

Neonatal Pharmacology Conference 2014: Incorporating Evidence-Based Practice into Clinical Decision Making



November 12-14, 2014
Francis Marion 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, NANN, and the Center for Education and Best Practice of MUSC Health



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.

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

	Early	Regular	One Day
NP, RN, & Other			
Healthcare Professionals	\$395	\$450	\$175
Physicians	\$465	\$495	\$250
Printed Syllabus	\$30	\$30	\$30

Early registration fees apply if registration is received before September 30, 2014.

Fee includes tuition, breaks, and certificates of attendance.

Please make your check payable to Medical University of South Carolina and mail with the registration form included in this brochure to: Elizabeth Gossen, MUSC Office of CME, 19 Hagood Avenue, Suite 1004, MSC 754, Charleston, SC 29425

No pre-registrations will be accepted after Friday, November 7, 2014. After Friday, November 7, 2014, call the MUSC Office of CME at 843-876-1925 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 12, 2014; however, \$100 will be retained for administrative costs. No refunds will be made after October 12, 2014. 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. *By registering for this conference, you agree to this cancellation policy.*

Electronic Syllabus

We're going green! In our efforts to "go green", the syllabus will be provided 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 \$30.00.

Credit Designation

The Medical University of South Carolina designates this live activity for a maximum of *20.00 AMA PRA Category 1 Credit(s)™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Nursing Credit: A maximum of 20.0 ANCC nursing contact hours will be provided. Partial credit will be awarded for each individual session. Successful completion of a session requires attendance at the session and completion of an online evaluation.

Advanced Practice Registered Nurses: This continuing education activity awards a total of 20.0 PH (pharmacology hours). 2.0 of these hours are for controlled substances.

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.

The Center for Education and Best Practice of MUSC Health is an approved provider of nursing continuing education by the South Carolina Nurses Association, an accredited provider by the American Nurses Credentialing Center's Commission on Accreditation.

Disclosure Statements

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 Faculty

Debra L. Bogen, MD

Associate Professor of Pediatrics, Psychiatry
and Clinical & Translational Sciences
University of Pittsburgh School of Medicine
Division of General Academic Pediatrics
Children's Hospital of Pittsburgh
Pittsburgh, PA

Reese Clark, MD

Vice-President and Co-Director
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Pediatrix Medical Group
Neonatologist, Greenville Memorial Hospital
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Jennifer D. Davidson, MD

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Toby Hoffman Cox, PharmD, BCPS

Clinical Specialist, Pediatrics/Neonatology
Medical University of South Carolina
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Dorothea Jenkins, MD

Associate Professor
Department of Pediatrics
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James Kiger, MD

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Stephen L. Kinsman, MD

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Division of Pediatric Neurology
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Donald M. Null, MD

Professor
Department of Pediatrics
University of Utah School of Medicine
Salt Lake City, UT

Rita Ryan, MD

Chair and Professor of Pediatrics
Professor of Pathology and Laboratory Medicine
Department of Pediatrics
Medical University of South Carolina
Pediatrician-in-Chief, MUSC Children's Hospital
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Richard A. Saunders, MD

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Attending Neonatologist
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Sarah N. Taylor, MD, MSCR

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Carol L. Wagner, MD

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Shelly-Ann Williams, MD

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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 12, 2014

- 6:30 Registration
7:00 Breakfast/Exhibits Open
7:25 Welcome
- 7:30 **Mystery in the NICU! An Interactive Case-Presentation**
Jim Kiger, MD
Develop a differential diagnosis for neonatal liver failure; Outline the diagnostic steps in establishing a diagnosis for neonatal liver failure; Discuss treatment and outcomes of liver failure with colleagues and families.
- 8:30 **Neonatal Abstinence Syndrome: 2014 Update**, *Debra Bogen, MD*
Describe the changing face of drug use in the US and its impact on pregnancy outcomes; Review the signs and clinical course of neonatal abstinence syndrome; Explain the risk factors for neonatal abstinence syndrome; Evaluate treatment strategies for neonatal abstinence syndrome.
- 9:30 Break/Exhibits Open
- 10:00 **Mother's Milk, Marijuana, Margaritas, Methadone and More**
Debra Bogen, MD
Describe the prevalence of substance use in pregnancy and lactation; Review potential risks of breastfeeding with legal, prescribed and illegal substances; Develop management strategies for women who use drugs and want to breastfeed.
- 11:00 **Is Necrotizing Enterocolitis Preventable?** *Sarah N. Taylor, MD*
Identify the evidence regarding necrotizing enterocolitis physiology; Identify the evidence determining how neonatal interventions affect risk for necrotizing enterocolitis.
- 12:00 Lunch on your own
- 1:15 **When NSAIDs are Not an Option, is Surgery the Only Choice for Closing a Patent Ductus Arteriosus?** *Toby Cox, PharmD*
Discuss current treatment options for the premature infant with patent ductus arteriosus (PDA); Recognize the patient who is refractory to or has contraindications to standard treatment options for PDA; Explain the potential role for acetaminophen in the pharmacologic closure of PDA.
- 2:15 **Maternal and Neonatal Pharmacologic Interventions for Chorioamnionitis**, *Dorothea Jenkins, MD*
Incorporate an understanding of mechanisms of fetal inflammation in chorioamnionitis into patient care management; Be able to explain approaches to mitigating secondary injury in fetuses exposed to chorioamnionitis; Arrange appropriate follow-up for neonates exposed to chorioamnionitis.
- 3:15 Break/Exhibits Open
- 3:45 **Emerging Therapies for HIE**, *Dorothea Jenkins, MD*
Incorporate an understanding of mechanisms of hypoxic ischemic injury, timing and severity, into patient care management; Identify who qualifies for hypothermia treatment and who may benefit, and a rationale for management protocols; Recognize novel therapies in phase 0-II trials for mitigating severe or complicated HIE
- 4:45 **Neonatal Seizures: Beyond Phenobarbital and Phenytoin**
Steven L. Kinsman, MD
Review the identification of neonatal seizures and approach to treatment; Review the pharmacology on all antiepileptic drugs currently used to treat neonatal seizures; Outline an approach to treating neonatal seizures, including the use of newer agents.
- 5:45 Adjourn for the Day

Thursday, November 13, 2014

- 7:00 Breakfast/Exhibits Open
- 7:30 **Calcium and Phosphorus – How Low is Too Low, How High is Too High?** *Sarah N. Taylor, MD*
Determine the physiology of calcium and phosphorus balance for the preterm infant; Identify short-term calcium and phosphorus needs for the preterm infant; Identify long-term health associated with calcium and phosphorus homeostasis for the preterm infant.
- 8:30 **Where is the Beef/Evidence? What's New and How Do We Implement the Evidence?*** *Reese Clark, MD*
Identify the most recent evidence that should be used to drive practice change and anticipate the consequences for ignoring it.
- 9:30 Break/Exhibits Open
- 10:00 **Neonatal Hypoglycemia: Are We Treating Just a Number?**
Matthew Saxonhouse, MD
Develop a differential diagnosis for the neonate with hypoglycemia; Develop an evaluation and management protocol for an infant with hypoglycemia; Recognize rare causes of persistent neonatal hypoglycemia; Recognize the possible short and long term neurodevelopmental complications of neonatal hypoglycemia.
- 11:00 **What Do We Know about the Medications We Prescribe in the NICU?**, *Reese Clark, MD*
Name the top 10 medications used in the NICU; Review how the FDA prioritizes drug studies; Define the importance of clinical studies of drug pharmacokinetics.
- 12:00 **The Evaluation and Management of Neonatal Thrombocytopenia: How Low Should We Go?** *Matthew Saxonhouse, MD*
Develop a current algorithm for managing the neonate with thrombocytopenia; Prepare appropriate management guidelines for treating neonates with severe thrombocytopenia; Develop platelet transfusion guidelines for your NICU.
- 1:00 Adjourn for the Day

**Prior to the conference, an email will be sent out to the participants that have registered inviting them to send in a question for Dr. Clark. Questions will be selected prior to the conference for Dr. Clark to answer during this session.*





Course Agenda Continued

Friday, November 14, 2014

- 7:00 Continental Breakfast
- 7:30 **Pharmacologic Treatment of Hyperbilirubinemia: Potential Therapies for the Future**, *Carol Wagner, MD*
Review of bilirubin metabolism and where pharmacologic agents could affect the metabolic pathway; Review animal and clinical data regarding the use of tin-protoporphyrin in the treatment of hyperbilirubinemia; Review mechanisms of action of tin-protoporphyrin on heme oxygenase, NADPH cytochrome c reductase, and biliverdin reductase activities; Review the evidence for the use of tin-protoporphyrin in everyday practice today and for the future.
- 8:30 **New vs. Old Treatments of Retinopathy of Prematurity: Is it Time to Switch?** *Jennifer Davidson, MD and Richard Saunders, MD*
Relate the history of the treatment of ROP; Describe the treatment protocol for laser for ROP; Describe the treatment protocol for anti-VEGF injections; Discuss the advantages and disadvantages of the two techniques and the future of the treatment of ROP.
- 9:30 Break
- 9:45 **Newborn Screening and the NICU: A Case of Congenital Adrenal Hyperplasia**, *Shelly-Ann Williams, MD*
Describe the steps involved in the State Newborn Screening Process and the role of the healthcare provider; Recognize abnormal screen results and determine the appropriate actions.
- 10:45 **Understanding Pharmacologic Effects on the Pulmonary Vasculature**, *Rita Ryan, MD*
Make better drug choices based on understanding fundamental biologic pathways
- 11:45 Lunch on your own
- 1:00 **BPD-Associated Pulmonary Hypertension**, *Rita Ryan, MD*
Provide better care to patients with BPD-associated pulmonary hypertension
- 2:00 **Is There Evidence for the Use of iNO... Prevention of BPD** *Donald Null, MD*
Discuss what value iNO has in preventing BPD in the preterm infant; Discuss the diagnosis of BPD in the preterm infant; Discuss the multiple factors that participate in causing BPD in the preterm infant.
- 3:00 Break
- 3:15 **Early Intervention Strategies with iNO in the Term and Late Preterm Infant with Hypoxic Respiratory Failure**, *Donald Null, MD*
Identify term and late preterm infants at risk for developing persistent pulmonary hypertension; Develop a treatment strategy for the use of iNO for late preterm and term patients with hypoxic respiratory failure and PPHN; Differentiate diagnosis for late preterm and term infants with HRF and PPHN.
- 4:15 Adjourn until 2015 (November 11-13, 2015)

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 preserved city you can experience tours through historic landmarks, including 18th century homes and plantations, the Battery, museums, 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

The Francis Marion Hotel, historic Charleston's landmark full service hotel, is in the heart of Charleston's historic district. Located at the newly restored Marion Square, the Francis Marion Hotel is only a few blocks from the Charleston Visitor Center, South Carolina Aquarium, restaurants, boutiques, galleries, museums, antique shops and night life. The hotel offers valet parking, spa, concierge, retail shops and the Swamp Fox Restaurant & Bar. Special group rates start at **\$189.00**, plus tax, per night. A limited number of guest rooms have been reserved and are being offered on a first come, first serve basis. The room block will be held until **Sunday, October 12, 2014**; however the room block may be filled prior to this date. In such a case, neither the group rate nor guest room availability can be guaranteed. Therefore, we recommend you make your reservation as soon as possible. Reservations can be made by calling the hotel directly at 843-722-0600 or 877-756-2121 and identifying yourself as being a participant in this meeting, or by following the online directions below.

Directions for online reservations:

- Visit <http://tinyurl.com/k7tpcmv>
- Enter Attendee Code: NEONATAL2014

Parking: Valet parking at the hotel is available at \$21.00 plus tax, per day and can be added to your guest folio. In addition, self-parking is available at \$16.00 per day (cash). Rates are subject to change without notice.

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 Medical Education at (843) 876-1925, or attach a note to your registration.



Registration Form

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Incorporating Evidence-Based Practice into Clinical Decision Making

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By Registering for this conference, you acknowledge and agree to this cancellation policy.

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 _____
Please use the email address you check most regularly to ensure receipt of all CME Credit emails.

☐ 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

	<i>Early Bird Fees</i> <i>Postmarked by 9/30/14</i>	<i>Regular Fees</i> <i>Postmarked after 9/30/14</i>	<i>One Day</i> <i>Only**</i>
Physicians	☐ \$465	☐ \$495	☐ \$250
NP, RN, Healthcare Professionals	☐ \$395	☐ \$450	☐ \$175
Printed Course Syllabus	☐ \$30	☐ \$30	☐ \$30

Total Registration Fee Included: \$ _____

**If you selected *One Day Only*, indicate which day: _____

Payment must accompany registration:

☐ Check Payable to **Medical University of South Carolina**

☐ MasterCard ☐ Visa ☐ 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 made out to "Medical University of South Carolina" or credit card information to Elizabeth Gossen, Office of CME, Medical University of South Carolina, 19 Hagood Avenue, Suite 1004, MSC 754, 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

