News of The Academy of Neonatal Nursing

Shirley J. Brott, RN, BSN, MEd
Editor

The Foundation for Neonatal Research and Education Seeks Donations

The Foundation for Neonatal Research and Education (FNRE), supported by The Academy of Neonatal Nursing, is a nonprofit organization that offers grants and scholarships for neonatal nurses to advance their practice through research, evaluation of patient outcomes, and education. FNRE is dependent on support from donations and welcomes contributions from individuals, families, and corporations. Donations are also accepted to memorial funds. Please think of the FNRE when considering contributions this holiday season. More information and contribution forms can be found at www.inurse.com/fnre. Thank you!

The 6th National Advanced Practice Neonatal Nurses Conference

“Building the Evidence: Supporting the Practice”

Mark your calendar and join us at the Westin Boston Waterfront

April 3–5, 2009

Boston, Massachusetts, is the place to be for the 6th National Advanced Practice Neonatal Nurses Conference! A great lineup is in store with topics including “The State of Neonatal Science,” “Human Milk Fortifiers,” and “Managing Pain in the NICU.”

The Westin Boston Waterfront, connected to the Boston Convention and Exhibit Center, is just three miles from Logan International Airport. In the evening, hop on the “T,” America’s first subway, or ride a water taxi to visit Back Bay, one of Boston’s most beautiful and walkable areas. Back Bay is centered on Newbury and Boylston Streets. It is home to shops, sidewalk cafes, art galleries, and nightlife. Stroll the Freedom Trail, a 2.5-mile red brick walking trail that leads you to 16 nationally significant historic sites. (Take a virtual tour of the trail by going to www.thefreedomtrail.org.) The hotel is a short walk from great restaurants serving lobster and from Quincy Market and Faneuil Hall. For more information about the 6th National Advanced Practice Neonatal Nurses Conference, visit: www.academyonline.org.

2008 Academy of Neonatal Nursing™ Conference Scholarship Award

Congratulations to Nagaina O. Simmons, RN, BSN, Clinical IV, of Lorton, Virginia, for receiving ANN’s Conference Scholarship Award. Nagaina (“Nikki”) has been a neonatal nurse for the past five years and works at the Virginia Hospital Center in Arlington, Virginia. Nikki is very active in educating new nurses and parents and has a true passion for lifelong learning. She is an active member of her NICU’s Clinical Practice Committee and plans to share her newly acquired information from this year’s National Neonatal Nurses Meeting in Washington, DC, with her committee and colleagues through inservice education, formal presentations, and discussion groups. “Through this valuable education, I intend to foster improved patient care, collaboration among staff and families, and quality nursing practice on my unit.”

For information regarding scholarships and grants offered by ANN, please go to www.academyonline.org.
Joint Committee on Infant Hearing 2007 Position Statement

The Joint Committee on Infant Hearing (JCIH) recently released its 2007 position statement, "Principles and Guidelines for Early Hearing Detection and Intervention Programs." The statement encourages the screening of all infants for hearing loss before one month of age, preferably before discharge from the hospital. Screening for hearing loss has increased from 38 percent to 95 percent since 2000, when the JCIH recommended all infants be screened; however, almost half do not receive follow-up care. Infants who do not pass the initial hearing screening require further evaluation. This report, published in the July issue of *Pediatrics* (2008, 122, e266–e276), comes after a systematic review of Medline and Cochrane databases by the U.S. Preventative Services Task Force.

The JCIH was established in 1989 by the American Speech-Language-Hearing Association, the (then) American Academy of Ophthalmology and Otolaryngology, and the American Association of Pediatrics. The committee now includes representatives from the American Academy of Pediatrics, the American Academy of Audiology, the Council on Education of the Deaf, the American Academy of Otolaryngology and Head and Neck Surgery, the American Speech-Language-Hearing Association, and directors of speech and hearing programs in state health and welfare agencies. For more information about the JCIH and to view the position statement, go to www.jcih.org.

Neonates in the NICU Endure Unrelieved Pain

According to a study in the *Journal of the American Medical Association* [2008, 300(1), pp. 60–70], during the first 14 days after admission to the NICU, each neonate undergoes an average of 16 painful or stressful procedures per day. Only 20 percent receive pain relief from pharmacologic analgesia such as opioids or topical drugs or nonpharmacologic analgesia such as allowing nonnutritive sucking or offering sweet solutions. Six of the 44 identified painful procedures in the study are commonly used procedures such as nasal aspiration, tracheal aspiration, heelstick, adhesive removal, gastric tube insertion, and venipuncture. Neonates are more sensitive to pain than older children or adults and according to the authors of the study, there is concern that long periods of unrelieved pain may influence the neonates pain processing ability and development.

EPO: Friend or Foe?

Erythropoiesis-stimulating agents, also known as ESAs, have shown to protect against hypoxic-ischemic and inflammatory injuries in laboratory and clinical trials with animals and adults. A recent study of the use of EPO in very premature infants from the University Hospital in Zurich, Switzerland, however, concluded that preterm infants (24–31 weeks gestation) who were given early administration of high-dose recombinant human EPO fared the same as the placebo group in the study. Because no adverse effect was immediately identified, the authors now plan for a large multihospital trial (*Pediatrics*, 2008, 122[2], 375–382).

The *Journal of Clinical Investigation* (2008, 118[2], 526–533) published a study earlier this year, "Erythropoietin Deficiency Decreases Vascular Stability in Mice," which raised concern about EPO increasing or worsening retinopathy in premature infants. The authors caution its use is a "double-edged sword."

On July 15, 2008, the U.S. Food and Drug Administration ordered the manufacturers of erythropoietin-stimulating agents, currently approved for adults and marketed as Procrit, EpoGEN, and Aranesp, to include in the warning label dangerous risks associated with its use. These risks include thrombovascular events, tumor progression, and shortened survival time (fda.gov/cder/drug/infopage/RHE/default.htm).

New Fragile X Newborn Screening

The Academy of Neonatal Nursing reported in the July 2007 issue of the *Academy Connection* the development of a screening test to identify carriers of the gene mutations causing Fragile X syndrome, the most common inherited form of mental retardation. A large, $2.3 million pilot study by researchers from the University of California, Davis, Medical Investigation of Neurodevelopmental Disorders (M.I.N.D) Institute is now under way to provide newborn screening for up to 30,000 infants over the next five years. Families will know shortly after birth if the baby has the disorder, information that is critical for earlier management and treatment. "Identification of the condition in early infancy will allow families to seek crucial early intervention services for their children, which we hope will mitigate the disabling effects of the disorder," said lead study investigator Flora Tassone, PhD. The M.I.N.D. Institute established the Fragile X Research and Treatment Center in 2001. It is funded by the National Institute for Child Health and Development in collaboration with the University of Washington, Seattle. For more information, go to: www.ucdmc.ucdavis.edu/mindinstitute/research/fxrct.html.

The Centers for Disease Control Update

**Diabetes and Birth Defects, HIV Rates in the U.S.**

- According to a study done by the Centers for Disease Control and Prevention (CDC) and published in the *American Journal of Obstetrics and Gynecology*, women who have diabetes before they become pregnant are three to four times more likely to have a child with one or more birth defects than
a mother who is not diabetic. Birth defects from diabetes occur in the heart, spine, brain, kidney, and gastrointestinal system. Oral clefts and limb defects are also seen. This study highlights the importance of preconception health care and early prenatal care to prevent birth defects and reduce the mothers’ health risks. In the U.S., gestational diabetes has been on the rise, affecting about seven percent of all pregnancies (from the CDC press release, July 30, 2008, www.cdc.gov/media/pressrel/2008/080730.htm).

- The CDC has a long-standing recommendation that pregnant women be routinely tested for HIV. More than half the population of the U.S. has not been tested for HIV, and the CDC estimates 250,000 people in the U.S. are living with HIV. Many are not aware of it until the disease becomes advanced. The findings underscore the importance of HIV screening as part of routine prenatal checkups. The National HIV and STD Testing Resources, a service of the CDC, offers a list of free testing sites as well as links to resources at hivtest.org ("Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings," cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm).

- Extremely low birth weight neonates had less morbidity and maintained appropriate size for weight at 36 weeks with three early management practice changes. This is the finding of a historical cohort study of infants born at the University of Texas Medical Branch between July 2004 and January 2005. The three early management practice changes included surfactant at delivery with immediate extubation to nasal continuous positive airway pressure, decreased oxygen exposure, and early parenteral amino acids. The study was published in the Journal of Perinatology (2008, 28[5], 347–353).

- A review of 88,774 live births via electronic and risk management records from the Intermountain Healthcare hospitals in Utah identified 14 in-house newborn falls in a three-year period. Seven falls occurred when a parent fell asleep while holding the infant. Six of these falls occurred between 1:30 AM and 9:00 AM. Four falls occurred in the delivery room, two in a hallway while a nurse was wheeling a bassinette, and one from an infant swing. According to the authors of the study, if the incidence of these falls is representative, then 600–700 such falls occur annually in the U.S. (Pediatrics, August 2008, 122[2], e277–e280).