Course:  
**Pediatric Allergy and Immunology** MS4

Department………………………………. Pediatrics
Selective………………………………… Allergy & Immunology
Faculty Coordinator…………………... J. Andrew Bird, M.D.
Participating Faculty………………….. Maite de la Morena, M.D.
Indulekha Warrier, M.D.
William Neaville, M.D.

Hospital………………………………... Children's Medical Center
Periods Offered…………………………... All – Except AAAAI meeting (Feb/March) and July, please check with office

Length……………………………………... 4 Weeks
Max. No. of Students…………………… 1
Fax…………………………………………. (214) 456-8317
First Day Contact……………………… Dr. de la Morena – (214) 456-5161
First Day Time…………………………… 8:00 a.m.
First Day Place…………………………... CMC, Pavilion-5th Floor
Allergy & Immunology Clinic

Prerequisites………………………….. 3rd Year Pediatric Clerkship

I. **Course Objectives:**
This course will provide an in-depth exposure to pediatric Allergy and Immunology via clinical experiences, participation in one-on-one discussions between student and faculty, attending structured didactic sessions/conferences, and self-study with prepared curriculum material.

II. **Course Goals and Objectives:**  
*(based on ACGME competencies for resident education and modified for medical student education)*

A. **Patient Care**
Students, together with supervising faculty must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

**Objectives:**
By the end of the rotation students should be able to:

- Gather an essential and accurate patient history.
- Perform a focused physical exam relevant for an allergic patient (*i.e.* allergic shiners, Dennie-Morgan lines, pale-boggy nasal mucosa, and eczematous lesions).
- Recognize pertinent features of immune deficiency found on physical exam (i.e. lymphadenopathy, hepatosplenomegaly, absence of tonsils, and dysmorphic facial features associated with DiGeorge Syndrome).
- Interpret pulmonary function tests.
- Interpret skin prick tests.
- Identify the presence or absence of a thymic shadow on chest x-ray.
- Determine appropriate indications for ordering specific IgE testing and correctly interpret testing results.
- Interpret basic laboratory immunology studies available to the clinician.
- Integrate clinical history, physical exam findings and spirometry results in order to appropriately manage asthma, other atopic diseases such as dermatitis, urticaria, angioedema, insect allergy and other allergic diseases on an outpatient setting.
- Integrate clinical history and physical exam findings in order to develop an appropriate work-up for a patient with a possible immune deficiency.

**B. Medical Knowledge**

Students must demonstrate knowledge about established biomedical and clinical sciences and the application of this knowledge to patient care.

**Objectives:**
- Demonstrate an understanding of the basic principles of allergic inflammation and how they apply to the pathophysiology of various atopic diseases.
- Demonstrate an analytic approach to clinical situations paying particular attention to the history and physical examination findings in order to direct an appropriate work-up and treatment plan.
- Demonstrate an understanding of the basic principles of clinical immunology and how they relate clinically when evaluating a patient’s immune function.
- Understand the pathophysiology of the different allergic diseases including asthma and obtain a working knowledge of their management. Also gain an understanding of the different medications used in the management of allergic diseases including their mechanisms of action, dosages, proper use of delivery devices etc.

**C. Practice-Based Learning and Improvement**

Students must be able to assimilate scientific evidence and improve their patient care practices.

**Objectives:**
Students are expected to:
- Locate and assimilate evidence from scientific studies related to patients’ health problem (i.e. use of immune modulators in eczema or use of IVIG in immunodeficiency).
• Use information technology to manage information, access on-line medical information, and support personal education.

D. Interpersonal and Communication Skills
Students must be able to demonstrate interpersonal and communication skills resulting in effective information exchange with members of the clinic, patients, and patient families.

Objectives:
Students are expected to:
• Use effective questioning and listening skills to develop an understanding of the patient’s coping abilities in regards to the medical situation.
• Work effectively with other members of the healthcare team.

E. Professionalism
Students must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

Objectives:
Students are expected to:
• Demonstrate compassion and responsiveness to the needs of patients.
• Demonstrate sensitivity to the patient’s culture, age and disability.
• Demonstrate a commitment to ethical principles pertaining to confidentiality of patient information.
• Be on time to clinics and didactic sessions.

III. Methods of Instruction:

A. Didactic
• Allergy Journal Club (2nd Wednesday from 12-1:00 PM and 4th Monday from 5-6:00 PM of every month)
• Immunology Clinic Conference (Thursday 8:00 – 9:00 AM)
• Allergy Noon Conference (Thursday 12:00 – 1:00 PM)
• Allergy Teaching Rounds (1st & 4th Thursday 9:30 – 10:30 AM)
• Allergy Research Conference (2nd Thursday of the Month – 9:30 AM)
• Interesting Case Conference (3rd Thursday of the Month 9:30 – 10:30 AM)
B. Clinical

- Attend pediatric Immunology Clinic with Dr. de la Morena on Monday and Wednesday AM.
  - Patients to be seen on Monday morning are discussed in the Thursday Immunology Clinic Conference. Each student needs to be aware of all patients coming to Immunology clinic.
  - Students will be responsible for presenting one patient per week. Preparation for this presentation should include reviewing the relevant literature, establishing a differential diagnosis, and formulating a plan.

- Attend pediatric Allergy Clinic:
  - Dr. Warrier on Tuesday AM and Thursday PM. (5th floor)
  - Dr. Bird on Tuesday PM and Wednesday PM. (4th floor)
  - Allergy Clinic with Dr. Neaville Friday AM. (5th floor)

- The student should focus on new-patient evaluations.

- During clinics the student will see the patients, take the history, and perform the physical examination. Then the patient will be presented to the attending.

- Summary of Schedule:

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<th>Monday</th>
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<tr>
<td>AM</td>
<td>Dr. de la Morena</td>
<td>Dr. Warrier</td>
<td>Dr. de la Morena</td>
<td>8 – 9: Immunology conference</td>
<td>Dr. Neaville</td>
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<tr>
<td>Noon</td>
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<td>J. Club (2nd Wednesday &amp; 4th Monday of each month)</td>
<td>9:30 – 10:30: Teaching/Research/Case conference</td>
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<td>PM</td>
<td>CONSULTS</td>
<td>Dr. Bird</td>
<td>Dr. Bird</td>
<td>Allergy Noon Conference</td>
<td>SELF STUDY</td>
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C. Student Responsibilities

- Attend clinics and inpatient consults as outlined.
- Attend conferences as outlined.
- Read literature from prepared curriculum.
- Be on time to clinics and didactic sessions.

IV. Method of Evaluation of Students:
Honors-pass-fail grades are assigned based on observation by faculty attending of the student’s performance working with patients the last week of the rotation. Achievement of the specified goals is based on this operational definition.