

University of Michigan

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Curriculum

UNIVERSITY OF MICHIGAN
MICROGRAPHIC SURGERY & DERMATOLOGIC ONCOLOGY FELLOWSHIP
TRAINING PROGRAM CURRICULUM
CLINIC ROTATION-SPECIFIC GOALS, OBJECTIVES, COMPETENCIES

Mohs Surgery Rotation

Location: Comprehensive Cancer Center 1st floor Mohs/CSO unit

Faculty: Drs. Johnson, Bichakjian, Durham, Schwartz, Harms, Orsini

Goals: This rotation is designed to assist you in the achievement of the following:

1. Develop the skills that enable the execution and appropriate use of the Mohs surgical technique for removal of various skin cancers in all applicable anatomic locations.
2. Develop competence in the design and execution of layer closures, flaps and grafts for repair of post-Mohs surgical defects.
3. Be able to successfully manage patients with complex medical conditions prior to, during and after skin surgery.
4. Enhance the ability to diagnose skin cancer on the basis of clinical and/or histologic findings.
5. Understand the requirements for setting up and running a Mohs histology laboratory.
6. Develop proficiency in decisions regarding instances in which the patient should be referred to a different specialty or individual.

Objectives: The faculty and staff will assist you reach the goals above by directing you to focus on the following objectives:

1. ***Patient care and Procedural Skills:*** You will be required to demonstrate:
 - a. mature caring, compassionate, appropriate, respectful attitudes and actions towards patients, families of patients, coworkers, and staff
 - b. competence in all aspects of Mohs surgery including:
 - i. diagnosing skin cancer including early identification of benign premalignant and malignant skin lesions
 - ii. consideration of all appropriate forms of therapy for different skin cancers
 - iii. indications for Mohs surgery
 - iv. execution of the Mohs surgical technique in tumor removal from a variety of body sites
 - v. grossing in Mohs specimens and labeling glass slides
 - vi. cutting frozen Mohs sections
 - vii. preparing frozen Mohs sections for reading under the microscope
 - viii. accurate interpretation-diagnosis of Mohs frozen section histology
 - ix. mapping the findings from Mohs histologic sections
 - x. location of positive margins using Mohs sections and executing subsequent staging excisions
 - c. competence in surgical repair techniques including:
 - i. determining when best to allow wounds to heal by second intention
 - ii. layered primary closure-including intermediate and complex repair
 - iii. random pattern and axial flap repair including sliding (advancement and rotation) and lifting (transposition) flaps

- iv. grafting techniques including full and split thickness grafts
 - v. staged reconstructive techniques such as interpolation staged pedicle flaps
- d. competence in evaluation and management skills for all cutaneous surgical patients regardless of diagnosis, including preoperative, perioperative, and postoperative evaluation
- e. certification in advanced cardiac life support (ACLS)
- 2. **Medical Knowledge:** You will be required to demonstrate:
 - a. in-depth knowledge of clinical diagnosis, biology, and pathology of skin tumors, as well as laboratory interpretation related to diagnosis and surgical treatment
 - b. knowledge of related disciplines including surgical anatomy, sterilization of equipment, aseptic technique, anesthesia, closure materials, and instrumentation
- 3. **Practice-Based Learning and Improvement:** You will be required to:
 - a. research issues you encounter with your patients--systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement
 - b. appropriately apply current knowledge to the care of your patients--locate, appraise, and assimilate evidence from scientific studies related to the patients' health problems
- 4. **Interpersonal and Communication Skills:** You are required to:
 - a. demonstrate effective use of technology to communicate with patients and referring physicians
 - b. appropriate timing of communication
 - c. effectively direct the care of patients requiring a multidisciplinary approach to successfully manage their lesion
- 5. **Professionalism:** You will be required to:
 - a. fulfill duties
 - b. make ethical decisions
 - c. show sensitivity towards diverse cultural, political and religious views
- 6. **Systems-Based Practice:** You will be required to:
 - a. demonstrate understanding of coding, billing and patient payer induced restriction in care allowed
 - b. determine how to maximize your ability to care for your patients within the financial and social constraints placed on the patient and your ability to care for the patient
 - c. mobilize all necessary resources to facilitate optimal care for your patients

Cosmetic Dermatology and Laser Surgery Rotation (Optional)

Location: Taubman Center 1st floor, reception B, Cosmetic Dermatology and Laser Center
Mott (mainly port-wine stains) and Livonia (mainly laser resurfacing) ORs

Faculty: Drs. Orringer and Sachs

Goals: This rotation is designed to assist you in the achievement of the following:

1. Develop competence in the execution and appropriate use of common procedures of an aesthetic nature including cutaneous soft tissue augmentation with injectable filler material, skin resurfacing and tightening techniques, cosmetic and non-cosmetic laser procedures, and sclerotherapy.

2. Develop competence, performance and learning of the a wide range of common (ever changing) patient concerns and the treatment options available and utilized in the cosmetic dermatology and laser center including:
 - acne scarring and other types of scars
 - actinic cheilitis
 - pigmented birthmarks: cafe au lait macules, Becker's nevi and other tan/brown birthmarks
 - facial blood vessels / telangiectasia: prominent facial blood vessels, the flushing and redness of rosacea, spider and cherry angiomas, and other benign blood vessel-related lesions
 - port wine stains: superficial hemangiomas, and other types of benign vascular "birthmarks"
 - removal of unwanted hair
 - skin texture, scars and stretchmarks: improvement in the appearance of some types of scars, stretch marks, and age related changes in the skin is achieved with microdermabrasion and laser therapy.
 - spider veins of the legs: laser therapy, sclerotherapy or a combination of these
 - sun damage - sun-damaged skin, fine lines, wrinkles, uneven coloring of the skin, and "sun spots" of the face, hands or other sites
 - tattoo removal: amateur and professional tattoos
 - wrinkles & fine lines
3. Develop knowledge in and understanding of small-volume tumescent liposuction and fat transplantation, hair replacement surgery, ambulatory phlebectomy/vein surgery and deep dermal chemical peels.
4. Be able to successfully advise patients on the management of aging skin, scars, pigmentary skin changes, hair loss body contouring, and multidisciplinary vascular lesion approaches.
5. Understand the requirements for setting up and running a cosmetic dermatology or laser clinic.

Objectives: The faculty and staff will assist you reach the goals above by directing you to focus on the following objectives:

1. **Patient care and Procedural Skills:** You will be required to demonstrate:
 - a. the ability to engage in productive directive conversations with the cosmetic patient regarding cosmetic lesions and how best to treat them. "Productive directive conversations" includes the following components:
 - i. assess the impact of the cosmetic lesion on the patient's self image and lifestyle
 - ii. communicate effective forms of therapy and expected results
 - iii. determine the patient's understanding of therapy limitations
 - iv. determine if patients expectations can be met
 - v. be able to redirect patients to other providers when you are unable to meet their expectations.
 - b. competence in all aspects of common cosmetic dermatology and laser procedures including:
 - i. laser resurfacing/ablative laser
 - ii. non-ablative laser
 - iii. pulsed dye laser

- iv. q-switched laser (pigmented scars)
 - v. ipl/photofacial
 - vi. ktp/versapulse
 - vii. diode laser
 - viii. gentlyag laser
 - ix. microdermabrasion
 - x. laser rejuvenation/non-ablative laser
 - xi. laser resurfacing/ablative laser
 - xii. sclerotherapy
 - xiii. q-switched lasers
 - xiv. chemical peel
 - xv. botox® injections
 - xvi. collagen injections
 - xvii. restylane® injections
2. **Medical Knowledge:** You will be required to:
 - a. expand your knowledge base regarding current understanding of the different therapeutic interventions to modify cosmetic skin lesions.
 - b. apply your knowledge in challenging diagnostic and therapeutic situations
 3. **Practice-Based Learning and Improvement:** You will be required to:
 - a. research issues you encounter with your patients
 - b. appropriately apply current knowledge to the care of your patients
 - c. measure improvement resulting from implementation of a change in routine approach
 4. **Interpersonal and Communication Skills:** You are required to:
 - a. demonstrate effective use of technology to communicate with patients and referring physicians
 - b. appropriate timing of communication
 - c. effectively direct the care of patients requiring a multidisciplinary approach to successfully manage their cosmetic concern
 5. **Professionalism:** You will be required to:
 - a. fulfill assigned duties during the rotation
 - b. make ethical decisions in interactions with patient, their families and other members of the care team
 - c. show sensitivity towards the patient's concerns but if you are not able to help them then be firm in your advice without insulting them
 6. **Systems-Based Practice:** You will be required to:
 - a. demonstrate understanding of coding, billing and patient payer induced restriction in care allowed.
 - b. determine how to maximize your ability to care for your patients within the financial and social constraints placed on the patient and your ability to care for the patient.
 - c. mobilize all necessary resources to facilitate optimal care for your patients.

Research – Scholarship Rotation

Location: Comprehensive Cancer Center Level 1, Taubman Center Level 1

Faculty: Drs. Johnson, Bichakjian, Durham, Schwartz, Cha, Harms

Goals: This rotation is designed to assist you in the achievement of the following:

1. Develop competence in understanding of the concepts of rigorous clinical research-IRB and other regulations, design and execution.
2. Develop the skills that enable the preparation of one or more manuscripts suitable for submission to a peer-reviewed publication.
3. Be able to deliver one or more presentations -- local, regional, or national

Objectives: The faculty and staff will assist you reach the goals above by directing you to focus on the following objectives:

1. ***Patient care:*** You will be required to:
 - a. apply an understanding of evidence-based concepts to optimal clinical care
 - b. identify and recruit subjects for clinical trials and a robust tissue bank annotated to clinical data and outcomes with many skin cancer types.
2. ***Medical Knowledge:*** You will be required to:
 - a. understand the concepts and application of evidence-based medicine
 - b. understand the rigor and regulatory requirements for clinical research and scholarship
 - c. assimilate a body of knowledge into an effective didactic delivery
3. ***Practice-Based Learning and Improvement:*** You will be required to:
 - a. research issues you encounter with your patients--systematically analyze practice using scholarship, and implement changes with the goal of practice improvement
 - b. acquire, identify, assimilate evidence, and apply recent medical literature to develop skills in critically analyzing the medical literature
4. ***Interpersonal and Communication Skills:*** You are required to:
 - a. demonstrate effective use of technology to do research
 - b. understand our clinical training model functions well as a research model with multidisciplinary collegiality leading to many collaborative publications annually
5. ***Professionalism:*** You will be required to:
 - a. fulfill duties
 - b. make ethical decisions in research and scholarship design, execution and completion
 - c. show sensitivity towards diverse cultural, political and religious views
6. ***Systems-Based Practice:*** You will be required to:
 - a. mobilize all necessary resources to facilitate optimal care for your patients
 - b. develop the skills that enable the preparation of one or more manuscripts suitable for submission to a peer-reviewed publication
 - c. be able to deliver one or more presentations local, regional, or national preferably on topics relevant to procedural dermatology

Melanoma/Merkel Cell carcinoma/Other Tumors Rotation

Location: Comprehensive Cancer Center 1st floor Mohs/Melanoma/Merkel Cell – CCC team 6

Faculty: Drs. Johnson, Bichakjian, Durham, Schwartz, Cha, Harms

Goals: This rotation is designed to assist you in the achievement of the following:

1. Be able to successfully manage and treat patients with the most complex skin cancers including diagnosis, counseling, and appropriate referral of advanced stages of skin cancer.
2. Develop proficiency in decisions regarding instances in which the patient should be referred to a different specialty or individual and the concepts and implementation of Multidisciplinary management.
3. Develop competence in the execution and appropriate use of the surgical techniques such as microstaging excision to staged “square” procedures to wide local resection for treatment of these various skin cancers.

Objectives: The faculty and staff will assist you reach the goals above by directing you to focus on the following objectives:

1. ***Patient care and Procedural Skills:*** You will be required to demonstrate:
 - a. mature caring, compassionate, appropriate, respectful attitudes and actions towards patients, families of patients, coworkers, and staff
 - b. competence in aspects of excisional skin-soft tissue surgery including:
 - i. appropriate biopsy techniques
 - ii. microstaging excision and repair
 - iii. staged “square” procedures and repair
 - iv. wide local resection and repair
 - v. consideration of all appropriate forms of therapy for different skin cancers including indications for surgery
 - c. competence in evaluation and management skills for all cutaneous surgical patients regardless of diagnosis, including preoperative, perioperative, and postoperative evaluation
2. ***Medical Knowledge:*** You will be required to demonstrate:
 - a. in-depth knowledge of clinical diagnosis, biology, and pathology of various skin tumors, as well as laboratory and radiographic interpretation related to diagnosis and treatment
 - b. knowledge of related disciplines including surgical anatomy, sterilization of equipment, aseptic technique, anesthesia, closure materials, and instrumentation
 - c. learning and involvement in tumor board multidisciplinary conferences
3. ***Practice-Based Learning and Improvement:*** You will be required to:
 - a. research issues you encounter with your patients--systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement
 - b. appropriately apply current knowledge to the care of your patients--locate, appraise, and assimilate evidence from scientific studies related to patient care.
4. ***Interpersonal and Communication Skills:*** You are required to:
 - a. demonstrate effective use of technology to communicate with patients and referring physicians
 - b. appropriate timing of communication

- c. effectively direct the care of patients requiring a multidisciplinary approach to successfully manage their lesion
- 5. **Professionalism:** You will be required to:
 - a. fulfill duties
 - b. make ethical decisions
 - c. show sensitivity towards diverse cultural, political and religious views
- 6. **Systems-Based Practice:** You will be required to:
 - a. demonstrate understanding of coding, billing and patient payer induced restriction in care allowed
 - b. determine how to maximize your ability to care for your patients within the financial and social constraints placed on the patient and your ability to care for the patient
 - c. mobilize all necessary resources to facilitate optimal care for your patients