Primary Rotations:

1. **Dermatopathology Service**:
   The mainstay of our educational training program is Dermatopathology Sign-out where slides from patient biopsies or excisions are reviewed and diagnoses rendered. The majority of slides are available the afternoon before sign-out the next morning, so fellows and pathology residents have the opportunity to preview them and develop differential diagnoses or specific diagnoses. Individual cases are discussed among the faculty attending, dermatopathology fellows, pathology and dermatology residents, and medical students at sign-out and, therefore, there is considerable real-time teaching and opportunity for questions during this activity.

Goals and Objectives:

a) **Patient Care**

- Attend daily Dermatopathology Sign-out in the morning (9:30 – 12:00) over the entire year.
- Each fellow is responsible for previewing and generating specific diagnoses or an appropriate differential diagnosis on all slides that are available the day before sign-out.
- Review immunofluorescence cases with the dermatopathology faculty weekly (Thursday afternoon 4:00-5:00).
- Become knowledgeable in the morphologic features of inflammatory and neoplastic changes in skin and soft tissue specimens and develop diagnostic proficiency and generate appropriate differential diagnoses when morphologic changes are not etiologically specific.
- Assume graded responsibility by dictating MD cases and reviewing them with the dermatopathology faculty during the last 6 months (beginning in January) of the fellowship.
- Assume graded responsibility by dictating TD cases and some extramural consults in the afternoon after sign-out and reviewing them with dermatopathology faculty during the last 3-4 months of the fellowship.
- Understand the importance of turn-around time and the need to provide patients and clinicians with timely reports.
- Attend all tumor boards (Multidisciplinary Melanoma, Multidisciplinary Merkel cell carcinoma, and Cutaneous Lymphoma) to integrate pathology findings into the management of patients with these tumors.
- Attend all Diagnostic Conferences (every Thursday morning, 8:00-10:00) in the Department of Dermatology to learn the importance of Clinicopathologic correlation in improving patient care.

Assessment Tools:
• Clinical performance rating
• 360 assessment
• Self-assessment slide examinations (Parts I & II)

b) Medical knowledge

• The fellow will understand normal anatomy and function of structures in the skin and soft tissue.
• The fellow will become knowledgeable in the morphologic features of inflammatory and neoplastic changes in skin and soft tissue specimens and develop diagnostic proficiency and generate appropriate differential diagnoses when morphologic changes are not etiologically specific.
• Over the course of the year, the fellow should read the entire Lever's Histopathology of the Skin textbook as the chapters coincide with the Lever Slide Conferences taught to the dermatology residents. The fellow will participate in the teaching of some of these slide sessions, but attend all of them, which will reinforce the principles he/she has learned in preparation for them.
• During the initial 6 months of the program, the dermatopathology fellows are expected to read the Mayo Clinic Atlas of Immunofluorescence in Dermatology that is available in the Dermatopathology Sign-out Room. This will reinforce the principles of immunofluorescence used during sign-out of these cases.
• Over the course of the year, the fellow is expected to review the electron microscopy study cases available in the three-ring binder and accompanying CD disk in the Dermatopathology Sign-out Room.
• The fellow will understand the appropriate use of histochemical and immunohistochemical stains.
• The fellow will understand the appropriate use of molecular diagnostic techniques in diagnostic dermatopathology.
• Over the course of the year, the fellow is expected to review Dr. Fullen’s slide study set (half by the end of the first 6 months; the other half by the end of their fellowship year). This experience will broaden their academic experience by exposing them to rare entities that they may not see at sign-out during the year, while reinforcing the more common lesions that they will see.
• The fellow is expected to participate in the teaching of dermatopathology to pathology house officers rotating on the Dermatopathology Service.

Assessment Tools:

• Clinical performance rating
• 360 assessment
• Self-assessment slide examinations (Parts I & II)

c) Interpersonal & Communication Skills

• The fellow will develop excellent communication skills so that diagnostic and prognostic information can be conveyed clearly and succinctly to other healthcare members. Each fellow is expected to communicate clearly biopsy results on rush specimens to our clinical colleagues.
• The fellow will learn how to communicate diagnostic information succinctly in their consultation reports.
• The fellow will discuss the findings of patient biopsies with the pathology residents on service prior to sign-out. This teaching activity is an important aspect of the fellows training experience.

Assessment Tools:
• Clinical performance rating
• 360 assessment
d) Professionalism
• The fellow is expected to consistently demonstrate integrity, honesty, compassion, empathy, and altruism in clinical care, education and research.
• The fellow will learn from role modeling on a daily basis to see how faculty works in a professional manner, demonstrating respect, compassion and integrity with a commitment to ethical principles and sensitivity to patient diversity.
• The fellow is expected to understand her/his limitations and acknowledge any errors in a timely manner.
• The fellow will maintain ethical principles with respect to patient confidentiality and informed consent.
• The fellow will understand age, gender, and ethnic differences in the manifestation of cutaneous disease.
• The fellow is expected to demonstrate strong work habits, including previewing cases for daily sign-out, appropriately following through on cases pending additional studies or further consultation, and assisting in the teaching of residents on service or seeking consultation.
• The fellow will look up additional clinical or laboratory information on patients when necessary.
• The fellow will attend all mandatory conferences and teach the conferences which are assigned to him/her.
• The fellow will actively participate in teaching pathology residents who are rotating on the Dermatopathology Service.
• The fellow will consistently demonstrate courtesy and respect for faculty, other fellows, residents, and staff.

Assessment Tools:
• Clinical performance rating
• 360 assessment (staff and residents)
e) Practice- Based Learning and Improvement
• The fellow will learn to locate, appraise and assimilate evidence from scientific studies as they relate to a specific patient's biopsy.
• The fellow will provide clinical teaching to medical students, fellow residents, and residents from other departments.
• The fellow will use information technology to perform his/her duties and access medical information online to support his/her own education.
• The fellow will see and learn from role modeling daily as the faculty engages in all aspects of practice-based learning and improvement.
• The fellow will participate in a minimum of two journal club presentations, which will reinforce the principles of self-directed learning and evidence-based practice.
• The fellow will exhibit evidence of self-evaluation.
• The fellow will demonstrate ongoing self-education and habits of life-long learning.
• The fellow will use feedback from faculty to improve his/her practice.
• The fellow will apply these learning tools to improve patient care.

Assessment Tools:

• Clinical performance rating
• Journal club assessment form

f) Systems-Based Practice

• The fellow will learn the effective use of system resources.
• The fellow will demonstrate an understanding of specimen acquisition and delivery.
• The fellow will understand the quality assessment and improvement processes and be exposed to lean principles. The fellow is expected to attend all Pathology Department Staff QA meetings.
• The fellow will learn from role modeling how to participate in cost-effective healthcare and resource allocation, while advocating for quality patient care.

Assessment Tools:

• Clinical performance rating
• Journal Club assessment form

Duties: Fellows are responsible for previewing in-house cases for daily sign-out and reviewing cases with the pathology resident prior to sign-out. Fellows are encouraged to request histochemical stains based on the clinical differential diagnosis and morphologic changes in the biopsy to expedite a given case. The fellows will observe daily sign-out and learn how to compose microscopic descriptions, diagnoses, comments, and provide appropriate fee codes. The fellows will participate in the triage of requests for rush or STAT biopsies during the week to expedite the turnaround time of appropriate cases. The fellow will function as a resource for grossing complex skin and soft tissue specimens.

Supervision: Faculty dermatopathologist on the in-house diagnostic service will supervise the fellow on a daily basis.

Evaluation: The fellow can expect daily feedback on a case-by-case basis, as needed. A formal evaluation of the fellow’s performance and progress will be performed at periodic (approximately every other month) intervals and at semiannual and final annual reviews.
2. **Dermatology Clinics (Pathology-trained Fellows)**

a) **Patient Care**

**Goals and Objectives:**

- The fellow will attend the Dermatology Clinics daily in the afternoon as an observer, except on the afternoon of dedicated research time, and will see a minimum of 1,000 patients.
- The fellow will understand the appropriate settings for biopsies and excisions of skin lesions and the most appropriate site to biopsy for a given lesion and clinical differential diagnosis.
- The fellow will attend the Mohs Clinic to gain an understanding of Mohs surgery and to see frozen sections of skin. The fellow will also attend other cutaneous surgery clinics and have the opportunity to perform biopsies and/or excisions, which is highly encouraged.
- The fellow will learn to correlate the clinical lesion with the histopathology when a biopsy or excision is performed.

**Assessment Tools:**

- Clinical performance rating
- Case and Procedure Logs
- 360 assessment (residents)

b) **Medical Knowledge**

**Goals and Objectives:**

- The fellow will learn the clinical appearance of skin lesions.
- The fellow will supplement his/her knowledge of clinical dermatology by reading appropriate topics related to patients seen in the clinic in the Dermatology textbook by J. Bologna.
- The fellow will attend all mandatory Dermatology Department Conferences (Clinical Science Journal Club, Basic Science Journal Club, Diagnostic Conference, Book Chapter, Kodachrome Conference, Lever Slide Conference) for the dermatology residents.

**Assessment Tools:**

- Clinical performance rating
- Case and Procedure Logs
- 360 assessment (residents)

c) **Interpersonal & Communication Skills**

**Goals and Objectives:**
• The fellow will function as a liaison to communicate clinical information on patients seen and biopsied in the clinic with the dermatopathology group at sign-out.
• The fellow will serve as a resource for questions regarding the appropriate site of biopsy for a specific patient’s lesion.
• The fellow is expected to demonstrate sound judgment and seek advice when uncertain about how to handle a question regarding patient management.

Assessment Tools:

• Clinical performance rating
• 360 assessment (residents)

d) Professionalism

Goals and Objectives:

• The fellow is expected to consistently demonstrate integrity, honesty, compassion, empathy, and altruism in clinical care.
• The fellow is expected to be at the clinic on time and dressed in the appropriate attire to see patients.
• The fellow will learn from role modeling on a daily basis to see how faculty works in a professional manner, demonstrating respect, compassion and integrity with a commitment to ethical principles and sensitivity to patient diversity.
• The fellow will maintain ethical principles with respect to patient confidentiality and informed consent.
• The fellow will understand age, gender, and ethnic differences in the manifestation of cutaneous disease.

Assessment Tools:

• Clinical performance rating
• 360 assessment (residents)

e) Practice- Based Learning and Improvement

Goals and Objectives:

• The fellow will learn to locate, appraise and assimilate evidence from scientific studies as they relate to a specific patient’s disease presentation.
• The fellow will provide clinical teaching of dermatopathology to medical students, fellow residents, and residents from other departments when appropriate.
• The fellow will use information technology to perform his/her duties and access medical information online to support his/her own education.
• The fellow will see and learn from role modeling daily as the faculty engages in all aspects of practice-based learning and improvement.
• The fellow will exhibit evidence of self-evaluation.
• The fellow will demonstrate ongoing self-education and habits of life-long learning.
• The fellow will use feedback from faculty to improve his/her practice.
• The fellow will apply these learning tools to improve patient care.
Assessment Tools:

- Clinical performance rating
- 360 assessment (dermatology residents)

f) **Systems-Based Practice**

Goals and Objectives:

- The fellow will learn the effective use of system resources.
- The fellow will demonstrate an understanding of specimen acquisition and delivery.
- The fellow will learn from role modeling how to participate in cost-effective healthcare and resource allocation, while advocating for quality patient care.

Assessment Tools:

- Clinical performance rating

**Duties:** Fellows previously trained in pathology are expected to rotate through the various dermatology clinics (general dermatology, CTCL clinic, immunobullous clinic, cutaneous surgery/Mohs clinic) at the University of Michigan Medical Center to gain experience with clinical-pathologic correlation. The fellow will be in the dermatology clinics in the afternoons, except on his/her afternoon of dedicated research time, during the course of the year of fellowship training. The fellows will see a minimum of **1,000 patients** by shadowing a dermatology faculty member; in this role, the dermatopathology fellow will not assume any direct responsibility for the clinical care of patients in the dermatology clinics.

**Supervision:** Direct interaction with dermatology residents and supervision by dermatology faculty.

**Evaluation:** Feedback from the dermatology department will be incorporated into the evaluations of the fellow.

3. **Surgical Pathology (Dermatology-trained Fellows)**

   a) **Patient Care**

   **Goals and Objectives:**

   - Learn how to approach morphologic changes in diagnostic pathology by rotating on various services (Room I, GU, GYN, Breast, Hemepath) in surgical pathology that have some overlap with dermatopathology.
   - The fellow is expected to review the dermatopathology section of the cutting manual to become familiar with the types of specimens to be grossed and the methods used.
   - Learn how to perform gross description and dictation of pathology specimens with particular attention to skin specimens. Assistance is available from the
dermatopathology faculty and pathologist's assistance. Once the fellow has demonstrated sufficient experience

- Become familiar with how to process specimens for ancillary testing, such as specimens for electron microscopy, direct immunofluorescence, molecular studies, etc.
- Participate in any autopsies which have findings related to the skin.
- Rotate through laboratories in Clinical Pathology, such as Microbiology, Immunopathology and Molecular Diagnostics, which perform ancillary tests on patients with skin diseases to gain an understanding of how the tests are performed and the limitations of the tests.

**Assessment Tools:**

- Clinical performance rating
- 360 Assessment
- Case Log

b) **Medical Knowledge**

**Goals and Objectives:**

- Obtain a basic knowledge of general diagnoses in surgical pathology, particularly in areas that overlap with dermatopathology. The fellow should reinforce principles of diagnostic pathology learned at sign-out by reading in a general textbook of surgical pathology (recommend: Sternberg's Diagnostic Surgical Pathology textbook)
- Obtain experience in soft tissue pathology by reviewing cases for Sarcoma Tumor Board with Dr. Patel (dermatopathology faculty). It is encouraged that the fellow spend elective time on the Soft Tissue Pathology Consult Service after the core rotations in Surgical and Clinical Pathology are completed (second half of the academic year).
- Attend all conferences in Anatomic Pathology to include: Consensus Conference (1st 2 months of the academic year), Autopsy Conference, Heme/Dermpath Conferences (Monday at 8 am; entire academic year), Consult Conference (entire academic year), and AP Grand Rounds (entire academic year).

**Assessment Tools:**

- Clinical performance rating
- 360 Assessment

c) **Interpersonal and Communication Skills**

**Goals and Objectives:**

- Actively participate in sign-out on the services (surgical pathology and clinical pathology) that the fellow attends.
- Show dermpath cases to colleagues on other services when a second opinion is required.
Assessment Tools:

- Clinical performance rating
- 360 Assessment

d) Professionalism

Goals and Objectives:

- The fellow is expected to consistently demonstrate integrity, honesty, compassion, empathy, and altruism in clinical care, education and research.
- The fellow will learn from role modeling on a daily basis to see how faculty works in a professional manner, demonstrating respect, compassion and integrity with a commitment to ethical principles and sensitivity to patient diversity.
- The fellow will maintain ethical principles with respect to patient confidentiality and informed consent.
- The fellow will understand age, gender, and ethnic differences in the manifestation of diseases.
- The fellow will attend all mandatory conferences and teach the conferences which are assigned to him/her.
- The fellow is expected to be at sign-out or on service for the full allotted time during the week(s) or month(s) assigned to that service.
- The fellow will consistently demonstrate courtesy and respect for faculty, other fellows, residents, and staff.

Assessment Tools:

- Clinical performance rating
- 360 Assessment

e) Practice- Based Learning and Improvement

Goals and Objectives:

- The fellow will learn to locate, appraise and assimilate evidence from scientific studies as they relate to a specific patient's disease presentation.
- The fellow will observe clinical teaching of medical students and residents during their rotations on surgical pathology and clinical pathology services.
- The fellow will use information technology to perform his/her duties and access medical information online to support his/her own education.
- The fellow will see and learn from role modeling daily as the faculty engages in all aspects of practice-based learning and improvement.
- The fellow will exhibit evidence of self-evaluation.
- The fellow will demonstrate ongoing self-education and habits of life-long learning.
- The fellow will use feedback from faculty to improve his/her practice.
- The fellow will apply these learning tools to improve patient care.

Assessment Tools:
f) **Systems-Based Practice**

**Goals and Objectives:**

- The fellow will learn the effective use of system resources in surgical pathology and clinical laboratories.
- The fellow will demonstrate an understanding of specimen acquisition and delivery.
- The fellow will learn from role modeling how to participate in cost-effective healthcare and resource allocation, while advocating for quality patient care.

**Assessment Tools:**

- Clinical performance rating
- 360 assessment (pathology residents)

**Duties:** A fellow who has completed a dermatology residency will rotate on some surgical pathology rotations, such as Room I, GU/GYN pathology, Breast pathology, Cytopathology, and Hematopathology, as well as some Clinical Pathology laboratories, such as Molecular Diagnostics, Microbiology and Immunopathology, during the first 6 months of the fellowship program in order to expose the fellow to areas of surgical pathology that overlap with dermatopathology. The fellow will continue to participate in daily dermatopathology sign-out, but the time will depend on when each of the surgical pathology sign-outs occur. The fellows will participate in the gross description, dissection and dictation of skin pathology specimens. The fellows will also participate in autopsies that have relevance to dermatopathology and attend Autopsy Conference, Consensus conference, Consult Conference and AP Grand Rounds. During the last 6 months, the fellow will have an opportunity to spend elective time in areas of surgical pathology related to the practice of dermatopathology. An example of this would be to spend a month on the consultation service with our soft tissue pathologist.

**Supervision:** Direct supervision of the fellow will be performed by the surgical pathology faculty on the service for the weeks or month the fellow is on service.

**Evaluation:** Fellows will be evaluated by the surgical pathology faculty who are assigned to the rotation for the week or month, depending on the length of the rotation.

4. **Research Rotation (3 hour block per week)**

   a) **Patient Care**
Goals and Objectives:

- Understand the significance of the research project and how it impacts patient care.

Assessment Tools:

- Research assessment form
- Semiannual and annual evaluations from Program Director

b) Medical Knowledge

Goals and Objectives:

- Understand the significance of the research project and how it impacts patient care.
- Perform a complete literature review to understand the topic and develop a sound hypothesis.

Assessment Tools:

- Research assessment form
- Semiannual and annual evaluations from Program Director

Interpersonal and Communication Skills

Goals and Objectives:

- Able to clearly articulate research activities with other members of the research team.
- Presents findings, either as an oral platform or poster presentation, succinctly and coherently at a scientific meeting.
- Able to summarize findings at section research meetings.

Assessment Tools:

- Clinical performance rating
- Semiannual and annual evaluations from Program Director

d) Professionalism

Goals and Objectives:

- The fellow is expected to consistently demonstrate integrity, honesty, compassion, empathy, and altruism in research.
- The fellow will complete required mandates related to research.
- The fellow is expected to understand the role of an IRB and conduct the research within the parameters approved by the IRB for the study.
- The fellow is expected to conduct the entire research study in an ethical manner.
- The fellow is expected to maintain HIPPA compliance and patient confidentiality during and after completion of the research study.

**Assessment Tools:**

- Research assessment form
- Semiannual and annual evaluations from Program Director

**e) Practice-Based Learning and Improvement**

**Goals and Objectives:**

- Perform a complete literature review to understand the topic and develop a sound hypothesis.
- Write a proposal for funding and IRB approval when necessary.
- When necessary, perform an appropriate database search to identify cases to include in the study.
- When appropriate, demonstrate the ability to implement findings of the research study into clinical practice.
- The fellow will see and learn from role modeling daily as the faculty engages in all aspects of practice-based learning and improvement related to scientific discovery and scholarly activities.
- The fellow will exhibit evidence of self-evaluation.
- The fellow will demonstrate ongoing self-education and habits of life-long learning.
- The fellow will use feedback from faculty to improve his/her practice.
- The fellow will apply these learning tools to improve patient care.

**Assessment Tools:**

- Research assessment form
- Semiannual and annual evaluations from Program Director

**f) Systems-Based Practice**

**Goals and Objectives:**

- The fellow will learn the effective use of system resources in conducting his or her research study.
- The fellow will demonstrate an understanding of controlling costs over the course of the research study.
- When appropriate, the fellow will demonstrate an understanding of the appropriate use of research reagents and methods to avoid reagent waste.
- When appropriate, the fellow will demonstrate an understanding of the appropriate use of tissue specimens to avoid waste of patient material.

**Assessment Tools:**

- Research assessment form
Semiannual and annual evaluations from Program Director

**Duties:** Each fellow is required to do a research project with a faculty mentor. The goal is for each fellow to gain a thorough understanding of the entire process involved in conducting research. The fellow is expected to present at least one research project at a scientific meeting and write the study up for publication. To assist the fellow in accomplishing this goal, the dermatopathology fellowship program allots each fellow the equivalent of an afternoon a week of academic protected time to work solely on scholarly activities.

**Supervision:** Direct supervision of the fellow will be performed by the dermatopathology faculty mentor, who is selected by the fellow very early in the fellowship year during the first research meeting. Subsequent research meetings occur approximately quarterly and serve as a mechanism to track projects and identify any barriers to completion of the study. GME meetings also allow the fellow to discuss any issues related to their research project.

**Evaluation:** Fellows will be evaluated by the dermatopathology faculty member who is mentoring the fellow on the research study. Progress in research will also be incorporated into the fellow's semiannual and final evaluations.