THE UNIVERSITY OF TEXAS
MD Anderson Cancer Center
Making Cancer History®

MD Anderson Pain Medicine Handbook for Fellows

Mission

To educate future pain medicine physicians in evidence-based clinical practice to provide outstanding patient-centered care to the international patient population at MD Anderson in alignment with MD Anderson's core values of caring, integrity and discovery.

Objectives

The primary objective of the fellowship program is to teach future leaders in pain medicine the medical knowledge, clinical decision-making, and procedural skills sufficient to function as expert consultants in the field of pain medicine. This includes the management of straightforward and complex pain syndromes in ambulatory and hospitalized patients. Fellows should be able to manage such problems, even when complicated by the presence of other symptoms, complex medical illness, and psychological distress. Fellows will develop these skills through attending didactic sessions, completing thorough patient evaluations, discussion of differential diagnoses and possible treatment options, selection of interventional procedures, and performance of these procedures when appropriate. The following goals and objectives address Accreditation Council of Graduate Medical Education (ACGME) general competencies and those of the fellowship program itself.

Patient Care and Interpersonal Communication

- To provide patient care that is honest, compassionate, appropriate and effective to assess and treat pain.
- To actively participate in an information exchange about pain management in patient care with patients, their families and other health professionals.
- To provide patient-focused care while gathering essential and accurate information.

- To make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, documented scientific evidence, and clinical judgment.
- To demonstrate ethical decision-making skills in communicating with or counseling patients and their families.
- To establish and carry out follow-up plans for patients.
- To develop a proactive approach to managing patient and family expectations and needs.
- To perform competently all procedures considered essential for the area of practice.
- To create and sustain therapeutic and ethically sound relationships with patients.
- To use effective listening skills and provide information using effective nonverbal, explanatory, questioning, and writing skills.

Medical Knowledge

- To understand established and evolving biomedical, clinical and cognate (e.g., epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.
- To know and apply the basic and clinically supportive sciences applicable to pain management patient care.
- To understand and gain expertise in the pathophysiology, assessment and management of acute, chronic and cancer pain and the related component symptoms (e.g., depression, anxiety, delirium, cachexia and dyspnea).
- To become familiar with the pharmaco-kinetics and pharmaco-dynamics of all major drug groups, as well as other medicine (opioids, antidepressants, anti-epileptics, antiemetics and psychotropics) where appropriate.
- To understand the implications, benefits and risks of anesthetic and neurosurgical procedures to control pain, including local anesthetic and neurolytic blocks, vertebral augmentation, and implantation and maintenance of spinal cord stimulators and spinal drug delivery systems.

- To comprehend the principles of long-term rehabilitation as applied to malignant and nonmalignant pain.
- To understand the principles of acute pain management, epidural management and intravenous patient-controlled analgesia use.
- To become familiar with psychological assessment and treatment techniques including behavioral therapy, hypnosis, acupuncture and the methodological and content aspects of pain management research.
- To reach a consultant level in the expert prescription of a complex pharmacopoeia.

Practice-Based Learning and Improvement

- To gain hands-on experience in anesthetic procedures used to treat malignant and nonmalignant pain.
- To acquire a diverse understanding of the principles, philosophy and knowledge/ skills of pain management and how a pain management clinic operates.
- To analyze practice experience and improve practice-based activities using a systematic methodology.
- To critically appraise pain management literature and research methodologies.
- To apply knowledge of study designs and statistical methods to the appraisal of clinical studies.
- To utilize information technology to support patient care decisions and education, to access online medical information and to support their own education.
- To participate and assist in presentations, lectures and facilitating the learning of all other health professionals.
- To act as an effective advocate for the rights of the patient and family in clinical situations involving serious ethical conditions.

Professionalism

- To pursue a commitment to excellence and ongoing professional development.

- To demonstrate respect, integrity and accountability while maintaining responsiveness to the needs of patients and society that supersedes self-interest.
- To adhere to an agreement to carry out professional responsibilities.
- To apply sensitivity to the culture, age, gender and disabilities of patients.

Systems-Based Practice

- To understand the health care organizational structure of other health care professionals and society in general and how these elements affect their practice.
- To assist institutional and community pain management programs in developing standards of care.
- To become familiar with the process of developing curriculum for pain management.
- To understand the organization and reimbursement for pain management services.
- To understand how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
- To practice cost-effective health care that does not compromise the quality of patient care.
- To network with other health care managers and health care providers to assess, coordinate and improve health care and know how these activities can affect system performance.

Curriculum

Didactic sessions are scheduled throughout the week. Fellows are expected to attend all sessions and should be relieved from clinical responsibilities to do so. During each week, at least one day is planned free of didactic activities.

The fellowship didactics are structured into eight blocks: Pathophysiology, Exam/Assessment, Pharmacotherapy, Basic Spinal Origins of Pain, Advanced Spinal Origins of Pain, Cancer

Pain/Palliative Medicine, Special Topics(headache, acute pain, geriatrics, pediatrics, parturients), Business of Medicine.

Pain Seminar: Weekly didactic seminars based on ACGME core curriculum topics. The information content is generally derived from the textbook *Practical Management of Pain*, By Benzon and colleagues. Fellows are expected to read the assigned chapter prior to the lecture. These lectures are delivered by faculty and will follow the block themes outlined above.

Block	Topic
Week 1-2	Pathophysiology
Week 3-7	Exam/Assessment
Week 8-12	Pharmacotherapy
Week 13-19	Basic Spinal Origins of Pain
Week 20-24	Advanced Spinal Origins of Pain
Week 25-28	Cancer Pain/Palliative Medicine
Week 29- 32	Special Topics(headache, acute pain, geriatrics, pediatrics, parturients)
Week 33-35	Business of Medicine

Other educational activities include:

GME Core Curriculum: Institutional lecture series exploring the basic science and clinical treatment of cancer. Once monthly.

EBM Journal Club: Educational modules sorted by blocks to include didactics on evidence based medicine and structured analysis of seminal publications in the field of pain medicine. Fellows are expected to read and critically evaluate all papers prior to the sessions. Fellows will provide critical analysis of a single article and discuss the implications in clinical practice.

Journal Club: Bi-monthly conference to evaluate, analyze and discuss the latest publications in pain medicine. Fellows will be expected to present at least one journal club with a faculty mentor.

UC-Davis/UCSF/UNMC Teleconferences: Quarterly teleconferences to discuss difficult cases. Fellows prepare the cases with the assistance of a faculty mentor. One of the conferences will be presented by an MD Anderson fellow.

Morbidity and Mortality (M&M): Monthly conference to review cases with unexpected outcomes or novel techniques. Fellows will be expected to present at least one journal club with a faculty mentor.

Quality Improvement (QI) Certificate: All GME fellows at MD Anderson are required to complete an "Essentials of Quality Improvement" Certificate in order to complete graduation. Instructions will be given by the GME office. Fellows will then present their QI project at the end of the fellowship year.

Recommended Resources

Books provided:

- Practical Management of Pain (5th Ed.). Benzon, Rathmell, et. al. Elsevier 2014. ISBN 9780323083409
- Atlas of Pain Medicine Procedures (1st Ed.) Diwan and Staats. McGraw-Hill, 2014. ISBN-10: 0071738762

Other recommended Books

- *Bonica's Management of Pain (4th Ed.), Fishman, Ballantyne, Rathmell. Lippincott 2009. ISBN-10: 0781768276
- *Atlas of Image-Guided Interventions in Regional Anesthesia and Pain Medicine (2nd Ed.), Rathmell. Lippincott 2011.

ISBN-10: 1608317048

- Complications in Regional Anesthesia and Pain Medicine (2nd Ed.), Neal and Rathmell. Lippincott 2012. ISBN-10: 1451109784
- *Access at: http://www3.mdanderson.org/library/index.html

Recommended Journals

- Pain
- Journal of pain
- Regional anesthesia and pain medicine
- Anesthesiology
- Anesthesia and analgesia
- Pain physician
- Pain medicine
- Access these at: http://www3.mdanderson.org/library/index.html

Evidence Based Medicine

- Pubmed
- Cochrane Database of Systematic Reviews
- Dynamed
- Uptodate
- Access these at: http://www3.mdanderson.org/library/evidence-based/pyramid.html#

Clinical Practice at MD Anderson

Rotations

Fellows will be assigned to each rotation for one week at a time except for the additional/external rotations which will be for 2-4 weeks.

Rotations include:

- 1 week Radiology
- 1 week PMR
- 1 week Anesthesiology
- 1 week Neurology
- 4 weeks North Lakes Pain Consultants

- 2 week elective (business/billing, Stearns, I.M., Palliative, Substance, Psych, Radiology, P.T.)
- 1 day in Tobacco Treatment Clinic

1. Outpatient Clinic

a. Clinic starts at 8 AM.

b. Fellows are assigned to a faculty member for each day. See continuity clinic assignments.

c. Please dress in professional clinic attire.

d. **Patient experience priority**: as a consultant physician, it is important that you see patients in a timely fashion. There should not be patients waiting in exam rooms for you to finish your notes. After you are finished seeing a patient, jot down your notes and then see the next patient. It is normal to have several charts to dictate at the end of the day.

e. Dictations should be completed the same day as the clinic visit. Patient charts are not to leave the clinic..

f. Remember that both referring physicians and the patients themselves will read your notes. Your note is a medico-legal documentation so please refrain from using inflammatory or speculative language.

g. You will be asked to return patient phone calls. The long distance phone code is 003556. Do not hesitate to ask faculty questions regarding directions to be given to the patients. Please document the content of these conversations in an EMR note when completed.

h. Patients are seen in the clinic until around 5:00 PM. If your faculty member is done early, then help see patients of other faculty members.

i. **Continuity Clinics:** You will be assigned to the same faculty member for the same weekday when you are in clinic. Our goal is for you to see some of the same patients over the year and hopefully develop continuity of care.

j. Fellow/Faculty Assignments: When you are not in your continuity clinic, you will receive a faculty assignment for the day. The assignments are sent monthly. The guidelines are as follows:
    i. Trainees are expected to see patients of the faculty member they are assigned to for that day.
    ii. The charge nurse may alter assignments if there are changes in the clinic templates on a day to day basis.
    iii. Nurses and MA/NAs are not to ask trainees to see patients of non-assigned faculty members.
    iv. It will be up to the faculty member to decide if they would like to "lend" their assigned fellow/resident to another faculty member. **Faculty in need of additional assistance will ask the charge nurse to reevaluate assignments.**
    v. When possible, trainees will be assigned to a single faculty all day.
    vi. Faculty with HAL clinics will receive priority for trainees when they are on Main Campus.
    vii. The OR fellow will remain "floating" so they can leave for the OR whenever necessary.
    viii. Dr. Novy takes priority if she has a patient for the fellows to see.

2. Inpatient Consult Service

a. Inpatient call lasts for one week at a time (Monday AM-Monday AM).
b. Weekdays
    i. Every morning, the fellow will make 6-7 copies of the inpatient registry, adding in any new consults/follow-ups from the previous day.
    ii. Morning report starts at 8 AM in the faculty conference room. Each patient on the "active list" will be discussed by the fellow or APPs.
    iii. Fellows will be assigned particularly difficult or unique patients to follow.

iv. Fellows will perform all new inpatient consults that they will then staff with the on call faculty. The fellow will be alerted to new consults by the PA holding the pager.
v. Provider to provider communication is expected when consults are placed at MD Anderson. If the consult is called in by a non-medical provider or if the reason for consult is unclear, please contact the referring physician or their mid-level provider for more information.
vi. When no further service is needed on the floor, please return to the clinic to assist with patients.
vii. On weekdays, the fellow holds the pager from 4 PM until 8 AM. The APPs will hold the pager from 8 AM until 4 PM.

c. Weekends
   i. No formal morning report is held on weekends.
   ii. Fellows will round on assigned follow-up patients in addition to seeing all new consults.
   iii. Fellows will staff these patients with the on-call faculty at a time pre-arranged by faculty.
   iv. The fellow holds the pager from Friday 4 PM until Monday 8 AM.

d. Notes about the on-call pager
   i. The fellow may receive pages from other physicians, nurses, inpatients, and outpatients.
   ii. Fellows are expected to answer all pages promptly. Failure to appropriately answer pages is a serious violation of both patient care expectations and professionalism.
   iii. If you ever have a question regarding appropriate patient care, do not hesitate to contact the on-call faculty.
   iv. **After hours and weekend prescription refill requests:** patients are instructed during their initial consult visit to call the clinic approx 3-5 days prior to needing a prescription refill thus they should not be calling the

paging service after hours unless it is an urgent situation. Refills will be reviewed on a case by case basis. If at all possible, redirect patients to call the clinic during business hours.

3. **Procedure Room (PR)**
    a. The PR fellow will perform all in office procedures with faculty supervision and guidance.
    b. At a minimum, the fellow is expected to review all pertinent imaging, check labs, ensure the patient is not taking an anticoagulant or have any active infections, and be knowledgeable about the procedure (indications, contraindications, technique, etc.) prior to the procedure.
    c. Prior to the procedure, verify with the patient that they are not on an anticoagulant, obtain informed consent.
    d. In addition to standard procedure note items, documentation must also include:
        i. **Statement of informed consent.**
        ii. **Statement of time-out being performed prior to the procedure.**
        iii. **Statement that the faculty was present during the procedure.**
    e. Following the procedure and before the patient leaves, the fellow must complete a note in EPIC. This document is considered critical for patient safety.
    f. **NEW Post-Procedure Follow up Policy (2019):** The OR fellow is expected to perform follow-up phone calls to determine the effectiveness of the last weeks' procedures and to check for possible complications. The phone calls should be performed approx 1 week after each procedure and documented in EPIC.

4. **Operating Room (OR)**
    a. **Assignments**: Each week, the designated OR Fellow will send out an email with a spreadsheet detailing the following weeks' OR cases. This spreadsheet will include fellow assignments to OR cases.
    b. **Double Scrub Policy:** Two fellows will be assigned to attend each of the following OR cases: vertebral augmentation, intrathecal pump implant, spinal

cord stimulator (or DRG) trial/implant. One fellow will be designated the "OR Fellow." The OR Fellow is responsible for all pre- and post-op documentation as well as patient followup.

c. For the first 6 months of fellowship, OR cases will be distributed evenly amongst fellows.
d. At the 6 month mark, OR case numbers will be tabulated and case assignments will be made on an as needed basis.
    i. Priority will be given to the fellow with the least number of each specific case. (For example, if Fellow A is the OR fellow and has performed 5 vertebral augmentations, Fellow B has performed 2 and Fellow C has done 3, Fellow A will assign the next vertebral augmentation to Fellow B and C even though Fellow A is the assigned OR Fellow.
e. The OR fellow is expected to review all pertinent imaging, check labs, ensure the patient is not taking an anticoagulant or have an active infection, and be knowledgeable about the operation prior to the operation. This should be reviewed 3-5 days prior to the procedure to prevent day of surgery delays and cancelations. For operations that require a device representative, please contact the rep at least 24 hours in advance.
f. Prior to the procedure
    i. Verify with the patient that they are not on an anticoagulant and do not have an active infection.
    ii. Perform informed consent and obtained a signed verification of the consent.
    iii. Mark the patient at the site of surgery **including prospective battery/pump implant side and site.**
    iv. Perform a Day of Surgery H&P.

    v. In addition to standard operation note items, the note must also include:

vi. **Statement of informed consent.**

vii. **Statement of time-out being performed prior to the procedure.**

viii. **Statement that the faculty was present during the operation.**

g. Following the procedure and before the patient leaves the OR, the fellow must complete a post-operative note in EPIC. This document is considered critical for patient safety.

h. The OR fellow is expected to perform follow-up phone calls to determine the effectiveness of the operation and to check for possible complications.

5. Additional Rotations

a. Psychology (included in the normal course of the fellowship by Dr. Novy).

b. Anesthesia (for non-anesthesia trained fellows).

c. Neurology (for non-neurology trained fellows).

d. Physical Medicine and Rehabilitation (for non-PMR trained fellows),

e. Palliative Care (included in the normal course of the fellowship by Palliative care boarded faculty).

f. Tobaccos Treatment Center (substance abuse medicine)

6. External Rotation

a. North Lakes Pain Consultants (1 month): This private practice rotation that provides an intensive experience in spine diagnosis and procedures.

7. Holiday Policy: At any given time, only three of six fellows are allowed away from campus. This includes vacation, illness, or external rotations. The remaining three fellows on campus must attend to the following priorities:

1. Inpatient Service
2. Operating Room
3. Procedure Room

North Lakes Pain Consultants Rotation

Pain Medicine Fellows rotate for 1 month at North Lakes Pain Consultants in Huntsville, TX. During this rotation, the fellows are supervised by Dr. Stephen Sims (site director). This rotation in the private practice setting develops important skills in the diagnosis and treatment of acute and chronic nonmalignant pain syndromes. The fellows learn to assess community based patients with common pain complaints, design appropriate treatment plans, reassess individuals that do not respond to common pain therapies, and provide a time-governed treatment of pain. This rotation places a particular emphasis on office based interventional procedures for the treatment of spine pain. In addition to excellent clinical training which augments the training at MD Anderson, the rotation also provides significant instruction in office based practice management, practice development, and professionalism in a small medical community.

Evaluations

Fellows will be evaluated quarterly in New Innovations per ACGME Milestones, which will be sent to you and are available online. Fellows will have the opportunity to evaluate the program and faculty as well on a regular basis.

Academic Projects

Fellows are required to complete at least one scholarly activity during the fellowship year. This project will be performed under the guidance of a faculty member. The program director must be notified once an academic project is selected. A copy of the completed project must be submitted to the program director for successful completion of the fellowship.

Mentoring Program

Fellows will be given the opportunity to choose a faculty mentor either from within or outside of the Pain Department. Fellows are expected to complete the pre-meeting Mentee Action Plan and Mentee Worksheet. Mentors and Mentees will meet quarterly and document their progress.

Continuing Education and Development Leave

Fellows may take up to 5 days of leave for their personal continuing education and development. These days may be used for specialty specific professional meeting attendance, board preparation courses, and board examination days. These days must be approved by the program director prior to being used.

Vacation and Sick Leave

Fellows are entitled to 15 days of vacation/paid time off (PTO) during the course of the year. Due to external rotations starting after the 1st of the year, at least 5 days should be taken before January 1. Days needed for job interviews will be taken from this pool. No more than 3 fellows can be gone at one time, except by program director approval.

Case Log

The ACGME dictates that each fellow has certain documented experiences. You will be provided with an excel spreadsheet for this purpose during your first month. All procedures performed must be recorded in this registry. The ACGME minimums include the following:

1. Neurological history and exam: 5 patients
2. Radiology studies—CT/MRI: 15 patients
3. Musculoskeletal/Neuromuscular exam: 15 patients
4. Rehabilitation plan development: 5 patients
5. Complete mental status exam: 15 patients (5 must be observed by Dr. Novy)
6. IV access: 15 patients
7. Mask ventilation: 15 patients
8. Endotracheal intubation: 15 patients
9. Procedural sedation: 15 patients
10. Thoracic or lumbar epidural injections (interlaminar): 15 patients
11. Image guided spinal interventions: 25 patients
12. Trigger point injections: 10 patients
13. Joint or bursa injections: 5 patients
14. Neuromodulation: 5 patients

15. Nerve blocks: 5 patients
16. Cancer pain: 20 patients with longitudinal care
17. Palliative care: 10 patients with longitudinal care

Duty Hours

It is the responsibility of each fellow to accurately record their duty hours electronically in the New Innovations system. Historically, our fellows average 50-55 hours per week. Fellows are limited to 80 hours per week averaged over 4 weeks by the ACGME. If the duty hours of a fellow approach this number, then the program director should be notified immediately to take corrective action.

Moonlighting Policy

Moonlighting is allowed during the fellowship year. Fellows must be in good standing and must obtain prior approval from the program director.

Problems and Concerns

The Fellowship Program Director will meet with the fellows as a group every other month. These meetings will serve as an open forum to bring up any collective issues that need to be addressed. Contact Dr Le-Short, or program coordinators MaryAnn Oler and Monique Rodriguez, at any time if you have individual concerns that need to be addressed.

Dr Le-Short:

Cell (504) 669-3480

Office (713) 792-9669

Program Coordinators:

Monique Rodriguez| mjvaldez@mdanderson.org

MaryAnn Oler | maoler@mdanderson.org

Critical Contact Information

Put these in your phone!

General MD Anderson

Emergency Department (713) 792-3722

Paging Operator (713) 792-7090

4-INFO (713) 794-4636

Pain Clinic

Main Line for patients (713) 792-6070

Back Line (713) 792-1430

Fax (713) 745-1305

Surgery Scheduling (713) 792-6343

Main OR

Front Desk (713) 792-2480

Pre-Op (713) 792-2274

Rooms (713) 834-64 _ _

PACU (713) 792-2470

ACB OR

Front Desk (713) 834-6755

Pre-Op (713) 563-7939

OR1 (713) 834-6731

OR2 (713) 834-6732

OR3 (713) 834-6733

OR4 (713) 834-6734

OR5 (713) 834-6735

OR6 (713) 834-6736

PACU (713) 834-6955

Blood Bank (713) 792-8630

Device Reps

Stryker—Kyphoplasty, Vertebroplasty, and Decompressor: Chris Trotter (832) 474-9794

Kyphon—Kyphoplasty and Vertebroplasty: Brett Smith (713) 444-8273

Medtronic—SCS and IT pumps: Marcus Patterson (281) 832-0913

Medtronic Technical Support (800) 707-0933

Boston Scientific—SCS:

Abbott—SCS: John Goldsmith (832) 349-2810