CURRICULUM: ALLERGY AND IMMUNOLOGY

I. GOALS

• To provide exposure, over a three year period, to frequently encountered diseases of altered immunity in both inpatient and office settings.
• To enable the resident to confidently recognize common clinical presentation of diseases of hypersensitivity.
• To develop an understanding of allergic and immunologic disease principles and methodologies, in order to initiate diagnostic evaluation and therapy.

II. CONTENT

• Basic principles of pathophysiology (understand the important aspects of history taking, physical exam and diagnostic testing)
• Understand the normal functioning of the immune system that is essential for health
• Understand how hyper-activity of one or more components results in the development of allergic and/or autoimmune disease
• Understand that these response may be manifested in one or more organ systems simultaneously, for e.g.
  a) Systemic anaphylasix
  b) Eye chemosis, ocular, pruritis, conjunctival inflammation etc.
  c) ENT rhinorrhoe, sneezing, etc.
  d) Lungs syspnea, cough, wheezing, sputum production etc.
  e) Skin whealing, eczematosous and papular eruption etc.

Clinical recognition

• Special emphasis is placed on the recognition of the following disease entities:
  a) Allergic conjunctivitis
  b) Allergic rhinitis
  c) Urticaria/angioedema
  d) Anaphylazis
  e) Asthma
  f) Drug allergy
  g) Insect sting allergy

Diagnostic/Procedure skills

• A general understanding of the principles and processes of diagnostic evaluation of diseases of altered immunity will be encouraged. Special emphasis will be given to:
  a) Spirometry and spirometric response to bronchodilators
  b) Wright Giemsa stain of nasal and pulmonary secretions
  c) Total eosinophil count
  d) Drug desentizing protocols
  e) CT of lungs and sinuses
  f) Immediate skin test for IgE mediated reactions to inhalants, foods, etc.
  g) Levels of complement components, CI esterase inhibitor
  h) Methacholine inhalation challenge
  i) Patch tests
  j) Prick and intradermal tests
  k) Serum immunoglobulin levels
  l) T and B cell quantitation and subtyping