The UM/JMH Department of Anesthesiology, Perioperative Medicine, and Pain Management Pain Medicine Fellowship Training Program
Curriculum

I. Program Description

The UM/JMH Pain Medicine Fellowship training program takes place within 4 institutions:

1. University of Miami/Jackson Memorial Hospital
2. UMHC/Sylvester Comprehensive Cancer Center and Satellite Clinics
3. Comprehensive Pain and Rehabilitation Center at the Miami Veterans Administration Medical Center
4. The UHealth Institute for Advanced Pain Management

II. Institute for Advanced Pain Management/Jackson Memorial Medical Center
(CHIEF FELLOW ROTATION)

JMH Pain Clinic is a high-volume chronic pain clinic which emphasizes the medical and interventional management of chronic and cancer pain. Fellows actively instruct rotating anesthesiology residents in proper history taking, examination, and evaluation of patients with chronic pain.

The Institute for Advanced Pain Management is a University of Miami Pain Clinic where a wide variety of pharmacologic therapies and invasive techniques are utilized on a daily basis. A high-quality fluoroscopic imaging system as well as a top-of-the-line ultrasound machine is available on a full-time basis. Some of the diagnostic procedures include epidural steroid injections, facet injections, medial and lateral branch nerve blocks, intercostal nerve blocks, other peripheral nerve blocks, radiofrequency ablation, joint injections, sacroiliac joint injections, spinal cord stimulator trials, peripheral nerve stimulator implants, sympathetic blocks, neurolysis performed for various types of cancer pain, etc.

*Chief Fellow Duties (3-4 months):

- During each fellow’s station at the Institute for Advanced Pain Management/Jackson Memorial Medical Center core rotation he/she will have the duty of carrying the chronic pain consult pager at all times. The duty of carrying the pager is typically shared with the rotating resident(s), however, all consults must be reported to the fellow upon receipt. Consults must be called back as soon as reasonably possible, and if any action or recommendations are necessary, they should be completed within 24 hrs (including documentation). In addition, a follow up sheet must be made and follow up of every consult will be made at least every 48 hrs from the initial visit until resolution or discharge. The patients will be documented on a spreadsheet and saved in the shared drive. The consults will be initially presented to the faculty members that are covering consult service and the patient will be evaluated by both the fellow and the attending to determine plan of treatment. A (predetermined) plan should be made by the fellow beforehand and presented to the attending physician.

- The chief fellow is in charge of arranging and organizing a monthly journal club. He/She will choose a topic, present it to the Program Director for approval and choose the journal article for review. He/She will be responsible to distribute the article to the faculty, fellows, and residents as well as setting the date and location for the journal club. It should be reported to Ms. Vivian Prats for posting on the Division calendar on the Department website.

- He/She will be notified of any absences in advance along with the fellowship director, coordinator and the site attending via email. In combination with Ms. Vivian Prats, he/she will coordinate call coverage
between fellows during absences. The fellow at each site should notify Ms. Vivian Prats of any resident absences to be recorded with the residency office.
- This fellow is in charge of the orientation for the incoming residents every month. As soon as the rotations are announced, the welcome email should be sent to the next group of incoming residents so that they can prepare for their rotation.

III. UMHC/Sylvester Comprehensive Cancer Center Pain Management Clinic (SCCC)

A variety of acute, chronic, and cancer patients are evaluated and treated in both the inpatient and outpatient settings.
Under direct supervision, the fellow receives extensive experience in the management of patients with cancer related pain as well as non-cancer chronic pain. The full range of diagnostic and therapeutic options are available.
During this rotation, the fellow will obtain extensive experience in neuromodulation (SCS, DRG, and PNS trials and permanent implants) as well as intrathecal pump trials and implants. Fellows will also have high exposure in management, trouble-shooting, and revisions for patients with intrathecal pump, PNS, SCS, and DRG implants. Fellows will become adept at preoperative, intraoperative, and postoperative management for these cases.
Fellows may or may not have the opportunity to rotate through SCCC satellite clinics. At the satellite site, fellows will have exposure to a fast-paced, high-volume outpatient experience during which fellows may hone their skills of effective diagnostic and therapeutic decision making while refining their skills in time management and efficiency.

IV. Miami Veterans Administration Medical Center (VA)

During this rotation, fellows will evaluate and treat many patients with history of spinal cord injury, phantom limb pain, stump pain, chronic non-malignant pain, and malignant pain alike. At the VA, fellows will perform a high volume of fundamental procedural interventions.
Fellows will also be involved in evaluation and treatment of acute pain and regional anesthesiology. One half day per week, fellows will rotate with the acute pain service. Fellows will become adept at medication management for acute pain as well as performing regional blocks for post-surgical analgesia as well as surgical anesthesia.
Fellows will manage inpatient acute and chronic pain.

V. UM/JMH, SCCC, satellites, & VAMC Competencies

At the rotations listed in the preceding sections (UM/JMH, SCCC, satellites, & VAMC), the fellow will be supervised on a pain team responsible for the assessment and management of inpatients with chronic pain including cancer pain:
- The fellow must document involvement with a minimum of 15 patients new to the fellow in the setting of chronic cancer and non-cancer pain in inpatients
- The fellow must document involvement with a minimum of 50 patients new to the fellow in the setting of acute pain in inpatients
- The fellow must be ACLS/BLS certified.
- The fellow must document longitudinal involvement with a minimum of 10 patients who require palliative care
- The fellow is strongly encouraged to document experience with the assessment and treatment of pain in children
The fellow must document involvement (and display proficiency and competence) in interventional procedures including:

- Epidural injections (interlaminar, transforaminal, and caudal)
- Trigger point injections
- Facet and medial branch nerve blocks
- Neuroablative procedures
- Joint and bursa injections
- Sympathetic blocks
- Peripheral nerve blocks
- Neuromodulation and managing intervertebral disc procedures (e.g. spinal cord stimulation, peripheral nerve stimulation, electrical stimulation, and targeted drug delivery)
- Peripheral IV placement
- Basic airway management, including mask ventilation and endotracheal intubation

The fellow must demonstrate competence in management of sedation including exposure to administration of moderate procedural sedation

VI. Fellows will also rotate through 5 mandatory pre-arranged electives, which will include

- Acute Pain/Regional Anesthesiology
- Neuroradiology
- Psychiatry
- Anesthesiology
- Physical Medicine and Rehabilitation
- Neurology

Neurology Elective:

This multidisciplinary rotation is coordinated with qualified and experienced physicians from the Department of Neurology. The experience involves supervised performance of neurological history and physical examination, interpretation of neuroimaging and electrodiagnostic studies. On this rotation, the fellow will gain experience in and demonstrate the ability to:

- Perform a directed neurological history
- Perform a detailed neurological exam including mental status, cranial nerve exam, motor and sensory exam, cerebellar exam, gait and reflexes.
- Review and identify significant findings on magnetic resonance (MR) and computerized tomography (CT) of the brain and spine.
- Know the indications for and interpretation of electrodiagnostic studies.

Physical Medicine and Rehabilitation Elective:

This multidisciplinary rotation is coordinated with qualified and experienced practitioners from the Department of Physical Medicine and Rehabilitation. The experience involves supervised performance of neuromusculoskeletal history and physical examination, developing rehabilitation programs, and performance and interpretation of electrodiagnostic studies. On this rotation, the fellow will demonstrate the ability to:

- Perform a comprehensive musculoskeletal and neuromuscular history
- Perform an appropriate musculoskeletal and neuromuscular physical examination (including for peripheral joint, spinal and soft tissue pain conditions) to include:
Assessments of static and dynamic flexibility
- Strength
- Coordination and agility

- Recognize how structural and functional findings on history and physical apply to diagnosing acute and chronic pain problems and designing individualized rehabilitation program
- Understand the natural history of musculoskeletal pain disorders
- Understand the algorithm for therapeutic modalities, to include therapeutic modalities and surgical intervention

Psychiatry Elective:

This multidisciplinary rotation is coordinated with qualified and experienced practitioners from the Department of Physical Medicine and Rehabilitation. The experience involves supervised performance of a complete psychiatric history, mental status examination, diagnosis of psychiatric disease, and development of a plan of care including psychosocial therapies and cognitive behavioral therapy. On this rotation, the fellow will demonstrate competence in:

- Completing a psychiatric history with emphasis on psychiatric and pain co-morbidities
- Completing a complete mental status exam

The fellow will gain knowledge in the following areas, either through didactics, or directed reading of the following:

- Effects of pain medications on mental status
- Common pain co-morbidities, for example:
  - Substance abuse
  - Mood disorders
  - Anxiety disorders
  - Somatoform disorders
  - Factitious disorders
  - Personality disorders
- Principles and techniques of psychosocial therapy including cognitive behavioral and supportive therapy
- When to make a referral to a psychiatrist/psychologist

Fellows will obtain this experience with psychiatry or clinical psychology faculty with documented chronic pain management and substance abuse clinical experience.

Acute Pain Service Elective:

The management of acute pain includes postoperative pain management, inpatient acute pain management as well as acute on chronic pain management and responding to consultation from other medical services for the control of acute pain for both outpatients and inpatients. Examples include perioperative pain control, acute low back and radicular pain, sickle cell crises, and herpes zoster. Under the supervision of the attending physician and other pain and regional anesthesia faculty, the fellow leads a team of residents rotating on the Acute Pain Management Service. The fellow is responsible for organizing daily rounds that includes the evaluation and treatment of in-house patients on the acute pain service. Techniques include PCA, single-shot epidural and intrathecal opioids, continuous epidural infusion of local anesthetic/opioid combinations and PCEA, continuous interpleural analgesia, and regional nerve blocks using landmark and/or ultrasound guidance. The fellow is
responsible for ongoing monitoring of the effectiveness of various modalities and identification of any administrative or clinical problems that arise.

VII. Competency Based Curriculum Goals and objectives

GOALS:

The goal of the training program is to train the pain fellow in the comprehensive assessment and management of pain, utilizing a multimodal, interdisciplinary approach. Physicians from the primary specialties of anesthesiology, physical medicine and rehabilitation, neurology, and psychiatry may be admitted to the fellowship, bringing with them their specialty specific knowledge in pain management. Regardless of primary knowledge, skills, and experience, each fellow receives interdisciplinary training with required exposure to knowledge and skill sets traditionally found in the other primary specialties that practice pain management.

OBJECTIVES:
Competency based learning objectives are in place, which reflect the six ACGME general competencies of:

1. Patient care
2. Medical knowledge
3. Practice-based learning and improvement
4. Communication Skills
5. Professionalism
6. Systems-based practice
7. Patient care (PC)

Patient care:

The pain fellow must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Fellows are expected to:

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about their patients.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans.
- Counsel and educate patients and their families.
- Use information technology to support patient care decisions and patient education.
- Perform competently all medical and invasive procedures considered essential for pain management practice.
- Work with other health care professionals to provide patient-focused care.

Medical knowledge:

Fellows must demonstrate knowledge about established and evolving biomedical, clinical, and cognate sciences and the application of this knowledge to patient care.

Fellows are expected to:

- Demonstrate an investigatory and analytic thinking approach to clinical situations.
- Know and apply the basic and clinically supportive sciences which are appropriate to pain management.
Practice Based Learning and Improvement (PBLI):

Fellows must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Fellows are expected to:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
- Locate, appraise, and assimilate evidence from scientific studies related to their patient’s health problems.
- Obtain and use information about their own population of patients and the larger population from which their patient are drawn.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Use information technology to manage information, assess on-line medical information, and support their own education.
- Facilitate the learning of students and other health care professionals.

Interpersonal and Communication Skills (ICS):

Fellows must be able to demonstrate interpersonal and communication skills that result in effective information exchange and collaboration with patients, their families, and other health professionals. Fellows are expected to:

- Create and sustain a therapeutic and ethically sound relationship with patients
- Use effective listening skills and elicit and provide information using effective non-verbal, explanatory, questioning, and writing skills
- Work effectively with others as a member or leader of a health care team or other professional group.

Professionalism (PF):

Fellows must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Fellows are expected to:

- Demonstrate respect, compassion, integrity, a responsiveness to the needs of patients and society that supersedes self-interest, accountability to society and to the profession, and a commitment to excellence and on-going professional development.
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
- Demonstrate sensitivity and responsiveness to patient’s culture, age, gender, and disabilities.

Systems Based Practice (SBP):

Fellows must demonstrate an awareness of and responsiveness to the larger context and system of health care at the ability to effectively call on system resources to provide care that is of optimal value. Fellows are expected to:

- Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
- Practice cost-effective health care and resource allocation that does not compromise quality of care. Advocate for quality patient care and assist patients in dealing with system complexities.
- Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

**Other Objectives:**

- **Administrative:** the pain management fellow shall experience and learn how to:
  - Effectively direct and manage allied health staff and other support personnel.
  - Determine appropriate monitoring, life-support equipment, and sedation requirements for interventional procedures.
  - Determine the appropriate utilization of laboratory and radiological imaging services.
  - Utilize psychiatric/psychological services, including behavioral modification.
  - Utilize physical/occupational therapy.
  - Refer to and utilize available social services and other ancillary services (vocational, nursing, pharmacy, dietary, etc.)
  - Refer to and utilize electrodiagnostic services.

- **Didactic objectives:** Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social behavioral sciences, as well as the application of this knowledge to patient care.
  - Fellows must attend all Wednesday and Friday morning didactic sessions, held from 7:00-8:00 AM, unless on vacation, sick, or other extenuating circumstance.

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**Fellow Of The Year Award**

This award will be given to the fellow that achieves the highest performance based on attending consensus evaluations after the end of the year.

**Strict Vacation Rules**

1. Only one fellow can be on vacation at a time (no overlapping vacations).
2. No vacation can be requested during the dates of August 15-August 30, 2019 or June 29-August 15, 2020.
3. No fellow can be on vacation during the pain ITE, unless the fellow can plan to be present for the exam despite being on vacation.
4. While it is unlikely a fellow would have to work on a holiday (ex: Christmas, Thanksgiving), the days before and after (for example, the Friday after Thanksgiving) are not vacation days and patients are still scheduled at every site unless the attending the fellow is rotating with is on vacation. The fellow may still have emergency cases even on a weekend or holiday, so if the fellow wishes to ENSURE a holiday off, it is recommended that it be requested it as vacation.
5. All vacation days for the entire year should be submitted to Dr. Horn NO later than mid-June, further instructions will be emailed to fellows.
   (Any future changes should be requested at least two weeks prior of the original date unless it is a justified emergency.)
6. All absences, planned or unplanned, should be reported to Ms. Prats, the Chief Fellow, and the Program Director via email in order to ensure coverage and prevent any compromise in patient care.