Educational Goals & Objectives

Stanford Cytopathology Fellowship

Cytology Rotations:

I. Exfoliative Cytology
   A. Gynecologic
      - Interpret Pap smears (liquid-based and conventional) and accurately classify by The Bethesda System 2001.
      - Know criteria for unsatisfactory Pap smears and quality indicators according to Bethesda 2001 (The Bethesda System book).
      - Be able to explain proper collection methods for conventional and liquid-based Pap smears, and for HPV testing.
      - Know infectious diseases that can be detected by Pap smear and be able to identify the organisms.
      - Know non-infectious causes of inflammation and reactive change.
      - Know and be able to identify common slide artifacts.
      - Understand etiology of squamous intraepithelial lesions.
      - Know indications for HPV testing and understand the different methods available for HPV detection.

   A. Non-Gynecologic
      - Interpret exfoliative samples from any body site and classify as negative, atypical or malignant.
      - Know criteria for sub-optimal or unsatisfactory samples, specific to each body site.
      - Know causes of inflammation specific to each body site, including infectious and non-infectious etiologies.
      - Understand appropriate use of special stains.
      - Understand implications of the cytologic diagnosis for each body site.

I. Aspiration Cytology
   A. Technique
      - Become proficient in performing fine needle aspiration biopsies and in preparing aspirate smears.
      - Be able to teach proper FNA technique to residents and clinicians.
      - Be able to explain potential complications to and obtain written consent from the patient.
      - Be able to prepare aspirate smears and assess adequacy at time of biopsy based on immediate stain (both cytologist performed and radiographically-guided FNAs).
      - Understand when to collect material for ancillary studies.
Educational Goals & Objectives
Stanford Cytopathology Fellowship

II. Aspiration Cytology
   A. Interpretation
      - Become proficient in interpreting aspirate smears from any body site and in writing concise, complete reports.
      - Understand appropriate use of ancillary studies (e.g. immunocytochemical stains, flow cytometry, microbiologic cultures, molecular diagnostics, cytogenetics, etc) and specimen requirements for each test.
      - Understand implications of the cytologic diagnosis for each body site.
      - Understand use of the Triple Test in management of breast lesions.
      - Be able to discuss results with the clinicians & suggest appropriate follow-up.

I. Lab Management
   - Understand the parameters evaluated for quality assurance for gynecologic, non-gynecologic and fine needle aspirate samples.
   - Be able to correlate cytology and histology cases, and give suggestions for appropriate follow-up.
   - Understand billing process, including which gynecologic cases require pathologist review and which components of FNA procedures/interpretation are professionally billable.
   - Know workload limits for cytotechnologists.

Elective Rotations:
   I. Consult Services (Hematopathology or Surgical Pathology)
      - Enhance skills in histologic diagnosis of entities commonly encountered on the Cytology Service.
      - Understand appropriate use of ancillary studies (e.g. immunohistochemical stains, cytogenetics, molecular diagnostics, flow cytometry) as additional tools in diagnosis.

II. Laboratory Services (Molecular Diagnostics, Cytogenetics or Flow Cytometry)
    - Understand limitations of ancillary studies.
    - Understand how ancillary studies (e.g. pcr, FISH, flow cytometry) are performed and their limitations.
    - Understand how ancillary studies can be used to aid in cytologic diagnosis.

III. Research
    - Acquire skills in identifying problematic areas that would benefit from further research.
    - Improve ability to access & critically evaluate relevant literature.
    - Improve ability to critically analyze data.
    - Prepare abstract to be presented at a national meeting (e.g. USCAP or ASC).
    - Prepare manuscript for publication in a peer-reviewed journal.