**Title of Program:** Pediatric Infectious Disease Research: Cytomegalovirus Infection

**Dept/Center/Lab:** Department of Pediatrics, Division of Pediatric Infectious Disease

**Principal Mentor:** Amina Ahmed, MD

**Other Faculty:** Anita Hoyt, Research Coordinator
Jennifer West, Research Coordinator

**Summary Description:**

The Center for Pediatric Research at Carolinas Medical Center seeks motivated and dedicated students to be involved in ongoing and novel pediatric infectious disease research efforts. Students will serve as part of a motivated and successful research team composed of postgraduate students, research coordinators, and investigators. The main focus of ongoing research is congenital cytomegalovirus (CMV) infection. The infection affects 1 of every 100 newborns, and 10% of these newborns may develop sensorineural hearing loss as a complication of the infection. In conjunction with other national and sites, the Center for Pediatric Research is identifying newborns with congenital CMV infection and enrolling them in a study to identify any hearing loss that may occur in the first three years of life. We are also involved in a treatment study for congenital cytomegalovirus infection using valganciclovir, an antiviral recently approved for use in children in an effort to determine if treatment will reduce the frequency or degree of hearing loss associated with this infection.

**Expectations**

The following are required for successful completion of the program:

- Compliance with the policies and procedures of the Carolinas Healthcare System and the Department of Pediatrics
- Completion of didactic sessions and training directed towards the protection of human subjects in clinical research
- Completion of assigned or self-directed reading relevant to clinical research or research-related topics
- Conduct of all activities related to the studies, including recruitment of patients, requisition of consent, preparation of case report forms, collection, collation, and analysis of data, and the collection, processing and shipment of specimens
- Dedication of a minimum of 30 hours per week to research efforts
- Presentation of research findings at the completion of the program

**Objectives**

Upon completion of the program, students should expect to be able to:

1. Demonstrate a working knowledge of the basic principles of the conduct and design of clinical research
2. Demonstrate knowledge about the epidemiology and clinical presentation of congenital cytomegalovirus infection and its impact on the health of children
3. Recognize challenges that are specific to clinical research in the pediatric population.
4. Possess a set of skills that will allow him/her to function as an active and contributing member of a research team in future endeavors