

Dermatopathology Educational Goals and Objectives

The educational goal of our dermatopathology fellowship program is to prepare trainees for a career in academic dermatopathology or in private practice dermatopathology with academic orientation. The program's primary objective is to train academically oriented individuals

Major Goals include:

1. To gain an in-depth understanding of diagnostic dermatopathology and develop a systemic approach to evaluating skin biopsy, to gain the basic knowledge needed to generate differential diagnoses for skin pathology.
2. To understand and become proficient in the basic methods routinely used in dermatopathology including special stains, immunofluorescence, immunohistochemistry. To understand the importance of clinicopathologic correlation.
3. To develop appropriate communication skills with other clinicians concerning diagnosis after arriving at appropriate diagnosis.
4. To be involved in research projects and be able to write scientific papers
5. To be prepared for independent Academic career.

This fellowship will serve to provide dermatology skills to those with a pathology background and pathology skills to those with training in dermatology. The fellow will act as consultants for residents and faculty of both departments, and participate in the teaching of dermatology and pathology residents with review and interpretation of dermatopathology cases. Fellows acquire special competence in this subspecialty in order to pursue a career in academia or private practice. Supervision is conducted by the faculty (five board certified dermatopathology teaching staff and four board certified dermatology faculties, plus large number of pathology staff) in charge of each of the rotations the fellow undertakes. An evaluation of the progress of the fellow is performed every six months during the whole fellowship program.

UT Surgical Pathology Rotation (for dermatology trained fellows):

The educational goals and objectives of the UT Surgical Pathology rotation (including electron microscopy, cytopathology, and hematopathology) for the dermatology trained dermatopathology fellows (usually a four to five months in duration, but on a half day over eight to ten months period) are in the following three areas of training:

- Gross specimen examination.

- Microscopic description/diagnosis
- Intraoperative consultation (frozen sections)

1. **Gross specimen examination:**

- a. To learn how to gross and dissect all minor and major surgical specimens.
- b. To learn how to concisely describe the gross findings of all major surgical specimens.
- c. To know how to use the dictation instrument for gross description.
- d. To be able to select appropriate blocks for microscopic examination.
- e. To know how to operate the photographic equipment for gross photographing of interesting surgical specimens (particularly skin lesions).

2. **Microscopic description/diagnosis:**

- a. To learn how to describe major microscopic findings of small biopsies as well as large surgical specimens.
- b. To be able to formulate general diagnostic categories of common surgical specimens.
- c. To know when and how to order special stains (histochemical stains) and immunoperoxidase stains.
- d. To know how to analyze and interpret special stain and immunohistochemical stain results.
- e. To be able to formulate final diagnosis and necessary comments to finalize reports at the end of the rotation.
- f. Electron microscopy: To review electron microscopic photographs with Dr. Gaber in her busy renal biopsy service and learn to interpret the major abnormalities on electron microscopic level.
- g. Cytopathology: To participate in UT cytology sign-out for GYN as well non-GYN cytology specimens to learn how to recognize the main cytomorphologic features of major abnormalities. On average each fellow is required to review approximately 100 cytology cases with the attending cytopathologist (Dr. Zafar).
- h. Hematopathology: To participate in bone marrow and lymph node specimen sign-out at the Baptist Memorial Hospital East hematopathology service with Dr. Calihim to learn how to recognize the normal components of bone marrow and

the main morphological features of neoplastic involvement by leukemia and lymphoma.

3. Intraoperative consultation (frozen sections):

- a. To learn how to examine the submitted specimen for frozen sections.
- b. To know how to select appropriate sections for freezing.
- c. To know how to cut good quality frozen sections.
- d. To know how to stain frozen sections.
- e. To learn how to generate a differential diagnosis based on the clinical, gross, and frozen microscopic findings.
- f. To know how to communicate with the submitting surgeon regarding frozen interpretation.

Hospital Autopsy Rotation (for dermatology trained fellows):

The educational goals and objectives of the Hospital Autopsy Rotation for the dermatology trained dermatopathology fellows (usually a one month rotation) are the following:

1. To know the criteria for appropriately completed autopsy permits.
2. To know how to perform appropriate external examination and description of the body.
3. To attend and participate in all the morning autopsies during this rotation.
4. To learn how to perform organ dissection.
5. To learn how to describe the gross findings in order to write up the autopsy protocol.
6. To know how to select and submit histological sections for microscopic examination.
7. To know how to use the photographic instruments in the morgue for appropriate photographing of autopsy organs.
8. To learn how to formulate an appropriate P.A.D. (provisional anatomic diagnosis) in a timely manner after the autopsy.
9. To preview the microscopic slides of the autopsy and describe the microscopic findings.

10. To be able to discuss the major microscopic findings with the attending anatomic pathologist in autopsy signout sessions.
11. To be able to write up the microscopic findings for autopsies.
12. To learn how to formulate the F.A.D. (final anatomic diagnosis).
13. To be a major participant or the primary resident for at least 5 hospital autopsies during this fellowship program.

Dermatopathology Rotation (for all fellows):

The dermatopathology rotation is a half day (afternoon) rotation which last through the whole year of the fellowship training. It is divided into six months of UT, three months of Trumbull, and three months of Duckworth dermatopathology services. This is the core rotation of this fellowship. The general educational goals of this rotation are:

1. To become competent and proficient in the interpretation of various dermatopathological biopsy materials, including most of the inflammatory as well as neoplastic lesions.
2. To master the special techniques and interpretation of such techniques relevant to dermatopathology, which include immunofluorescence and immunoperoxidase methods.
3. To become familiar with the various aspects of the daily operation of a dermatopathology histology laboratory.
4. To be a consultant for residents in dermatology and pathology as well as faculties in both departments.

Objectives and responsibilities of this rotation are:

1. To participate in daily dermpath sign-out sessions.
2. When possible, preview all the dermpath cases and formulate differential diagnosis before signing-out with the assigned dermatopathologist.
3. To be able to discuss with the attending dermatopathologist all the dermpath cases during sign-out sessions.
4. To be responsible for ordering all the special and immunohistochemical stains for dermpath cases.
5. To follow up all the pending cases and to be responsible to work with the attending dermatopathologist for issuing the final report in a timely manner.

6. To review all the immunofluorescence and immunoperoxidase stains of dermpath cases and record the preliminary results for sign-out with the attending dermatopathologist.
7. To be responsible for collecting and organizing cases for weekly dermatopathology conferences for the dermatology residents.
8. To be responsible for photographing cases for presentation at the dermatology grand rounds or Memphis Dermatology Society meetings.
9. To participate with the attending dermatopathologist for all the frozen sections of dermatologic cases.
10. To function as a consultant for skins cases received from other general pathologists within the departments and give preliminary diagnosis to the submitting pathologists in a timely manner.
11. To be the first person to review consultation cases received from outside pathologists and work up the differential diagnosis with ordering necessary procedures (recuts, special and immunostains), and be ready for signout with the attending dermatopathologists.

Clinical Dermatology Rotation (for pathology trained fellows):

The Clinical Dermatology Rotation consists of the Medplex dermatology clinic (three clinics/week) and the VA dermatology clinic (two clinic/week) for the pathology trained dermatopathology fellows. The educational goals of this rotation are:

1. To become competent in the clinical diagnosis of patients with common dermatological conditions.
2. To be able to describe, categorize different types of skin lesions, and reach a differential diagnosis based on the relevant clinical history and the presentation of the skin lesion.
3. To become familiar with the different treatment modalities for the common skin conditions.
4. To master the various techniques of cutaneous biopsy (punch, shave, and simple excision).
5. To become proficient in performing potassium hydroxide preparations, Tzanck preparations, Wood's light examination, and cultures of parasites, fungi, yeast, viruses, and bacteria.

The objectives and duties of this rotation are:

1. To attend and participate at least four dermatology clinics per week (two to three Medplex clinics and two VA clinics).
2. To make every efforts to observe and examine skin lesions of as many patients as possible with the attending dermatologists when the other dermatology residents are presenting their cases to the attendings.
3. To take clinical history and perform physical examination on new dermatology patients, and present the case to the attending faculty dermatologist with a differential diagnosis.
4. To order necessary diagnostic work-up and perform necessary procedures (such as skin biopsy, KOH preparation, Tzanck smears, Wood's light examination, microorganism cultures) in order to reach a definitive diagnosis.
5. To make treatment plans and schedule follow-ups for the patients.
6. To perform minor surgical procedures, such as simple excision for the patients seen at the clinics.
7. To analyze and evaluate the treatment results and make necessary changes of the treatment plan in follow-up of the patients.
8. To be proficient in making appropriate digital photographs of clinical dermatological lesions.
9. To be responsible for interesting case presentation at the weekly dermatology grand rounds and monthly Memphis Dermatology Society meetings.
10. To be responsible for giving the weekly didactic Lever's Chapter reading conference to the dermatology residents.
11. To function as a consultant for clinicopathological correlation for the dermatology residents as well as dermatology faculties.
12. To actively participate in clinical research projects, or interesting case report, write up manuscripts and submit for publications.