ALLERGY AND IMMUNOLOGY ROTATION

Faculty:

Ricardo Sorensen, M.D.
Cleveland Moore, M.D.
Augusto Ochoa, M.D.

Goal: Develop competency in pediatric allergy and immunology.

Learning Objectives:

1. Describe in general terms the normal development and pathophysiology of the immune system including the cellular, humoral, phagocytic, and complement based systems.

2. Describe findings on clinical history or exam which suggest allergy or immunologic dysfunction.

3. Recognize, evaluate, and manage allergic and immunologic disorders of infancy, childhood and adolescence.

4. Understand the office evaluation and management of patients with allergic and immunologic complaints.

Curriculum Content:

1. Allergic problems- recognize, diagnose, and describe the pathophysiology of, and manage appropriately these conditions:
   a. Allergic rhinitis
   b. Allergic conjunctivitis
   c. Atopic dermatitis
   d. Asthma, moderate to severe
   e. Urticaria and angioedema
   f. Food allergies
   g. Common drug allergies
   h. Insect sting allergy
   i. Anaphylaxis

2. Immunologic problems – understand the role of the general pediatrician in the assessment and management of immunodeficiency:
   a. Define the various types of immunodeficiency diseases by pathophysiology (e.g., humoral and cellular immunity, complement, phagocytes) and by etiology (e.g., genetic, infectious, post chemotherapy.)
   b. List symptoms and signs compatible with immunodeficiency including HIV/AIDS.
   c. Discuss the approaches to management of children with immunodeficiency.
   d. Demonstrate knowledge of immunization requirements for children with immunodeficiency.

Skills Acquisition

1. Interpreting and recognizing the importance or significance of laboratory results:
   a. Screening tests for immunodeficiency
   b. Immunoglobulin and complement determinations
   c. Immunoelectrophoresis
   d. Neutrophil function tests
e. Delayed hypersensitivity  
f. Allergy skin testing  
g. Serology (RAST)  
h. Pulmonary function tests  
i. Nasal smear for eosinophils  
j. Total peripheral eosinophil count  
k. IGE levels

2. Identify appropriate reference materials for keeping up-to-date in this area.

Reading Materials:

1. Housestaff binder for allergy/immunology  
2. Articles from the Division files

Rotation Requirements:

1. Residents will attend allergy and immunology clinics.

2. Residents will work up patients, perform physical examinations on them, and devise an appropriate plan for laboratory evaluation and management. This will be discussed with the attending.

3. Residents will be provided with a series of didactic lectures which cover the basic and clinical aspects of immunology and allergy.

4. Residents will spend time in the clinical immunology laboratory and become familiar with all relevant tests.

5. Residents will work up and manage all inpatient admission to the service and consult with the attending on management.

6. Residents will be encouraged to attend weekly seminars of the Division and research and present topics of interest.

7. Residents will be exposed to the research efforts of the Division and will be encouraged to develop a project of their own if interested.