University of Minnesota Lab Medicine and Pathology

Immunology Rotation

Location: Mayo 798
Duration: One month
Rotation Directors: John Crosson, MD – phone: 612-626-7801
Other Faculty:

General Description:
Through daily 1 & ½ hour presentations and discussion of current patients with abnormal immunology tests the residents will acquire an understanding of the pathogenesis of diseases with an immunologic bases and how the clinical immunology tests help with diagnoses.

Goals and Objectives:
Upon completion of this rotation, the resident will be able to:
- Understand the clinical immunology tests, their strengths and limitations, so that the residents can guide clinicians in appropriate ordering and interpreting these tests

The learning objectives below reference the corresponding ACGME core competencies: Patient Care (PC), Medical Knowledge (MK), Professionalism (Prof), Communication Skills (CS), Practice Based Learning and Improvement (PBLI), and Systems-Based Practice (SBP).

- Achieve enough knowledge of the immune system to know how the above tests incorporate basic immunology in evaluating immunologic diseases.
  - Mechanisms of primary responses
  - Innate immunity
  - Immunologic Memory
  - Tolerance
  - Specific cells in the immune response
  - Cytokines and chemokines
- Review daily selected clinical cases that have abnormal clinical immunology tests and correlate the results of these tests with the clinical presentation
- Spend two days in a community immunology clinic to learn about immune deficiency and serious autoimmune disease patients followed there. Learn about the indications and administration of therapeutic IG.
- Learn the basics of HLA, its relation to developing certain diseases, and it's role in cancer resistance and allograft rejection.
- Meet with a local rheumatologist to understand how practicing rheumatologists interpret selected immunologic tests.
- Review standard immunologic tests, the problems of performing and the indications for ordering these tests, and understand how these tests are used by clinicians to diagnose and manage their patients (see attached list of tests).

Assigned Reading:
- Abbas AK et al: Cellular and Molecular Immunology, ed 6, Sanders Elsevier

Optional Reading:
- Other articles to be assigned depending on discussion arising from the daily presentations and case presentations.
**Call Duties:** No on-call duties outside of regular laboratory working hours are assigned to the resident.

**During the rotation, the trainee is expected to join the following conferences:**
- Clinical Pathology Conference: Tues 12:00-1:00 PM (weekly) – Mayo D175
- Resident Didactic Series: Wed 7:00-8:00 AM & 9:15-10:15 AM (weekly) – Mayo D175
- Lab Medicine/Pathology Grand Rounds: Wed 8:00-9:00 AM (weekly) – 450 MCRB

**Assessment methods:**
Resident performance on this rotation will be assessed by:
- Formative feedback provided by attending physician(s)
- Performance evaluation by faculty based upon review by faculty working with the resident during the rotation. Residents will be evaluated on performance of daily activities, on participation in required meetings and conferences, and on presentations.