

Neonatal-Perinatal Medicine Rotation Description

Fellowship in Neonatal-Perinatal Medicine

Description/Goals:

The training program in neonatal-perinatal medicine at the Medical University of South Carolina is a three-year program during which the subspecialty resident will gain competency in the management of neonates with various disorders, medical and surgical, requiring neonatal intensive care. Additionally, the trainee will develop an understanding of the pathophysiological basis of common clinical problems encountered in neonatal-perinatal medicine and develop the scientific and analytical foundations required to make clinical decisions which are evidence-based and informed. Finally, the trainee will develop the foundation of scholarship upon which future clinical and scientific growth can be based

To address these goals, the training program provides education and experience in the clinical management of sick and recovering newborns, involvement in discussions concerning therapeutic approaches to the high-risk pregnancy, basic science and clinical research, instruction in statistics and epidemiology, and "hands on" academic experience in a supervised setting.

Specific Clinical Objectives:

The objectives of the program are listed below in general terms. Achievement of these objectives will occur over several years in a progression as outlined in detailed descriptions of rotations, conferences and other educational activities.

1. First Year
 - a. Describe the developmental physiology of the fetus and neonate and pathophysiology of common neonatal diseases and conditions
 - b. Participate as a member in a team of providers in the stabilization of neonates in the delivery room and in a nursery setting
 - c. Demonstrate the skills required to triage admissions to appropriate locations, triage requests for incoming and outgoing transports, and direct a remote team of providers during the stabilization and transport of neonates from referring centers to the NICU.
 - d. Participate as a member in a team of providers in the management of premature and term infants who present with common neonatal problems
 - e. Demonstrate competence in common procedures in neonatal-perinatal medicine
 - f. Begin to assume supervisory and educational responsibilities among a team of providers of neonatal care
 - g. Demonstrate professional relationships with team members and families
 - h. Demonstrate the ability to communicate effectively and compassionately
 - i. Demonstrate the ability to assess literature and apply knowledge to practice
 - j. Know and communicate to prospective parents the likelihood of complications of obstetrical and neonatal conditions commonly encountered in neonatal-perinatal medicine

2. Second Year
 - a. Further describe the developmental physiology of the fetus and neonate and the pathophysiology specific neonatal disease process and conditions
 - b. Apply knowledge of physiology and pathophysiology by assuming a role in the education of residents, students, and nurse practitioners
 - c. Direct, under limited supervision, the resuscitation and stabilization of neonates in the delivery room and a nursery setting
 - d. Direct the stabilization, evaluation and care of patients requiring transport from referring facilities.
 - e. Under limited supervision, direct the triage of patients during transport and upon admission to the nursery system
 - f. Begin to assume a leadership role among a team of providers in the management of premature and term neonates who present with common neonatal problems
 - g. Manage, under supervision, patients who require extracorporeal life support
 - h. Demonstrate professional relationships with team members and families
 - i. Demonstrate the ability to communicate effectively and compassionately
 - j. Demonstrate the ability to assess literature and apply knowledge to practice
3. Third Year
 - a. Continue to expand one's ability to describe and teach developmental physiology of the fetus and neonate and the pathophysiology of diseases commonly encountered in neonatal-perinatal medicine
 - b. Direct, under limited supervision, the stabilization, evaluation and care of neonates requiring intensive care for medical or surgical conditions.
 - c. Demonstrate the ability to lead a team of providers in the care of neonates requiring intensive care for medical or surgical conditions
 - d. Demonstrate competence in most procedures associated with neonatal-perinatal medicine
 - e. Demonstrate professional relationships with team members and families
 - f. Demonstrate the ability to communicate effectively and compassionately
 - g. Demonstrate the ability to assess literature and apply knowledge to practice
4. All Years
 - a. Develop and demonstrate the skills needed to effectively involve parents in decision making and care of their infants
 - b. Advise prospective parents on the benefits of antenatal interventions for common perinatal conditions and the range of expected outcomes for such conditions.
 - c. Demonstrate the ability to acquire knowledge from various sources and integrate basic biomedical knowledge with clinical evidence in the care of infants requiring neonatal intensive care
 - d. Effectively exchange information among team members, including consultants and referring or follow-up providers, and families of infants requiring neonatal intensive care.
 - e. Demonstrate the skills needed to assess and improve one's own performance

- f. Develop and demonstrate an understanding the systems involved in medical care, the costs associated with tests and therapies, and the evaluation of tests and therapies.
5. Scholarly Activities: over the course of training the fellow will:
 - a. Demonstrate the ability to develop a clinical or investigational question.
 - b. Demonstrate the ability to design a research plan or scholarly approach to addressing the question and gather appropriate approvals.
 - c. Demonstrate the ability to gather or develop necessary information.
 - d. Demonstrate the ability to interpret data and formulate conclusions.
 - e. Demonstrate the ability to disseminate scientific knowledge.

Evaluation:

Progress will be evaluated with several tools. Progress through each rotation or elective will be assessed at completion by the attending(s) supervising that experience. Additionally, mid-rotation evaluations are encouraged in general and required if concerns about performance exist. In addition to the specific evaluations of each rotation, fellows will be evaluated on six-month intervals with regard to professionalism and performance on call.

Performance on call will be evaluated by all members of the division's clinical staff. Professionalism will be evaluated by 360 degree evaluations performed by divisional clinical and research staff, secretarial and other support personnel in the division of neonatology and in the nursery, selected nurses and nurse practitioners, and others nursery personnel. Fellows will also be evaluated by each other (peer evaluation). Finally, fellows will be evaluated by select families of infants they provided care for.

Evaluations will be reviewed officially semiannually as part of each fellow's 6 month performance review. Additionally, most evaluations are completed electronically and are available on line as they are completed. In the event a fellow is not meeting expectations regarding competency, a formal remediation plan will be developed.

Fellows will also have the opportunity to evaluate attendings and rotations as well as the program overall. Anonymity in a situation where there are few fellows performing staff evaluations will be preserved by using blinding techniques for electronic summaries of fellow evaluations of staff and by the use of three-year rolling summaries of performance.

Advancement:

Advancement within the training program is based on achievement of competencies as described above. Assessment is based on competency-based evaluations, professionalism evaluations, and 360-degree evaluations. Decisions regarding advancement will be carried out in accord with GME policies.

Supervision:

Direct supervision will always be available to trainees. Each rotation will be supervised by an attending physician who is ultimately responsible for patient care as well as the supervision of fellows on service. Supervision will vary from direct "bedside" supervision to advisory supervision by phone, depending on the year of training and the skills of the

individual fellow. In all cases, should the need for direct supervision arise, as determined by the situation, the attending, or the fellow, a designated supervising attending physician will be available within a reasonable time.

Director:

David J. Annibale, M.D.