Renal Pathology

Fellows spend one month their first year working with Dr. Hayner Buchan, Professor of Pathology and Renal Pathologist on the Renal Pathology Rotation. During that month they learn the fundamentals of renal histopathology through a combination of one-on-one teaching and slide review that the Fellow performs on his/her own.

Lines of Responsibility:
Fellows report to Attending Renal Pathologist during this experience and if the Attending Renal Pathologist is unavailable, Fellows report to the Renal Pathologist on-call and ultimately to the Program Director. Training in interpretation of renal biopsies is provided through weekly Pathology conference. A joint conference between the Section of Nephrology and the Department of Pathology that takes place in the conference room of the Department of Pathology. Several cases are presented each week. All cases, in which a biopsy of a native kidney was performed at AMC, in addition to selected cases of transplant biopsies, are written up as a protocol by the Fellow involved in the case. This protocol is handed out to conference participants and is orally presented by that Fellow. Both Attendings and Fellows then discuss the case as they are called upon by a conference mediator. After a differential diagnosis has been generated, the pathology is presented onto a screen. A Fellow is randomly chosen to read these slides (first year Fellows do not read cases in this conference until they have completed their Pathology rotation). When the slide review has been completed, the Fellow is asked to give a histologic diagnosis. The treatment is then discussed by Attendings and Fellows as they are called upon. The active process of reading biopsies in an intellectually stimulating and supportive setting is the most effective teaching tool. Fellows are encouraged to perform as many renal biopsies as they can that are medically indicated during their Fellowship. Biopsies may be done on native kidneys as well as on renal transplants. This procedure is tracked through the electronic procedure log found on www.new-innov.com.

Goals and Objectives:
To learn the evaluation and management of the Following Areas of Medical Knowledge: Although much of this is taught during and through a daily session at the microscope, it is expected that the Fellow know:

- Normal renal histology including the recognition of different normal and abnormal cells within the glomerulus and interstitium.
- The handling and processing of renal biopsy specimens.
- The normal staining characteristics of the trichrome, PAS, H&E, and silver stains.
- A systematic approach to reading renal histopathologic slides.
- A systematic approach to reading renal immunofluorescence slides.
- A systematic approach to reading renal electron micrographs.
- The renal histopathologic features of the major nephrotic, nephritic, microvascular, and tubulointerstitial diseases including an understanding of the criteria of acute rejection in the renal transplant.

Fellows are evaluated by Dr. Buchan after the rotation. It is expected that the Fellow incorporate this evaluation feedback into daily practice and that this will help the Fellow identify strengths, deficiencies, and limits in one’s knowledge and expertise (“Practice-based Learning and improvement”), make a habit of localizing and assimilating medical evidence from appropriate medical journals as well as other sources of information technology (“Practice-based learning and improvement”).