

Neonatal Pharmacology Conference 2013: Incorporating Evidence-Based Practice into Clinical Decision Making



November 10–13, 2013
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, 2013.

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, 2013. After Friday, November 7, 2013, 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 11, 2013; however, \$100 will be retained for administrative costs. No refunds will be made after October 11, 2013. 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 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 *20.0 AMA PRA Category 1 Credit(s)*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Nursing Credit: Application for Nursing contact hours has been filed with the Center for Education and Best Practice of MUSC Health. Determination of credits is pending.

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.

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.



Neonatal Pharmacology Conference 2013: Incorporating Evidence-Based Practice into Clinical Decision Making



Course Faculty

Katherine H. Chessman, PharmD, FCCP, BCPS, BCNSP

Professor of Clinical Pharmacy and Outcome Sciences
Vice Chair, Faculty Development
Residency Program Director, Pediatrics
South Carolina College of Pharmacy, MUSC Campus
Clinical Pharmacy Specialist, Pediatrics/Pediatric Surgery
MUSC Children's Hospital
Charleston, South Carolina

Reese Clark, MD

Vice-President and Co-Director
The Center for Research, Education, and Quality
Pediatrix Medical Group

Margaret Conway-Orgel, MSN, NNP-BC

Neonatal Nurse Practitioner
Medical University of South Carolina
Charleston, South Carolina

Evelyn Fulmore, PharmD

Supervisor, Pediatric Pharmacy Services
McLeod Regional Medical Center
Florence, South Carolina

James Kiger, MD

Assistant Professor of Pediatrics
Department of Pediatrics
Medical University of South Carolina
Charleston, South Carolina

Frances Koch, MD

Assistant Professor of Pediatrics
Division of Neonatology
Department of Pediatrics
Medical Director of Neonatal Nurseries
Medical University of South Carolina
Charleston, South Carolina

Martin McCaffrey, MD, CAPT USN (Ret)

Director, Perinatal Quality Collaborative of North Carolina (PQCNC)
Professor of Pediatrics
Division of Neonatal-Perinatal Medicine
Department of Pediatrics
UNC School of Medicine
Chapel Hill, North Carolina

Patrick McNamara, MD

Staff Neonatologist & Associate Scientist
Hospital for Sick Children
Associate Professor of Pediatrics and Physiology
University of Toronto
Toronto, Canada

Bryan Ohnig, MD

Medical Director - NICU
GHS Professor of Clinical Pediatrics
Greenville Children's Hospital
Greenville, South Carolina

Julie Ross, MD

Assistant Professor of Neonatology
Department of Pediatrics
Medical University of South Carolina
Charleston, South Carolina

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
Charleston, South Carolina

W. Michael Southgate, MD

Professor of Pediatrics
Division of Neonatal-Perinatal Medicine
Residency Program Director
Vice Chair of Education
Department of Pediatrics
Medical University of South Carolina
Charleston, South Carolina

Gautham Suresh, MBBS, MD, MS

Associate Professor of Pediatrics and Community & Family Medicine,
The Dartmouth Institute for Health Policy and Clinical Practice,
Geisel School of Medicine at Dartmouth, Hanover, NH
Medical Director, Intensive Care Nursery,
Program Director, Neonatal-Perinatal Medicine Fellowship Program,
Dartmouth-Hitchcock Medical Center
Lebanon, New Hampshire

Sarah N. Taylor, MD, MSCR

Associate Professor
Department of Pediatrics
Medical University of South Carolina
Charleston, South Carolina

Sally A. Webb, MD

Associate Professor of Pediatrics
Division Director, Pediatric Critical Care Medicine
Medical University of South Carolina
Charleston, South Carolina



Neonatal Pharmacology Conference 2013: Incorporating Evidence-Based Practice into Clinical Decision Making

Course Agenda *At the end of each presentation, learners should be better able to achieve the respective objectives stated.*

Monday, November 11, 2013

- 6:30 Registration
7:00 Breakfast/Exhibits Open
7:25 Welcome
- 7:30 **Refeeding Syndrome & Other Physiologic Manifestations in the Intrauterine Growth Restricted Preterm Neonate**, *Julie Ross, MD*
Define refeeding syndrome and related physiologic disturbances in the IUGR neonate; Recognize patients at highest risk for refeeding syndrome; Apply strategies to monitor for and manage electrolyte disturbances associated with refeeding syndrome.
- 8:30 **The Many Faces of Preterm Infant Gastric-Esophageal Reflux Presence, Diagnosis, and Treatment**, *Sarah Taylor, MD*
Describe the physiology of preterm infant gastro-esophageal motility and determine evidence-based methods to diagnose and treat disease.
- 9:30 Break/Exhibits Open
- 10:00 **Infant Formula Adjustments to Achieve Baby-Friendly Status**, *Sarah Taylor, MD*
Explain the evidence behind the World Health Organization's Baby-Friendly Steps and infant formula quality improvement options associated with Baby-Friendly status.
- 11:00 **Medications and Lactation: Principles for Safe Practice for the Clinician**, *Evelyn Fulmore, PharmD*
Describe basic physiology of lactation; Review the evidence of galactagogues in lactation induction; Examine the factors to consider when selecting medications in lactation; Identify common pitfalls clinicians encounter when interpreting lactation information; Demonstrate a working knowledge of the use of lactation support tools/resources.
- 12:00 Lunch on your own
- 1:15 **Enteral Nutrition: The Evidence for Feeding During Pressor Support, Pharmacologic Treatment for PDA, and Stage 2 NEC**, *Fran Koch, MD*
Discuss the current literature supporting MEN during medical situations in which feeds have been commonly held; Identify those patients for MEN during pressor or indocin use; Recognize why it may be more harmful to prolong npo status for stage 2 NEC treatment vs earlier introduction of MEN.
- 2:15 **Spinning the Antibiotic Wheel in the NICU**, *Marty McCaffrey, MD*
Define central line associated blood stream infection in NICU patients (CLABSI); Identify critical pathogenic organisms in CLABSI; Describe diagnostic approaches to CLABSI; Identify and implement treatment strategies for infants with CLABSI.
- 3:15 Break/Exhibits Open
- 3:45 **What Could Be Bad About A Little Antibiotic?**, *Marty McCaffrey, MD*
Identify evolving resistance patterns and potential risks associated with antibiotic therapy; Determine which tests may guide initiation of antibiotic treatment.
- 4:45 **Intrauterine Drug Exposure & the Management of Neonatal Abstinence Syndrome (NAS)**, *Evelyn Fulmore, PharmD*
Discuss the impact of poly-drug exposure and NAS; Compare pharmacokinetic profiles of various drugs associated with NAS; Describe pharmacologic therapies used in the treatment of NAS; Examine the evidence of poly-drug exposure on short and long-term developmental outcomes.
- 5:45 Adjourn for the Day

Tuesday, November 12, 2013

- 7:00 Breakfast/Exhibits Open
- 7:30 **Environmental Exposures During Pregnancy: Fetal, Neonatal and Lifelong Consequences**, *Jim Kiger, MD*
Realize the scope of environmental exposures to substances such as BPA and phthalates; Summarize the proposed mechanisms of developmental disruption; Recognize the areas of future investigation into these environmental exposures.
- 8:30 **Controversies in the Management of the Patent Ductus Arteriosus**, *Patrick McNamara, MD*
Discuss the principles of evaluation of hemodynamic significance of a PDA; Recognize the Post-Ligation cardiac syndrome and the role of afterload reducing agents in preventative care.
- 9:30 Break/Exhibits Open
- 10:00 **Cardiovascular Decision Making in the NICU - Beyond Blood Pressure**, *Patrick McNamara, MD*
Recall the determinants of a healthy cardiovascular system in neonates; Describe a rationalized approach to intervention based on disease, physiology and pharmacology.
- 11:00 **Maternal Drugs (ANS, SSRI, Antibiotics) and Neonatal Outcomes**, *Reese Clark, MD*
Name 3 new drugs to which moms of infants admitted for NICU are commonly exposed; Discuss the potential adverse effects of exposure of the fetus to these drugs; Review how changes in care can be improved and adverse events reduced.
- 12:00 **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.
- 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

Wednesday, November 13, 2013

- 7:00 Breakfast
- 7:30 **Neonatal Pharmacodynamics & Pharmacokinetics: The Ins & Outs and Hows & Whys**, *Bryan Ohning, MD*
Recite the basic principles of the pharmacology of drugs and why this is important; Define what a therapeutic range entails and how to attain this goal; Explain the basics of drug absorption into the body and how it gets to the site of action; Describe how the body eliminates the drug or renders it ineffective.
- 8:30 **The Negative Effects of Our Most Commonly Used Drug, Oxygen!**, *Rita Ryan, MD*
Consider the negative effects and long term outcomes of exposure to hyperoxia.
- 9:30 Break
- 9:45 **BPD Treatment: What Are We Doing... And Why?**
Bryan Ohning, MD
Summarize the range of treatments utilized to treat bronchopulmonary dysplasia in the neonatal patient; Recall the evidence on the efficacy of these treatments in attaining a clinical effect; Recognize the untoward effects of treatment drugs in the BPD patient.
- 10:45 **Health Information Technology for Medication Safety**, *Gautham Suresh, MD*
Identify methods by which health information technology (including computerized physician order entry systems) can enhance medication safety; Realize new types of medication errors and medication safety hazards that are created by health information technology; Use computerized physician order entry and other features of the electronic medical record to optimize medication safety.
- 11:45 Lunch on your own
- 1:00 **Understanding and Preventing Medication Errors**, *Gautham Suresh, MD & Mike Southgate, MD*
Identify the frequency and types of medication errors in neonatal intensive care; Explain the causes and contributory factors to medication errors in neonatal intensive care; Implement preventive strategies to reduce medication errors in neonatal intensive care.
- 2:00 **Ethical Issues in the Pharmacologic Management of Pain and Sedation at the End of Life**, *Margaret Conway-Orgel, NNP and Sally Webb, MD*
Describe the history of palliative sedation and pain control in terminally ill neonates; Distinguish between the doctrine of double effect, addiction and euthanasia; Identify pharmacokinetic characteristics of ideal drug regimens in palliative care; Apply knowledge of ethics and pain control to specific patient situations in the neonatal intensive care unit.
- 3:00 Break
- 3:15 **Prescribing PN During Product Shortages**, *Kathy Chessman, PharmD*
Explain the reasons for product shortages; Describe the potential impact on patient safety; Recognize the process by which scarce products are allocated; Devise a monitoring plan for a patient receiving PN without all the usual ingredients; Find up-to-date, expert recommendations regarding PN-related product shortages.
- 4:15 Evaluations/Adjourn until 2014

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 **\$169.00**, 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 **Friday, October 11, 2013**; 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/cc529I2>
- Enter Attendee Code: NEONATAL

Parking: Valet parking at the hotel is available at \$19.00 plus tax, per day and can be added to your guest folio. In addition, self-parking is available at \$14.00 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 (866) 637-6835, or attach a note to your registration.



Registration Form

Neonatal Pharmacology Conference 2013

Incorporating Evidence-Based Practice into Clinical Decision Making

November 10–13, 2013

Francis Marion Hotel • Charleston, South Carolina

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

	<i>Early Bird Fees</i> <i>Postmarked by 9/30/13</i>	<i>Regular Fees</i> <i>Postmarked after 9/30/13</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 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

