Course Director: Martha Naylor, MD  
Location: Pediatrics – Neonatology, Vidant Neonatal  
Duration: 4 weeks

**Course Goal(s)**  
Through an expansive exposure to neonatal intensive care the medical student will learn and/or reinforce many of the basic principles of pathophysiology and patient care. This is an excellent opportunity to consolidate the basics of assessment and treatment of respiratory diseases, fluids and electrolytes, nutrition, and principles of infectious disease. The student will also learn about disease processes unique to the newborn such as: perinatal depression, respiratory distress syndrome, congenital heart disease, and necrotizing enterocolitis. The student will also develop skills in collaborating with consultant staff and communicating with parents and families of critically ill infants.

**Educational Objectives**  
The student will become familiar with the principles and practice of:

1. Neonatal resuscitation
2. Evaluation and treatment of respiratory diseases of the newborn
4. Management of fluid and electrolyte problems
5. Assessment of nutritional needs, and provision of both enteral and parenteral nutrition
6. Treatment of neonatal sepsis and other infections
7. Family communication and support

The student will have opportunity to participate with a variety of technical procedures: endotracheal intubation, umbilical artery and vein cannulation, radial artery sticks, lumbar puncture, and chest aspirations/chest tube insertions. The student will also attend high-risk deliveries as a member of a newborn resuscitation team. Simulations in intubations and umbilical line placement are part of the rotation.

**Course Readings**  
Suggested reading Gomella Neonatology and additional readings to be provided

**Course Activities/Experience**  
The medical student will function as an acting intern under the direct supervision of a neonatology fellow and a neonatology attending. The AI will be assigned his/her own patient load of 1-4 patients. In addition, the student will attend high risk deliveries to gain experience in evaluating infants in the delivery room, and in resuscitation skills. The student will also learn procedures as available. The student will be expected to work an intern’s schedule. The student will work 6 days during the week. The student will be provided self-learning programs on neonatal resuscitation and stabilization. Radiology conference attendance is expected. 3 teaching conferences are held each week and grand rounds is held on Wednesday.

**On Call Requirements**  
none

**Student Performance & Assessment**  
Clinical Evaluation (knowledge, skills, case write-ups)  
Participation

**Other Info**  
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