

NEONATAL INTENSIVE CARE UNIT

Residents rotate through the neonatal intensive care unit for three months during residency. Interns will spend two one-month blocks in the neonatal intensive care unit; PL-2's will have a one-month block. In-house call is required every fourth night. Residents may elect to spend a month in the ICN as a selective during their PL-3 year. In house call for PL-3s is NOT required.

Residents are required to attend daily didactic lectures and teaching rounds.

Residents are also expected to respond to delivery room codes—pink (delivery requiring intern only), white (delivery requiring intern and residents), and blue (delivery requiring intern, resident and fellow/attending).

During this rotation, residents are excused from continuity clinic.

Goals, Objectives and Resident Responsibilities of the Neonatal Intensive Care Unit Experience:

Patient Care: Residents are expected to provide patient care that is compassionate, appropriate and effective for the promotion of health, prevention of illness, treatment of disease and at the end of life:

- PL-1's gather accurate, essential information from all sources, including medical interviews, physical examinations, medical records and diagnostic/therapeutic procedures
- PL-1's develop informed recommendations about preventive, diagnostic and therapeutic options and interventions that are based on clinical judgment, scientific evidence, and patient preference, aided through this process by the PL-2.
- PL-2's develop, negotiate and implement effective patient management plans and instruct/guide the first year resident through this decision making process

Medical Knowledge: Residents are expected to demonstrate knowledge of established and evolving biomedical, clinical and social sciences, and the application of their knowledge to patient care and the education of others. Residents will apply an open-minded, analytical approach to acquiring new knowledge, access and critically evaluate current medical information and scientific evidence and apply this knowledge to clinical problem-solving, clinical decision-making, and critical thinking. In the ICN, the PL-1 and 2 residents will

- Learn to care for critically ill term and preterm newborns
- in a supervised setting
- Develop an understanding of the equipment, procedures and medications available to
- monitor and support critically ill newborns
- Learn to evaluate and resuscitate newborns in the delivery room
- Learn to evaluate critically ill and unstable newborns
- Learn the appropriate use of the devices and machines for maintaining an airway and
- Sustain acceptable ventilation in ill newborns
- Learn the management of fluid and electrolytes in newborns
- Learn the appropriate ongoing monitoring for common complications of preterm infants including eye disease, intracranial bleeds, hearing and vision problems

- Become familiar with the following topics during their time in the Neonatal Intensive care setting through experience didactic sessions or reading:

- Bilirubin metabolism and hyperbilirubinemia
- Congenital and perinatal infections
- Diagnosis and management of neonatal seizures
- Intraventricular hemorrhage
- Neonatal glucose metabolism
- Neonatal resuscitation and intubation
- Respiratory distress syndrome
- Ventilators and management of respiratory problems

- Procedures to be reviewed and learned:

- Umbilical lines
- Endotracheal intubation
- Set up, mechanical ventilation
- Bag mask ventilation
- Arterial puncture
- Peripheral venous line
- Basic cardiac life support
- Exchange transfusion
- Placement, chest tube
- Placement, nasogastric tube
- Venipuncture
- Lumbar puncture

Practice-Based Learning and Improvement: All residents are expected to be able to use scientific evidence and methods to investigate, evaluate, and improve patient care practices, and

- Identify areas for improvement and implement strategies to enhance knowledge, skills, attitudes and processes of care
- Analyze and evaluate practice experiences and implement strategies to continually improve the quality of patient practice
- Develop and maintain a willingness to learn from errors and use errors to improve the system or processes of care
- Use information technology or other available methodologies to access and manage information, support patient care decisions and enhance both patient and physician education

Interpersonal and Communication Skills: PL-1 residents are expected to demonstrate interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, families, and other members of health care teams, and

- Provide effective and professional consultation to other physicians and health care professionals and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues

- Learn to care for newborns as part of a multidisciplinary team including pediatricians, obstetricians, surgeons, nurses, nutritionists, physical therapists and social workers
- Use effective listening, nonverbal, questioning, and narrative skills to communicate with patients and families
- Interact with consultants in a respectful, appropriate manner
- Maintain comprehensive, timely, and legible medical records
- Complete evaluations of the attending, staff and rotation

Senior residents are expected to demonstrate interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, families, and other members of health care teams, and

- Learn to supervise and teach interns in an acute care setting
- Provide effective and professional consultation to other physicians and health care professionals and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues
- Learn to care for newborns as part of a multidisciplinary team including pediatricians, obstetricians, surgeons, nurses, nutritionists, physical therapists and social workers
- Use effective listening, nonverbal, questioning, and narrative skills to communicate with patients and families
- Interact with consultants in a respectful, appropriate manner
- Maintain comprehensive, timely, and legible medical records
- Complete evaluations of the attending, staff and rotation

Professionalism: All residents are expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, an understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession and society, and

- Demonstrate respect, compassion, integrity, and altruism in relationships with patients, families, and colleagues
- Demonstrate sensitivity and responsiveness to the gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behaviors and disabilities of patients and professional colleagues
- Adhere to principles of confidentiality, scientific/academic integrity, and informed consent
- Recognize and identify deficiencies in peer performance

Systems-Based Practice: Residents are expected to demonstrate both an understanding of the contexts and systems in which health care is provided, and the ability to apply this knowledge to improve and optimize health care, and

- Understand, access and utilize the resources, providers and systems necessary to provide optimal care
- Understand the limitations and opportunities inherent in various practice types and delivery systems, and develop strategies to optimize care for the individual patient
- Learn appropriate discharge planning so that families have necessary equipment, help and medical knowledge to care for the newborns at home, and to insure that the infants
- have appropriate medical follow-up scheduled

- Apply evidence-based, cost-conscious strategies to prevention, diagnosis and disease management
- Collaborate with other members of the health care team to assist patients in dealing effectively with complex systems and to improve systematic processes of care