Womens Hospital and Children's Hospital (average daily census of about seven infants); (b) monthly educational sessions with the Family Practice Residency Program at Washington Hospital and the placement of a nurse practitioner on site to assist with delivery-room attendance and stabilization, to improve transport readiness, and to provide daily education to staff; (c) bimonthly sessions with the pediatric staff at Excelsa Health Center for continuous quality improvement (QI) of newborn care and the placement of a neonatologist on site; (d) neonatal educational sessions and neonatal resuscitation courses for healthcare professionals in the community; and (e) telemedicine now offered to referral and partner hospitals for use in their nurseries, providing them with around-the-clock access to neonatologists for consultation and pre-transport management strategies.

Transport by ground or helicopter is available 24 hours a day by a team of nurses, respiratory therapists, and physicians with special expertise in dealing with problems of the newborn. The transport numbers have continued to grow since the inception of this service.

The division also provides an extensive and comprehensive educational program for both families and staff to increase the use of breast milk for the infant population; 81% of babies who are admitted at younger than eight days of life received breast milk within 24 hours of discharge.

## RESEARCH AND OTHER SCHOLARLY ACTIVITIES

**Richard A. Saladino, MD**

Richard Saladino's mentorship efforts blend his past laboratory interests (pathophysiology and prevention and treatment of serious bacterial infections) and current clinical interests (process improvement, biosurveillance, procedural sedation, and evaluation and management of traumatic injuries). Saladino is a co-investigator on two major grants: an NIH R01 grant titled "Novel Approaches to Screening for Inflicted Childhood Neurotrauma" and a Patient-Centered Outcomes Research Institute grant titled "Using the Electronic Medical Record to Improve Outcomes and Decrease Disparities in Screening for Child Physical Abuse." He has mentored numerous students, residents, fellows, MD-PhD students, and junior faculty in their clinical and scholarly projects.

**PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS**

- Society for Pediatric Research
- American Academy of Pediatrics
- Section on Emergency Medicine, American Academy of Pediatrics
- Academy of Master Educators, University of Pittsburgh School of Medicine



**Richard A. Saladino, MD**  
Interim Division Chief, Pediatric  
Emergency Medicine

**Abeer Azzuqa, MD****RESEARCH**

Abeer Azzuqa is the physician liaison for the division's telemedicine program. Telemedicine is used during transports from regional and community hospitals to support and supervise the care of infants, improving outcomes of critically ill and often unstable infants. The telemedicine capacity also serves a valuable educational component, allowing the division to broadcast educational conferences to outside sites.

**ADVISORY COMMITTEE MEMBERSHIPS**

- Fellowship Committee, UPMC Neonatal-Perinatal Medicine Fellowship Program

**EDITORSHIPS**

- *Handbook of Neonatal Critical Care*

**PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS**

- American Academy of Pediatrics
- Perinatal Section, American Academy of Pediatrics

**Arcangela Balest, MD****ADVISORY COMMITTEE MEMBERSHIPS**

- Chair, NICU Feeding Task Force, Children's Hospital of Pittsburgh
- Chair, Hyperbilirubinemia Guidelines Committee, Children's Hospital of Pittsburgh
- Chair, Bronchiolitis Guidelines Committee, Children's Hospital of Pittsburgh

- Chair, Modified Barium Swallow Guidelines Committee, Children's Hospital of Pittsburgh
- Resident Mentor, Children's Hospital of Pittsburgh
- Clinical Resource Management Committee, Children's Hospital of Pittsburgh
- Bedside Monitoring Taskforce, Children's Hospital of Pittsburgh

**Michael J. Balsan, MD****RESEARCH**

Michael Balsan is an active member of the Vermont-Oxford Neonatal Database and participates in multicenter clinical research endeavors related to that group. In 2015, Balsan was instrumental in the successful receipt of a University of Pittsburgh-affiliated Pittsburgh Innovation Challenge grant award for NEATCAP, which is a hearing-protection device for babies in neonatal intensive care units that blocks noxious noise to reduce infant stress, improve sleep, and promote brain development.

**ADVISORY COMMITTEE MEMBERSHIPS**

- Allied Pediatric Health, Board of Directors, Shriners Hospital for Children-Erie Ambulatory
- Maternal Child Health Committee, Pennsylvania March of Dimes
- Pennsylvania Premature Infant Health Network
- Surgery Center and Outpatient Specialty Care Center
- Blood Transfusion Committee, UPMC Hamot

- Infection Control Committee, UPMC Hamot
- Local board member, March of Dimes
- Medical Education Committee, UPMC Hamot
- Patient Safety and Quality Committee, UPMC Hamot

#### PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics

#### Charles V. Bender, MD, MJ

##### ADVISORY COMMITTEE MEMBERSHIPS

- Ethics Committee, Children's Hospital of Pittsburgh of UPMC

##### EDITORSHIPS

- Contributing editor, *Obstetric Anesthesia Digest*

#### PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- Carroll F. Reynolds History of Medicine Society
- Southern Association for the History of Medicine and Science

#### Beverly S. Brozanski, MD

##### RESEARCH

Beverly Brozanski remains focused on neonatal outcomes research and cost effectiveness. She has worked with 27 children's hospitals in the United States (Children's Hospital Neonatal Consortium [CHNC]) to develop a database for QI and benchmarking for the care of infants admitted to NICUs in children's hospitals. She was the co-chair of the CHNC QI steering committee to help develop and implement QI projects. The group's first QI project was to develop and evaluate a clinical practice recommendation for the care and use of central lines to prevent central line-associated bloodstream infections. The collaboration resulted in a 22% decrease in such infections, from 1.39 to 1.07 infections per 1,000 line days.

A second QI project was initiated to improve perioperative handoffs and decrease postoperative hypothermia. Preliminary results showed a decrease of about 40% in rates of postoperative hypothermia and an improvement in postoperative handoffs as indicated by a decrease in reported care failures. Brozanski worked with clinicians in CHNC to develop best practices for the care of babies with gastroschisis and congenital diaphragmatic hernia.

##### ADVISORY COMMITTEE MEMBERSHIPS

- Collaborative Initiative for QI Steering Committee, Child Health Corporation of America
- Children's Hospital Neonatal Consortium Board
- National Neonatal Working Group to develop national scoring for *U.S. News & World Report*
- Pittsburgh Milk Bank Medical Advisory Board

#### PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics
- Society for Pediatric Research
- American College of Physician Executives

##### HONORS

- Best Doctors, *Pittsburgh Magazine*, 2016, 2017
- America's Best Physicians, National Consumer Advisory Board, 2016, 2017
- Best Doctors in America®, 2017

#### Justin Buland, MD

##### ADVISORY COMMITTEE MEMBERSHIPS

- Fellowship Committee, UPMC Newborn Medicine Program

#### PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics
- American Thoracic Society
- Society of Pediatric Research

#### Carmela Coppola, MD

##### PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics

#### Sean A. Frederick, MD

##### RESEARCH

Sean Frederick is a clinical neonatologist within the UPMC Newborn Medicine Program. He serves as the assistant chief medical information officer for Children's Hospital of Pittsburgh of UPMC. As such, he focuses on advancing and developing the hospital's use of its electronic health record.

##### ADVISORY COMMITTEE MEMBERSHIPS

- NICU Hypothermia Committee, UPMC Newborn Medicine Program
- Neonatal ECMO Core Team, UPMC Newborn Medicine Program



- Neonatal ECMO Consensus Committee, UPMC Newborn Medicine Program
- Non-Emergent Neonatal Intubation Consensus Committee, UPMC Newborn Medicine
- Femoral Line Placement Committee, UPMC Newborn Medicine Program
- Pediatric Physician Lead, Maternal Infant Health Project, UPMC
- Readmissions Project Team, Children's Hospital of Pittsburgh of UPMC
- CNET Committee, Children's Hospital of Pittsburgh of UPMC
- Critical Care Dose Range Checking Committee, Children's Hospital of Pittsburgh of UPMC
- Pediatric Physician Lead, Maternal Infant Health Project, UPMC
- Chair, Medical Informatics Committee, UPMC Newborn Medicine Program
- eRecord Physician Advisory Council, Children's Hospital of Pittsburgh of UPMC

#### PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics
- Perinatal Section, American Academy of Pediatrics
- American Medical Association

#### Carol Huntress Gilmour, MD, MPH

##### ADVISORY COMMITTEE MEMBERSHIPS

- Medical Executive Committee, UPMC Mercy
- Perinatal and Gynecology Morbidity and Mortality Committee, UPMC Mercy Hospital
- Chair, Neonatal Care and Quality Committee, UPMC Mercy Hospital
- Quality Committee, UPMC Mercy Hospital

#### PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics
- Perinatal Section, American Academy of Pediatrics
- Academy of Breastfeeding Medicine

#### Misty Good, MD

##### RESEARCH

Misty Good's laboratory focuses on the cellular and molecular mechanisms involved in the development of necrotizing enterocolitis (NEC), a gastrointestinal disease affecting premature infants. Utilizing a mouse model of NEC, she investigates the mechanisms by which breast milk and amniotic fluid prevent the progression of the disease. Good has demonstrated that

amniotic fluid inhibits Toll-like receptor 4-mediated pro-inflammatory signaling in the fetal and neonatal intestinal epithelium and prevents NEC via epidermal growth factor (EGF) receptor activation (*PNAS*, 2012). Furthermore, she has discovered that the EGF in breast milk is responsible for the protective effect against NEC (*Mucosal Immunology*, 2015). To pursue translational significance, she has developed a premature piglet model of NEC and has begun testing therapeutics in this model (*AJP-GI and Liver*, 2014). Her laboratory continues to study the intestinal mucosal host defense involved in NEC pathogenesis, to gain insights that will lead to the development of novel therapeutics for the disease. She conducts ongoing translational research studies evaluating the differences in the biological signature of premature infants with and without NEC. The long-term goal is to determine which infants are the most susceptible to the disease, which would afford the opportunity to intervene earlier in the disease course and ultimately prevent the development of this devastating disease altogether.

#### PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics
- Pediatric Academic Societies

#### James Kiger, MD

##### ADVISORY COMMITTEE MEMBERSHIPS

- Medical Director, Neonatal Respiratory Therapy and Care, UPMC Newborn Medicine
- Medical Codirector of Respiratory Care, Children's Hospital of Pittsburgh of UPMC
- Physician chair, Ventilator Adverse Event Committee, Children's Hospital of Pittsburgh

#### Jennifer Kloesz, MD

##### ADVISORY COMMITTEE MEMBERSHIPS

- Fellowship Committee, UPMC Neonatal-Perinatal Medicine Fellowship Program
- Medical Executive Committee, Magee-Womens Hospital of UPMC
- Newborn Quality Assurance Committee, Magee-Womens Hospital of UPMC
- Risk Management Committee, Magee-Womens Hospital of UPMC
- Board member, Three Rivers Mothers' Milk Bank
- Premature Infant Health Network
- Transfusion Committee, Magee-Womens Hospital

**PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS**

- American Academy of Pediatrics
- Perinatal Section, American Academy of Pediatrics

**HONORS**

- Jon F. Watchko, MD, Fellowship Mentoring Award, UPMC Neonatal-Perinatal Fellowship Training Program, 2016

**William McCarran, MD****ADVISORY COMMITTEE MEMBERSHIPS**

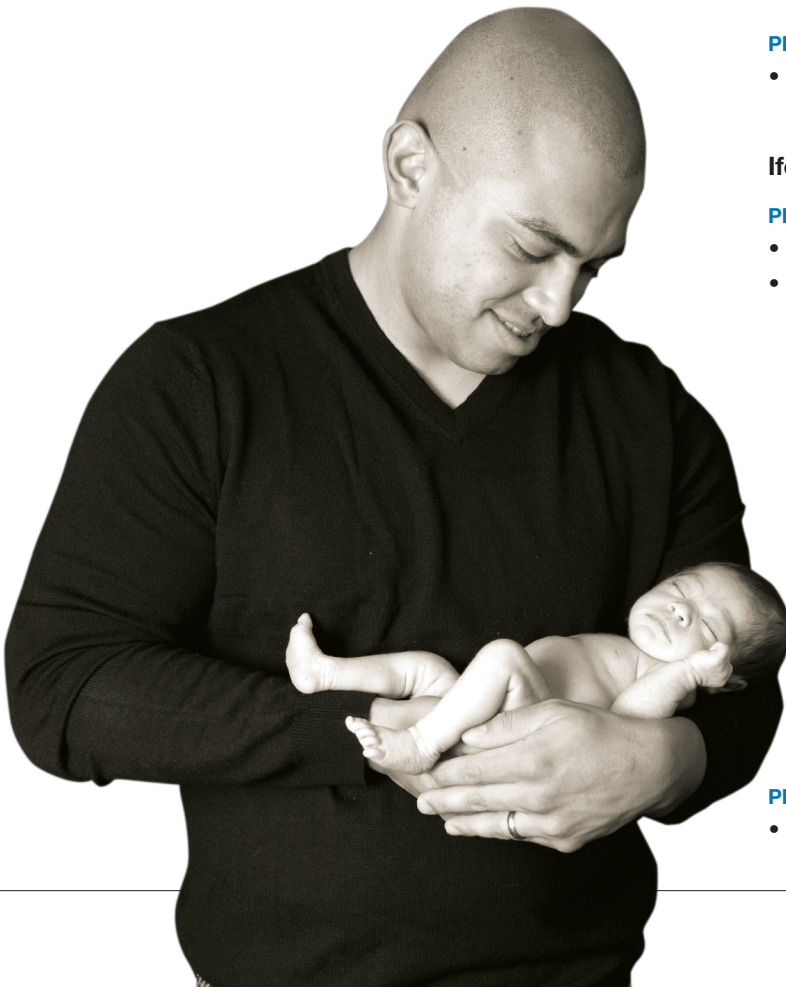
- Children's Hospital Neonatal Database Severe Chronic Lung Disease Working Group, Child Health Corporation of America

**PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS**

- American Academy of Pediatrics
- Society for Neuroscience
- Pulmonary Hypertension Association

**Burhan Mahmood, MD****RESEARCH**

Burhan Mahmood is medical director of the neonatal ECMO program. His research focuses on usage and prediction of need for ECMO.

**ADVISORY COMMITTEE MEMBERSHIPS**

- Fellowship Committee, UPMC Neonatal-Perinatal Medicine Fellowship Program
- Coordinator, Neonatal ECMO Core Team, Division of Newborn Medicine, Children's Hospital of Pittsburgh of UPMC
- Coordinator, Neonatal Congenital Diaphragmatic Hernia Core Team, Division of Newborn Medicine, Children's Hospital of Pittsburgh of UPMC
- Chair, Neonatal Nutritional Support Committee, Magee-Womens Hospital of UPMC
- Chair, Neonatal Medication Committee, Magee-Womens Hospital of UPMC
- Magee-Womens Hospital Pharmacy and Therapeutics Committee, Magee-Womens Hospital of UPMC
- UPMC Pharmacy and Therapeutics Committee, Children's Hospital of Pittsburgh of UPMC

**PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS**

- American Academy of Pediatrics

**Sharmilarani Nanda, MBBS****ADVISORY COMMITTEE MEMBERSHIPS**

- Clinical Director, Special Care Nursery, Westmoreland Hospital

**PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS**

- American Academy of Pediatrics

**Ifeyinwa Nwankwor, MBBS****PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS**

- American Academy of Pediatrics
- Section on Perinatal Pediatrics, American Academy of Pediatrics

**Brigid O'Donnell, MD****RESEARCH**

Brigid O'Donnell's research focuses on the role of endoplasmic reticulum-associated degradation in the regulation of ROMK associated with type II Bartter syndrome.

**ADVISORY COMMITTEE MEMBERSHIPS**

- Fellowship Committee, UPMC Newborn Medicine Program

**PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS**

- American Academy of Pediatrics



**HONORS**

- T32 Institutional National Research Service Award, Children's Hospital of Pittsburgh of UPMC, Mark Lowe, MD (T32DK071492-0), 2014–2016
- K12 Physician Scientist Award Program, Children's Hospital of Pittsburgh of UPMC, "Molecular Basis of Pediatric Disease," Terence S. Dermody, MD (K12HD052892), 2016–2017

**Karin Plummer Potoka, MD****RESEARCH**

Karin Plummer Potoka's laboratory studies the use of novel nitric oxide-independent targeting of soluble guanylate cyclase (sGC) to improve pulmonary vascular dysfunction in mouse models of sickle cell disease. The laboratory continues testing these sGC targeting agents' abilities to induce fetal hemoglobin in erythroid progenitor cells. The research has the potential to benefit extremely preterm infants who are at risk of developing pulmonary hypertension as a result of their chronic lung disease of prematurity. Oxidative pressure plays a role in their pulmonary hypertension and lack of response to nitric oxide or phosphodiesterase inhibition. sGC modulators may improve pulmonary vascular resistance in this disease process. Additionally, babies who screen positive for sickle cell disease may be enrolled in early treatment with hydroxyurea to increase their fetal hemoglobin levels and decrease the number of complications from their sickle cell disease. The sGC targeting agents also have the potential to increase fetal hemoglobin in "hydroxyurea non-responders" in the future.

**PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS**

- American Academy of Pediatrics
- Pediatric Academic Societies

**HONORS**

- Faculty, Eastern SPR Platform Session, Young Investigator Award

**Mohammad Riaz, MD****PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS**

- American Academy of Pediatrics
- Section on Perinatal Pediatrics, American Academy of Pediatrics

**Melissa Riley, MD****RESEARCH**

Melissa Riley is the division's outreach liaison, collaborating with community hospitals in the region. In this position, she provides access to educational and clinical support both before and after births and works to improve medical outcomes for high-risk neonates.

**ADVISORY COMMITTEE MEMBERSHIPS**

- Gastroschisis Committee, UPMC Division of Newborn Medicine and Pediatric Surgery Medicine Breastmilk Committee, UPMC Newborn Medicine
- Delayed Cord Clamping Committee, UPMC Newborn Medicine
- Extreme Prematurity Working Group, UPMC Newborn Medicine
- Donor Breastmilk Guidelines Committee, UPMC Newborn Medicine
- Division of Newborn Medicine Oral Care Policy, UPMC Newborn Medicine
- Neonatal Perinatal Fellowship Program Evaluation Committee, UPMC Newborn Medicine
- Fellowship Clinical Competency Committee, UPMC Newborn Medicine
- Neonatal ECMO Core Team, UPMC Newborn Medicine
- Extracorporeal Life Support Organization Task Force, Children's Hospital of Pittsburgh
- UPMC Medical Records and Forms Committee
- STAT MedEvac Medical Advisory Committee
- NICU Multidisciplinary Committee, Children's Hospital of Pittsburgh
- Disaster/Emergency Preparedness Committee, Children's Hospital of Pittsburgh
- Magee/Uniontown Hospital Women's Service Line Committee
- Magee-Womens Hospital Woman's Health Outreach Team
- Task Force 2019 for Neonatal Transport, Children's Hospital of Pittsburgh

- STEPP IN (Safe Transitions and Euthermia in the Perioperative Period in Infants and Neonates)
- AAP physician liaison, UPMC Division of Newborn Medicine
- Neonatal consultant, Excelsa Westmoreland Hospital
- Medical Advisory Board, Three Rivers Mothers' Milk Bank

#### PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics
- Section on Perinatal Pediatrics, American Academy of Pediatrics
- Section on Transport Medicine, American Academy of Pediatrics
- Pediatric Academic Societies

#### HONORS

- Snee-Reinhardt Charitable Foundation Gant for Tecotherm Device, 2016
- Jon F. Watchko Fellowship Mentoring Award, 2017

### Anthony Rudine, MD, MBA

#### RESEARCH

Anthony Rudine's laboratory focuses on using a murine model to study fetal brain development and the impact of corticosteroids. The laboratory continues working on pharmacologic treatments to modify the response of glucocorticoids in the developing brain to protect more infants from the devastating effects and complications of prematurity. Molecular techniques are used for genome evaluation. Using this model, the laboratory has shown that antenatally administered glucocorticoids can alter brain development in the fetus, leading to lifelong changes in genomic expression and behavior. The laboratory investigates the gender- and race-specific responses to some fetal treatments, and studies are ongoing to evaluate potential pharmacologic co-treatments that would maximize the benefit of glucocorticoids for all infants.

Additionally, Rudine is the primary investigator on multiple Institutional Review Board protocols, and he has funded his studies through the Clinical and Translational Science Institute at the University of Pittsburgh School of Medicine as well as the Magee-Womens Research Institute, in addition to being the recipient of the University of Pittsburgh Medical Center Department of Pediatrics Endowed Instructorship. He has studied the creation of neural stem cells from human tissue and the patterns of genomic expression in steroid-exposed cells. Another study has looked at cells obtained from umbilical cord blood to determine whether a pattern of gene expression

exists at the cellular level for infants who are or are not exposed to steroids *in utero*. The goal of these studies was to identify biomarkers for newborn brain injury and to stratify risk for the development of disease later in life.

#### PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- Fellow, American Academy of Pediatrics, 2016
- Section on Neonatal-Perinatal Medicine, American Academy of Pediatrics
- Representative, Children's Hospital Network Database Health Information Exchange

### Richard Telesco, MD

#### RESEARCH

Richard Telesco continues participating in the NEATCAP trial as a co-investigator studying a decibel-reduction device to improve neurodevelopmental outcomes. Site principal investigator is Michael Balsan.

#### ADVISORY COMMITTEE MEMBERSHIPS

- Associate clinical director, UPMC Hamot NICU

#### PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics

### Amy M. Urban, DO, MPH

#### RESEARCH

Amy Urban, the course developer for Neonatal Critical Care Communication, focuses on providing neonatal fellows and nurse practitioners with fundamental communication skills to interact with families of very ill neonates. Her work was disseminated in "Neonatal Critical Care Communication (NC3): Training NICU Physicians and Nurse Practitioners," published in the *Journal of Perinatology*. She continues as program developer of the Neonatal Simulation Program. She shares her work in simulation at both the International Meeting for Simulation in Healthcare and the International Pediatric Simulation Symposia and Workshops on the potential roles for simulation with the introduction of the Next Accreditation System in graduate medical education.

She is director of the bereavement team at Magee-Womens Hospital of UPMC and works closely with the Center for Organ Recovery and Education to promote organ donation. She serves on the organizing committee for Schwartz Center Rounds at Children's Hospital. She is a member of the clinical advisory board for the Pennsylvania Premie Network and is the co-chair for the network's webinar on neonatal abstinence syndrome.

**ADVISORY COMMITTEE MEMBERSHIPS**

- Advisory Board, PA Preemie Network, American Academy of Pediatrics
- Clinical Competency Committee, UPMC Newborn Medicine
- Improving Patient Handoffs Collaborative, Children's Hospital of Pittsburgh
- Director, Bereavement Committee, UPMC Newborn Medicine
- Physician Champion, Center for Organ Recovery and Education, UPMC Newborn Medicine

**PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS**

- American Academy of Pediatrics
- American Osteopathic Association
- Society for Simulation in Healthcare

**Kalyani Vats, MD****ADVISORY COMMITTEE MEMBERSHIPS**

- Obstetrician Services Committee, UPMC
- Fellowship Committee, UPMC Neonatal-Perinatal Medicine Fellowship Program
- Consultant Center for Advance Fetal Diagnosis, Magee-Womens Hospital of UPMC
- Medical advisor, Parent Advisory Council, Magee-Womens Hospital of UPMC
- Director, NICU Triage and Antenatal Consult Services, Magee-Womens Hospital of UPMC
- Co-chair, Clinical Consensus, Magee-Womens Hospital and Children's Hospital of Pittsburgh of UPMC
- Co-chair, WCBC-NICU Committee, Magee-Womens Hospital of UPMC
- Co-chair, Extreme Prematurity Task Force Working Group, Magee-Womens Hospital of UPMC
- Clinical research mentor, University of Pittsburgh medical students
- Codirector, Center for Advance Fetal Diagnosis, Magee-Womens Hospital of Pittsburgh

**PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS**

- American Academy of Pediatrics
- Indian Academy of Pediatrics

**HONORS**

- Chairman's Distinction Bonus, Department of Pediatrics, 2016

**Jon F. Watchko, MD****RESEARCH**

Jon Watchko's research focuses on the pathogenesis of bilirubin-induced brain injury, the mechanisms of brain bilirubin clearance, and novel pharmacologic neuroprotective strategies against kernicterus. He also studies the genetic architecture of severe neonatal hyperbilirubinemia. In collaboration with Ashok Panigrahy, chief of the Department of Pediatric Radiology, Watchko uses advanced magnetic resonance imaging to examine the effects of hazardous bilirubin on subcortical neural circuitry.

**EDITORSHIPS**

- Guest co-editor, "Neonatal Jaundice," *Seminars in Perinatology*

**ADVISORY COMMITTEE MEMBERSHIPS**

- Coordinator, Washington Hospital Neonatal Outreach Program
- Neonatal-Perinatal Medicine Fellowship Committee, University of Pittsburgh School of Medicine
- Ethics Committee, Children's Hospital of Pittsburgh of UPMC
- Institutional Review Board, University of Pittsburgh
- Neonatal Jaundice in Low- and Middle-Income Countries Working Group, International Panel of Experts on Neonatal Jaundice
- Mercer County Amish Outreach Education (Rh disease)
- Stakeholder Group on Perivable Counseling Decision Support Tool

**PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS**

- American Academy of Pediatrics
- Society for Pediatric Research
- American Physiological Society
- Midwest Society for Pediatric Research
- Perinatal Research Society
- American Pediatric Society

**HONORS**

- *Top Doctors*, Castle Connolly, 2010–2017

**Toby Debra Yanowitz, MD, MS****RESEARCH**

Toby Debra Yanowitz engages in clinical and translational research in the areas of perinatal brain injury, cardiac function, regional hemodynamics of preterm infants, neonatal outcomes, and database creation analysis. Yanowitz continues to lead multicenter clinical studies at Magee-Womens Hospital of UPMC and Children's Hospital of Pittsburgh of UPMC. Yanowitz is the co-chair



of the Newborn Research Support Service at Magee-Womens Hospital. She is the site representative to the Children's Hospital Network Database subgroup on outcomes for babies with surgical NEC and was recently elected chair of the committee.

#### ADVISORY COMMITTEE MEMBERSHIPS

- Chair, Review Committee, Magee-Womens Research Institute Clinical Trainee Research Award, Magee-Research Institute
- Member, Institutional Review Board, University of Pittsburgh School of Medicine
- Member, Neonatal-Perinatal Fellowship Committee Annual Program Evaluation
- Representative, Newborn Medicine Division, Vermont Oxford Network and Newborn Medicine Database Maintenance
- Chair, Clinical Working Group, "Guidelines for Oxygen Saturation Limits for Newborns," UPMC Newborn Medicine
- Chair, Clinical Working Group, "Guidelines for Acute Management of Neonatal Seizures," UPMC Newborn Medicine
- Chair, Clinical Working Group, "Guidelines for Management of the Patent Ductus Arteriosus Among Premature Infants," UPMC Newborn Medicine
- Chair, Clinical Working Group, "Guidelines for Management of Early-Onset Sepsis," UPMC Newborn Medicine
- Member, Clinical Working Group, "Guidelines for Use of Non-Invasive Ventilation in Newborn Infants," UPMC Newborn Medicine
- Member, Clinical Working Group, "Guidelines for Use of Nitric Oxide in Newborn Infants," UPMC Newborn Medicine
- Codirector, UPMC Newborn Medicine Clinical Consensus Committee, UPMC Newborn Medicine
- Neonatology representative, Brain Care Institute, Children's Hospital of Pittsburgh
- Member, Clinical Working Group, "Guidelines for Use of Hemodynamic Support in Newborn Infants," UPMC Newborn Medicine
- Member, Clinical Working Group, "Guidelines for Use of Respiratory Support in the Delivery Room," UPMC Newborn Medicine
- Member, Newborn Quality and Patient Safety Council, Magee-Womens Hospital
- Chair, Clinical Working Group, "UPMC Newborn Medicine, OB/GYN, and Maternal-Fetal Medicine Clinical Consensus Guideline for Delayed Umbilical Cord Clamping in Preterm Infants  $\leq 34$  6/7 Weeks Gestation," Divisions of UPMC Newborn Medicine, OB/GYN, and Maternal-Fetal Medicine
- Chair, Clinical Working Group, "UPMC Newborn Medicine, OB/GYN, and Maternal-Fetal Medicine Clinical Consensus Guideline for Delayed Umbilical Cord Clamping in Term and Late Preterm Infants  $\geq 35$  0/7 Weeks Gestation," UPMC Divisions of Newborn Medicine, OB/GYN, and Maternal-Fetal Medicine
- Co-chair, Clinical Working Group, "UPMC Newborn Medicine Clinical Consensus Guideline for Care of the Extremely Low Gestational Age Newborn," UPMC Division of Newborn Medicine
- Neonatal/Perinatal Fellowship Clinical Competency Committee, Department of Pediatrics, University of Pittsburgh School of Medicine
- Director, UPMC Newborn Medicine Neonatal Neuro-Intensive Care Unit, UPMC Newborn Medicine

#### PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- Alpha Omega Alpha
- American Academy of Pediatrics
- Perinatal Section, American Academy of Pediatrics
- Midwest Society for Pediatric Research
- Society for Pediatric Research
- Perinatal Research Society
- Association for Clinical and Translational Science

### THREE-YEAR BIBLIOGRAPHY

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