

# 2015 UAB Perinatal Conference

## The NICU and Beyond

### **Before the NICU...**

Long before the first neonatal intensive care units (NICUs) opened in the 1960s, physicians treated premature infants and debated their future. To be sure, the smallest such infants likely died within hours at home, victims of what we would recognize as respiratory distress syndrome. The fate of those born 1 to 2 months early, however, hung in the balance. In 19<sup>th</sup> century American cities, where some 15% to 20% of all infants died before reaching their first birthday, premature babies were the most vulnerable of all. Many succumbed to a vicious cycle of hypothermia, poor feeding, and infection in the first weeks of life. Physicians rarely did anything to save them, and resigned themselves to seeing this high mortality as a law of nature, not amenable to medical effort.

### **Evolution of the NICU**

All of this began to change in 1880. In that year, the French obstetrician E.S. Tarnier introduced two simple but effective interventions on the wards of Paris's largest maternity hospital: the incubator and the gavage feeding tube. Combined with skilled nursing care and wet nurses, the introduction of these two measures was associated with a remarkable decline in mortality of premature newborns in the 1200- to 2000-g range from 66% to 38%. Tarnier's results ignited widespread excitement in France and around the Western world. Paris's health authorities installed incubators in other maternity hospitals, and a variety of newer and more complex models appeared across Europe and the United States. Most remarkably, so-called incubator baby shows became a staple of world fairs and midways at the dawn of the 20<sup>th</sup> century. Featuring live infants, these shows invited the public to view the new technology in a setting that evoked faith in progress and a dash of side-show sensationalism.

William F. Malcolm. Beyond the NICU: Comprehensive Care of the High-Risk Infant, 1<sup>st</sup> Edition, 2014.

**July 31, 2015  
Birmingham, AL**

The Conference will be held in the Children's Harbor Building at the Children's of Alabama Hospital. The Bradley Lecture Center is located on the 4<sup>th</sup> floor  
**1616 6<sup>th</sup> Avenue South,  
Birmingham, AL 35233**  
(across from Burger King)

### **COORDINATORS**

Joseph B. Philips, III, MD  
Tara McNair, RN, BSN  
Cassandra Hudson  
chudson@peds.uab.edu  
(205) 934-4680 office  
(205) 934-3100 fax

# AGENDA

## At Discharge & Beyond

Greater numbers of premature infants and infants recuperating from illness, coupled with earlier discharge from the NICU, have increased demand for complex post hospital care.

Survival to discharge has improved across all gestational ages; for those born at 23-26 weeks, the survival is approximately 70 percent, and for those completing 32-36 weeks, the survival rate exceeds 90 percent.

However, intact survival is not always guaranteed, and up to 30-50 percent of very low-birthweight infants, for example, have residual disability associated with chronic lung disease, sensory impairment, neurodevelopmental delays, and nutrition and growth challenges.

The perceived benefits of a shortened hospital stay, such as lessened risk of adverse parenting behavior, decreased hospital-acquired morbidity or cost may be outweighed by increased mortality or morbidity in the infant not yet proved to be physiologically stable.

This complex infant will have a direct impact on the primary care setting, and on a provider who must now be versed in the care of infants with residual issues such as chronic lung disease, neurodevelopmental deficits, growth failure and nutritional deficiencies. Some disabilities may not be immediately apparent at the time of hospital discharge, thus outpatient providers must also carefully assess and intervene early to maximize potential.

The birth of even a healthy infant creates new family demands. When the birth is high-risk, there is additional stress due to maternal recovery from a high-risk pregnancy, uncertainty about neonatal outcome or adaptation to the NICU environment. While preparing for discharge, parents of at-risk infants may remain anxious and question their ability to adequately assume care beyond the NICU.

Parenting a NICU graduate is more challenging due to neurobehavioral immaturity and alterations in behavioral responses or sleep/wake patterns. An infant's well-being is interdependent on his family; therefore, it is essential to identify strengths and risks in the family system that may impact the infant once discharged.

The successful discharge plan must consider family values, and acknowledge characteristics such as cultural and ethnic heritage, language, safety and competence.

Annette Carley, MS, RN, NNP-BC, PNP-BC

7:30a – 8:00a	Registration and Continental Breakfast
8:00a – 8:05a	Welcome Joseph Philips, MD; Tara McNair, RN, BSN
8:05a – 9:35a	Supporting Developmental Outcomes: From the NICU and Beyond Myriam Peralta, MD; Sheree York, PT, DPT, PCS; Jill Everette
9:35a – 10:05a	IVH in the NICU Brian Sims, MD, PhD
10:05a – 10:15a	Break
10:15a – 11:00a	Follow-up of IVH Leon Dure, MD; Paola Mendoza, MD
11:00a – 11:30a	BPD in the NICU Rune Toms, MD
11:30a – 12:15p	BPD Post Discharge David Lozano, MD
12:15p – 1:15p	Lunch (provided)
1:15p – 1:45p	Care of the Late-Preterm Infant Joseph Philips, MD
1:45p – 2:15p	ROP in the NICU Joseph Philips, MD
2:15p – 2:45p	ROP Post Discharge Thomas Metz, MD
2:45p – 3:00p	Break
3:00p – 3:45p	Surgical Management of NEC Colin Martin, MD
3:45p – 4:30p	NEC Post Discharge Reed Dimmitt, MD
4:30p	Evaluation and Adjournment

*The meeting room is usually cold when first entering. It is difficult to maintain a constant temperature that meets the need of each individual participant. For your comfort, we suggest that a jacket, sweater, or sweatshirt be worn.*

## SPEAKERS

Reed A. Dimmitt, MD  
Professor  
Pediatric Gastroenterology, Hepatology,  
and Nutrition

Leon S. Dure, IV, MD  
Professor  
Division of Pediatric Neurology & Neurobiology

Jill Everette  
March of Dimes NICU Family Support  
Specialist at UAB

David J. Lozano, MD  
Associate Professor  
Division of Pediatric Pulmonary

Colin A. Martin, MD  
Associate Professor  
Division of Pediatric Surgery

Paola Mendoza, MD  
Assistant Professor  
Division of Pediatric Rehabilitation Medicine

Thomas H. Metz, MD  
Assistant Professor  
Department of Ophthalmology

Myriam Peralta, MD  
Professor  
Division of General Pediatrics

Joseph B. Philips, III, MD  
Professor  
Division of Neonatology

Brian Sims, MD, PhD  
Associate Professor  
Division of Neonatology

Rune Toms, MD  
Associate Professor  
Division of Neonatology

Sheree York, PT, DPT, PCS  
Director, PT/OT Department  
Children's of Alabama

## ACCREDITATION

Children's of Alabama designates this live activity for a maximum of 6.0 *AMA PRA Category 1 Credit™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Children's of Alabama is accredited by the Medical Association of the State of Alabama to provide continuing medical education for physicians.

No application to the Alabama Board of Nursing has been made. Per Alabama Administration Code Chapter 610-X-10-.04e, AMA PRA Category 1 Credits are acceptable for CEUs. CME conversion to CEUs for this conference equals 8.4 Continuing Education Hours. To receive the Nursing Contact Hours, go to the Alabama Board of Nursing website: [www.abn.alabama.gov](http://www.abn.alabama.gov)

- Click on Continuing Education (on the gray bar in purple letters)
- Click on Access Individual CE Record
- When the Individual CE Record page opens, follow the directions on the screen.

All participants will receive a Certificate of Attendance showing the total number of Contact Hours received.

## DIRECTIONS

Parking will be available in the 5<sup>th</sup> Avenue Parking Deck. Take a ticket upon entering the deck. Parking on the 2<sup>nd</sup> Floor of the deck is for Patients/Visitors Only. **Bring your ticket with you to the Conference. The ticket must be validated or there will be a \$25 charge to exit the deck.** Take the elevator in the center of the deck to the 2<sup>nd</sup> Floor. Take the crosswalk into the Children's Hospital. Follow the hallway to the right of the information desk. You will cross another crosswalk into the Bradley Center. Take those elevators to the 4<sup>th</sup> Floor.

**DIRECTIONS to the 5<sup>th</sup> Avenue Parking Deck (1600 5<sup>th</sup> Avenue South).** If you are not familiar with the Birmingham area, the streets run north and south, while avenues run east west. For example, the back of parking deck faces 5<sup>th</sup> Avenue South, and is located between 16<sup>th</sup> and 17<sup>th</sup> Street South.

**From the West on I-20/I-59** Take I-65 South, bearing to the right at the major junction before reaching Birmingham. Exit I-65 at the 4<sup>th</sup> Ave South Exit. You will be traveling East on 4<sup>th</sup> Avenue South. Turn right onto 16<sup>th</sup> Street South. The parking deck entrance will be on your left at the corner of 5<sup>th</sup> Avenue and 16<sup>th</sup> Street South.

**From the North on I-65** Exit I-65 at the 4<sup>th</sup> Avenue South. You will be traveling East on 4<sup>th</sup> Avenue South. Turn right onto 16<sup>th</sup> Street South. The parking deck entrance will be on your left at the corner of 5<sup>th</sup> Avenue and 16<sup>th</sup> Street South.

**From the East on I-20/I-59** Take I-20/I-59 West into Birmingham. After the 22<sup>nd</sup> Street North Exit in Downtown Birmingham, get into the far left-hand lane. Bear left onto I-65 South Exit. Exit I-65 at the 4<sup>th</sup> Avenue Exit. You will be traveling East on 4<sup>th</sup> Avenue South. Turn right onto 16<sup>th</sup> Street South. The parking deck entrance will be on your left at the corner of 5<sup>th</sup> Avenue and 16<sup>th</sup> Street South.

**From the South on I-65** Take the University Boulevard/8th Avenue South Exit. You will be going East on University Boulevard. Turn left onto 11<sup>th</sup> Street South. Turn right onto 5<sup>th</sup> Avenue South. Building is first left after McDonald's.

**From the East on U.S. 280** Take Highway 280 to Highway 31 North to Birmingham (also called the Elton B. Stephens "Red Mountain" Expressway). Exit at 3<sup>rd</sup>/4<sup>th</sup> Avenue South exit. Take a left onto 3<sup>rd</sup> Avenue South. You will be traveling west on 3<sup>rd</sup> Avenue South. Turn left onto 16<sup>th</sup> Street South.

*Enter the deck on either the 16<sup>th</sup> or 17<sup>th</sup> Street entrance*

## OBJECTIVES

**Upon completion of this live activity, participants will be able to:**

- Recommend developmental interventions in the NICU and follow-up post-discharge
- Assess outcome of very low birth weight infants
- Review the pathophysiology and management of infants with BPD in the NICU and post-discharge
- Review the pathophysiology and management of infants with NEC in the NICU and post-discharge
- Identify problems, develop management plan and predict outcome of infants with ROP in the NICU and post-discharge
- Identify problems, develop management plan and predict outcome of infants with ICH in the NICU and post-discharge
- Recommend plan of care for the late-preterm infant



# 2015 UAB Perinatal Conference



## Registration Form July 31, 2015

PLEASE REGISTER IN ADVANCE BY COMPLETING THIS ENROLLMENT FORM.  
MAIL REGISTRATION FORM AND FEE TO ADDRESS BELOW OR FAX IT TO (205) 934-3100.  
*REGISTER EARLY, SEATING IS LIMITED*

*Please type or print legibly*

Name: \_\_\_\_\_ Degree (MD, RN, RT, etc) \_\_\_\_\_

Hospital/Practice \_\_\_\_\_ Email address: \_\_\_\_\_

Mailing Address \_\_\_\_\_ City \_\_\_\_\_ State/Zip \_\_\_\_\_

Office # \_\_\_\_\_ Home/Cell #: \_\_\_\_\_ Fax # \_\_\_\_\_

*(Confirmation will be sent via e-mail or Fax ONLY)*

**Course fee:**

- **\$75 (includes handouts, breakfast, lunch and breaks)**

*For more information contact Cassandra at UAB Neonatology,  
(205) 934-4680 or chudson@peds.uab.edu*

Make check payable to **UAB Neonatology** and mail to:  
**ATTN: Perinatal Conference**  
UAB Division of Neonatology  
176F Suite 9380  
619 South 19<sup>th</sup> Street  
Birmingham, AL 35249-7335