Neonatal Pharmacology Conference 2012:
Incorporating Evidence-Based Practice into Clinical Decision Making

November 7–9, 2012
DoubleTree Guest Suites Hotel
Charleston, South Carolina

Presented by the Medical University of South Carolina Neonatal Nurse Practitioner Team, Division of Neonatology, Office of Continuing Medical Education, South Carolina Neonatal Medical Consortium and NANN

Office of Continuing Medical Education
19 Hagood Avenue, Suite 1004
MSC 754
Charleston, SC 29425
Neonatal Pharmacology Conference 2012: Incorporating Evidence-Based Practice into Clinical Decision Making

Course Faculty

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Associate Chief, Pediatric Cardiology  
Vice Chair for Clinical Research  
Professor of Pediatrics  
Medical University of South Carolina

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Department of Pediatrics  
Medical University of South Carolina

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Pediatrix Medical Group

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Chapel Hill, North Carolina

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Residency Program Director  
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Sarah N. Taylor, MD  
Associate Professor  
Department of Pediatrics  
Medical University of South Carolina
Conference Description

The need for evidenced-based practice in neonatology is increasingly important as clinical decisions and treatments are made. The conference is designed to help NICU professionals including physicians, nurse practitioners, nurse managers and experienced staff nurses make those decisions. The goal of the conference is to share evidence based approaches to the care of the neonate.

Credit Designation

The Medical University of South Carolina designates this live activity for a maximum of 20.0 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Nursing Credit: This nursing continuing education activity awards a total of 20.0 CH (contact hours).

Advanced Practice Registered Nurses: This continuing education activity awards a total of 20.0 CH of which 20.0 are PH (pharmacology hours).

Lowcountry AHEC is an approved provider of continuing nursing education by the South Carolina Nurses Association, an accredited approver by the American Nurses Credentialing Center’s Commission on Accreditation.

This program is approved for 2.00 CEUs (20.0 clock hours) by Lowcountry AHEC and meets SC AHEC Best Practice Standards.

Learning Objectives

At the completion of this conference you should be able to achieve the objectives listed under each topic. The conference will be presented in lecture format with question and answer sessions.

Registration Fees

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<th>Early</th>
<th>Regular</th>
<th>One Day</th>
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<td>NP, RN, &amp; Other</td>
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<td>Printed Syllabus</td>
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Early registration fees apply if registration is received before September 30, 2012.

Fee includes tuition, breaks, and certificates of attendance.

Please make your check payable to MUSC Office of CME and mail with the registration form included in this brochure to: Elizabeth Gosson, MUSC Office of CME, 19 Hagood Avenue, Suite 1004, PO Box 250754, Charleston, SC 29425

No pre-registrations will be accepted after Friday, November 2, 2012. After Friday, November 2, 2012, call the MUSC Office of CME at 843-676-1925 to see if space is still available. If space is still available you must register at the conference.

Cancellations

A refund will be made upon written request prior to October 7, 2012; however, $100 will be retained for administrative costs. No refunds will be made after October 7, 2012. We reserve the right to cancel the program if necessary. Full registration fees will be refunded for cancelled programs. The Medical University of South Carolina cannot be responsible for reimbursement of airline or other transportation fares, hotel or rental car charges, including penalties.

Electronic Syllabus

We’re going green! In our efforts to “go green”, the syllabus will be provided electronically (USB Drive or CD). Efforts will be made to also have the syllabus online. Information will be emailed to you the week prior to the conference so that you may download a copy. A printed syllabus is available upon request at the time of your registration for an additional fee of $20.00.

Accreditation

The Medical University of South Carolina College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Disclosure Statements

Disclosure of Financial Relationships: The Medical University of South Carolina, College of Medicine, Office of CME is a provider accredited by the ACCME and as such, must ensure balance, independence, objectivity and scientific rigor in its educational activities. Course directors, planning committee members, faculty, and all others who are in a position to control the content of this educational activity are required to disclose all relevant financial relationships with any commercial interest related to the subject matter of the educational activity. A process to resolve conflicts of interest and commercial bias has been implemented. Faculty also will disclose any off-label and/or investigational use of pharmaceuticals or instruments discussed in their presentation. Disclosure of this information will be published in course materials, so those participants in the activity may formulate their own judgments regarding the presentation. All presentations will be lectures supported by PowerPoint slides, handouts and Q&A.
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Course Agenda
At the end of each presentation, learners should be better able to achieve the respective objectives stated.

Wednesday, November 7, 2012

6:30 Registration
7:00 Continental Breakfast
7:25 Welcome
7:30 
**Little Babies and Big Swings: Physiology, Pathophysiology, and Management of Glucose Needs and Metabolism in the Preterm Infant**, Mike Southgate, MD
Describe the normal and developmental physiology of glucose metabolism; Identify unique characteristics of the preterm infant which lead to perturbations in glucose needs and metabolism; Employ the above knowledge to construct a management plan for parenteral glucose therapy in response to the needs of the sick preterm infant.
8:30 
**Current Trends in Management of Congenital Hyperinsulinism**, Remberto Paulo, MD
Recognize the different forms of hyperinsulinism in the neonate; Identify the different causes of congenital hyperinsulinism; List the diagnostic steps for congenital hyperinsulinism; Describe the current treatment modalities for congenital hyperinsulinism.
9:30 Break
10:00 
**Engineering of Mother’s Own Milk to Assist in the Growth of the VLBW Infant**, Pam Murphy, PhD
Discuss the role of hormone production in the establishment of an adequate maternal milk supply; Identify other factors that contribute to establishing an adequate milk supply; Describe the fat content of maternal milk; Explain how mothers can manipulate milk expression to maximize fat content for their VLBW infants as an adjunct therapy for growth.
11:00 
**The Evidence Regarding Human Milk Fortifier Choices**, Sarah Taylor, MD
Define Randomized, controlled trials of human milk fortifier types; Describe basic science studies of human milk fortifier components; Compare the pros and cons of each fortifier option.
12:00 Lunch on your own
1:15 
**Vitamins and Iron: What and When for Preterm Infants**, Sarah Taylor, MD
Describe the studies performed to identify the vitamin and iron needs for preterm infants; Define evidence-based approaches to supplementation; Assess the remaining questions for vitamin and iron supplementation for preterm infants.
2:15 
**Pharmacotherapy in Persistent Pulmonary Hypertension of the Newborn**, Matthew Laughon, MD, MPH
Describe the pathophysiology of PPHN; Identify evidence-based therapeutics for PPHN.
3:15 Break
3:45 
**Blood Pressure in Premature Infants**, Matthew Laughon, MD, MPH
Describe the natural history of and recognize various definitions of low blood pressure in premature infants; Identify wide center variation in blood pressure management.
4:45 
**Narcotic Therapy in the NICU: Which One Should I Choose?**, Julie Ross, MD
Describe the pharmacokinetics of Morphine and Fentanyl; Identify specific patient populations and situations where one drug may offer benefit over the other.
5:45 Adjourn for the Day

Thursday, November 8, 2012

7:00 Continental Breakfast
7:30 
**Maternal, Fetal and Neonatal Arrhythmias**, Nicole Brooks Cain, MD
Diagnose arrhythmias on EKG; View fetal echocardiograms as they relate to arrhythmias; Recall treatments of various arrhythmias; Recall the long term outcome and implications of arrhythmias in neonates.
8:30 
**Medication Use in the NICU, What Drives Change?**, Reese Clark, MD
Identify two important changes in NICU clinical practice and their impact on outcomes; Explain how Prokinetics and Protein Pump inhibitors may be associated with significant adverse events; Discuss how surfactant use has changed; Monitor changes to clinical practice to determine if that change improves outcomes.
9:30 Break
10:00 
**CPAP or Surfactant First?**, Reese Clark, MD
Discuss two reasons why surfactant is important in preventing acute lung injury; Compare the differences in commercially available surfactants.
11:00 
**Antibiotics and the Association Between Duration of Treatment and Outcomes**, Michael Cotten, MD
Recognize rationale for early use of antimicrobials in low birth weight infants; Summarize the epidemiologic evidence supporting the hypothesis that duration of empirical antimicrobials is detrimental to health outcomes of premature infants; Apply strategies to reduce duration of empirical antimicrobials in the face of sterile cultures.
12:00 Break
12:15 
**Cooling and What Else? Can We Further Help Babies Using What We’ve Already Got?**, Michael Cotten, MD
Describe current state of use of hypothermia & ongoing clinical trials of hypothermia; Assess use and pharmacokinetics, risks and benefits of adjunct medications, particularly opiates, during hypothermia.
1:15 Adjourn for the Day
Course Agenda (Continued)

Friday, November 9, 2012

7:00  Continental Breakfast

7:30  Prevention of Perinatal Transmission of HIV, Terry Dixon, MD
Identify infants at risk for congenital HIV infection; Formulate a
treatment plan to prevent transmission in accordance to gestational
age and maternal risk factors; Arrange appropriate follow-up for the
HIV exposed infant.

8:30  Oxygen: A Drug of Abuse in Neonatology?  David Burchfield, MD
Justify using lower oxygen saturation targets in neonates.

9:30  Break

9:45  Neonatal Abstinence: Management and Outcomes,
David Burchfield, MD
Counsel a family about the short and long term course for their baby
exposed to narcotics in-utero.

10:45  New Therapies for the Treatment of Retinopathy of Prematurity,
James Kiger, MD
Discuss new advancements in explaining the pathogenesis of
retinopathy of prematurity; Recognize the efficacy and physiology
behind laser photoagulation therapy; Describe the physiology and
use of new monoclonal antibody therapy for ROP.

11:45  Lunch on your own

1:00  Practicing in the Age of Drug Shortages: Examining Causes,
Providing Solutions, and Protecting Patients, Toby Cox, PharmD
Summarize the history and current trends in drug shortages; Examine
why drug shortages have become a nationwide problem; Identify
resources for tracking drug shortages; Discuss the impact of drug
shortages on patient safety, quality and cost of care; Develop man-
agement strategies to deal with drugs shortages within health sys-
tems; Identify how political and governmental agencies are dealing
with drug shortages.

2:00  Pharmacologic Support of Acute and Chronic Renal Failure,
David Sas, MD
Recognize the most common causes of kidney injury in babies;
Recall the indications for renal replacement therapy (dialysis); Inte-
grate concepts regarding typical electrolyte disturbances in babies
with kidney injury; Describe how to evaluate and manage fluid dis-
turbances; Recognize the common nutritional issues in this patient
population; Outline how to monitor and manage anemia and hyper-
parathyroidism in babies with chronic kidney disease.

3:00  Break

3:15  Emerging Pulmonary Artery Hypertension Therapy, Andy Atz, MD
Recognize neonates who might benefit from PAH therapy; Review
current approved and experimental therapies for PAH

4:15  Adjourn

Historic Charleston

Charleston has stood throughout History as the cultural capital of
the South and is considered by many to be a living museum, with a
wonderful variety of things to do and see. In this beautifully pre-
served city you can experience tours through historic landmarks,
including 18th century homes and plantations, the Battery, muse-
ums, churches and the city market. It also boasts numerous art
galleries that display the city's impressive appreciation for the visual
arts, wonderful shops and some of the best restaurants to be found
anywhere in the United States.

Hotel Accommodations

DoubleTree Guest Suites is an elegantly appointed property with
182 one and two bedroom suites – the largest suites in Charleston's
Historic District, and 30 Executive King Deluxe Rooms. Located
in the heart of the city Market, the DoubleTree is easily accessible
to Charleston's renowned restaurants, historic walking and car-
rriage tours, Waterfront Park and High Battery, antebellum mansions
and gardens, and shopping – from Charleston's boutiques to local
vendors in the open-air Market. The DoubleTree provides legendary
service, southern hospitality, traditional Charleston ambience and
thoroughly modern amenities for business and leisure travelers.

A limited number of guest rooms have been reserved and are being
offered on a first come, first serve basis. Hotel rates are $199.00
Single/Double for November 6, 7, 8, 2012 and $259.00 for November
9, 2012. All rates are subject to applicable taxes and assessments
which are currently 12.5%. Please call the hotel to reserve your dis-
counted rate by mentioning this conference. 843-577-2644 or toll free
877-408-8733. Reservations can also be made by going online to
http://www.charlestondoubletree.com. On the right hand side, en-
ter your arrival and departure date and then “check availability”. From
here, under Group Code, enter “NPH” and the group rate will come
up. Continue with the reservation. The room block will be held until
October 8, 2012; however, the room block may be filled prior to this date. In such a
case, neither the discounted rate nor guest room availability can be guaran-
teed. Therefore, we recommend you make your reservation as soon
as possible.

Parking: Valet parking at the hotel is available at $20.00 plus tax, per day,
and can be added to your guest folio.

Americans with Disabilities Act

It is the policy of the Medical University of South Carolina not to
discriminate against any person on the basis of disabilities. If you
feel you need services or the auxiliary aids mentioned in this act in
order to fully participate in this continuing education activity, please
call the Office of Continuing Education at (866) 637-6835, or attach a
note to your registration.
Registration Form

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Name ____________________________ Personal ID# ___XXX - XX - ___
As you would like it printed on your name badge
Please use the last four digits of your SSN

Address ____________________________
City ____________________________ State ___________ Zip Code ____________

Specialty ____________________________ Degree/Credentials ____________________________

Daytime Phone ( _______ ) ___________ - ___________ Business Fax ( _______ ) ___________ - ___________

Email ____________________________

I do not want my name included on a list of participants to be included in handouts at the conference.
YES, I do want a printed copy of the course syllabus (in addition to the provided electronic syllabus).
NO, I do not want a printed copy of the course syllabus.

Registration Fees

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<th>Description</th>
<th>Early Bird Fees</th>
<th>Regular Fees</th>
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<td>Physicians</td>
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<td>NP, RN, Healthcare Professionals</td>
<td>Postmarked after 9/30/12</td>
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<td>Printed Course Syllabus</td>
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Total Registration Fee Included: $______

Payment must accompany registration:
Check Payable to MUSC - Office of CME
MasterCard  O Visa  O American Express

Cardholder’s Name

Card Number ____________________________ Expiration Date ____________________________

Registration fees include tuition, breaks, and certificates of attendance. Please direct any inquiries to Elizabeth Gossen, Office of CME 843.876.1925 • Toll Free 866.637.6835 or gossen@musc.edu

Registration methods: (Please use ONE of these methods to register. Do not mail if previously faxed or telephoned).
• Mail registration form with check or credit card information to Elizabeth Gossen, Office of CME, Medical University of South Carolina, 19 Hagood Avenue, Suite 1004, P.O. Box 250754, Charleston, SC, 29425
• Telephone: (843) 876-1925 – Registration by credit card only
• Fax: (843) 876-1931 – Registration by credit card only
• Online: Visit http://www.musc.edu/cme and select “CME Conferences” on the left hand side, then scroll down to find this activity, select the blue “Register” button, and follow directions as prompted.

More Information

For more information, call the Office of CME toll free (866) 637-6835 or directly at (843) 876-1925, or email gossen@musc.edu