



PAIN MEDICINE FELLOWSHIP

Educational Goals & Objectives



UC Davis Pain Fellowship

Educational Goals and Objectives

- Understand the nature of pain and its treatment.
 - Understand the mind body spectrum of pain and suffering.
 - Understand common barriers to treating pain.
 - Understand the major drug groups used to manage the different classes of pain.
 - Understand the interventional therapies used to treat different types of pain.
 - Understand the full range of resuscitation skills required for safe procedural practice.
 - Understand the non-pharmacological and non-injection approaches to pain management.
 - Understand the special needs of the terminally ill patient who is suffering.
 - Understand the legal and regulatory issues that impact pain management.
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The mission of the UC Davis Pain Medicine Fellowship is to fully prepare future pain specialists for the demands of practice in Pain Medicine. The focus is in broad-based multi-disciplinary knowledge and skills for managing pain and suffering in all patients and most patient settings. Our Fellowship is designed to help Fellows meet these goals, as well as to acquire the necessary skills to substantially contribute to and advance the field.

The UC Davis Pain Fellowship is committed to excellence in clinical care, research, education, and advocacy for those in pain. The faculty is dedicated to training and educating the future leaders in Pain Medicine so that they can utilize the most comprehensive and innovative approaches to the evaluation and management of acute, cancer-related, and chronic non-cancer pain. Teaching is a core activity within the Fellowship as reflected in our faculty maintaining one of the most didactically intensive Pain Fellowships in the US, offering 13 formal didactic sessions per week (30 minutes per session).

Because the UC Davis Pain Fellowship has a long history of multidisciplinary leadership and has accepted both Anesthesiologist and non-Anesthesiologist trainees, our program is accustomed to providing the core educational elements from the multiple medical disciplines essential to the practice of Pain Medicine and has long been well-positioned to meet the newly adopted ACGME Pain Medicine requirements. Our Faculty offers a remarkably broad representation of the multiple disciplines within state-of-the-art pain and symptom management. These include Anesthesiology (Drs. Copenhaver, Furukawa, Howton, Kreis, Sheth, N. Singh, and Wilsey), Internal Medicine (Drs. Fishman, MacMillan, McCarron, H. Singh), Psychiatry (Drs. Fishman, McCarron and Moskowitz), Physical Medicine and Rehabilitation (Dr. Mahajan), Neurology (Drs. Gorin and H. Singh), Addiction Medicine (Dr. Kreis), Hospice & Palliative Medicine (Drs. Fishman and MacMillan), Acupuncture (Dr. Wilsey), Radiology (Dr. Dublin), Public Health (Dr. Moskowitz), Psychology (Dr. Symreng), Pharmacology (Dr. Holtzman), Law and Bioethics (Dr. Rich), Physical Therapy (Tim McGonigle and Michael Moore), and Mindfulness Based Stress Reduction (Dr. Howton). The clinical program integrates outpatient and inpatient settings, offering a broad

array of diagnostic and therapeutic approaches, including pharmacological, surgical, psychological, rehabilitative, and alternative modalities.

The goal of improving quality of life is infused throughout the Fellowship's culture and is expressed through clinical care, teaching, research, and advocacy. In addition to faculty teaching the Fellows and other trainees, the Fellows are actively involved in this process as well. Fellows supervise Residents and medical students rotating on the Pain service and are asked to take on the role of junior faculty for these trainees.

Our Fellows are taught that a comprehensive approach to patient care works best in achieving tangible results. Therefore, they learn how to optimize patient outcomes for both physical and emotional wellbeing by understanding how to integrate pharmacological, interventional, psychological, and alternative modalities.

Learning Objectives – Core Competencies

At the completion of the rotation we require Fellows to obtain competencies in the 6 areas below to the level expected of a Fellow at his/her current stage of training:

- A:** Patient Care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
- B:** Medical Knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.
- C:** Practice-Based Learning and Improvement that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care.
- D:** Interpersonal and Communication Skills that result in effective information exchange and teaming with patients, their families, and other health professionals.
- E:** Professionalism, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.
- F:** Systems-Based Practice, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.

Patient Care

Patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

Quality and Safety

The overall core aims of patient care to improve the quality and safety of patient care as defined by the Institute of Medicine (Crossing the Quality Chasm, 2001) are as follows:

Patient care must be:

• Safe:	Avoiding injuries to patients from the care that is intended to help them.
• Timely:	Reducing waits and sometimes harmful delays for both those who receive and those who give care.
• Effective:	Providing services based on scientific knowledge to all who could benefit, and refraining from providing services to those not likely to benefit.
• Efficient:	Avoiding waste, including waste of equipment, supplies, ideas, and energy.
• Equitable:	Providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.
• Patient-Centered:	Providing care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions.

Clinical Management

Fellows are expected to understand relevant principles, apply knowledge in practice, and to demonstrate abilities in the clinical management of patients with acute and chronic pain. These include the following:

Pain Assessment and Measurement

- Assess pain and outcome of pain treatment using history, clinical examination and pain measurement tools.
- Recognize the limitations of pain measurement techniques, particularly in certain patient populations/situations (e.g. children, those in whom a language barrier exists between the patient and health-care provider, and those with cognitive impairment).

Acute and Chronic Pain

- Have an understanding of:
 - Anatomy, physiology and pharmacology of pain transmission and modulation.
 - Neuro-endocrine and metabolic responses to surgery and other acute and chronic stressors and impact of analgesic techniques.
 - Consequences of poorly controlled pain.
 - Current evidence for and against pre-emptive analgesia and clinical implications.
 - Current evidence for the effect of analgesic technique on morbidity and mortality.
 - Importance of aggressive multimodal postoperative rehabilitation.

- Relationship between acute and chronic pain, including factors involved in progression from one to the other and potential interventions to prevent such progression.
- Have an understanding of the more common pain syndromes:
 - Spinal pain.
 - Myofascial pain.
 - Neuropathic pain.
 - Headache and orofacial pain.
 - Rheumatologic aspects of pain.
 - Complex regional pain syndromes.
 - Visceral pain.
 - Urogenital pain.
 - Cancer pain, including palliative and hospice care.
- Choose the most appropriate technique of acute and chronic pain management:
 - Pharmacological techniques (opioid and non-opioid) via a variety of routes.
 - Regional techniques including central neuraxial, plexus and peripheral nerve blockade.
 - Non-pharmacological techniques (physical therapy, psychological therapy, and complementary and alternative therapies).
- Formulate a pain management plan based upon:
 - Integration of medical knowledge with clinical data.
 - Prioritization of pain management goals and medical issues appropriate for the level of care.
 - Patient preference, physical and mental status, and available expertise and technology.
 - Special requirements in specific patient groups (e.g., the elderly, children, pregnant and postpartum patients; obstructive sleep apnea, concurrent hepatic or renal disease; non-English speaking; cognitive impairment).
 - Special requirements in patients with opioid-tolerance and/or a substance abuse disorder, including an understanding of guidelines and regimens for analgesic drug use (equianalgesic dosing for opioids; tolerance, dependence, and pseudo-addiction).
 - Special requirements under specific clinical situations (e.g., spinal cord injuries, burns, acute and chronic spine pain, musculoskeletal pain, acute medical pain, acute and chronic cancer pain and patients in the Intensive Care).
- Include in a pain management plan:
 - Appropriate evaluation of the patient's pain.
 - Informed consent, including disclosure of risk and appropriate documentation.
 - Patient education about the selected treatment plan and alternatives.
- Recognize common presentations of acute musculoskeletal pain (e.g., rib fracture, acute back pain), other non-surgical acute pain syndromes (migraine, renal colic), and cancer pain syndromes.
- Identify when to seek advice from, or refer to, another specialist.

Cancer Pain and Palliative Care

- Undertake assessment of pain in patients with cancer based upon:
 - Understanding of the multiple potential etiologies of pain associated with cancer.
 - Differentiation between somatic, visceral, and neuropathic pain.

- Evaluation of psychological, social, cultural and spiritual issues.
- Undertake treatment of cancer-related pain syndromes based on therapies available (including chemotherapy, radiotherapy, surgery, invasive and non-invasive analgesic techniques, physical therapy and psychological therapy).
- Understand guidelines and regimens for analgesic drug use including equianalgesic dosing for opioids; dependence, tolerance, pseudo-addiction, and addiction and their management in the patient with cancer.
- Understand clinical approach to the multi-dimensional treatments that comprise palliative care, and an understand the strategies to integrate pain management into this multi-dimensional treatment model.
- Identify when to seek advice from, or refer to, another specialist.

Neuropathic Pain

- Understand diagnostic criteria, clinical features and management of specific neuropathic pain syndromes including:
 - Central pain (e.g., pain after stroke, thalamic pain, spinal cord injury pain, deafferentation pain, phantom limb pain).
 - Neuralgias (e.g., trigeminal neuralgia, postherpetic neuralgia, occipital neuralgia, ilioinguinal neuralgia, meralgia paresthetica).
 - Painful peripheral neuropathy (e.g., metabolic, toxic, ischemic).
 - Pain after nerve injury (e.g., neuroma).
 - Post-surgical pain syndromes (e.g., post-thoracotomy, post-CABG pain, post-mastectomy, post-amputation pain, phantom pain).
 - Complex regional pain syndrome types I and 2 (including the differentiation of sympathetically-maintained from sympathetically-independent pain).
- Identify when to seek advice from, or refer to, another specialist.

Pain in Children

- Recognize and understand the ways in which acute and chronic pain in children differ from pain in adults, including:
 - The effect of developmental stage on assessment and management of pain in children.
 - The selection of pain assessment tools for children of different developmental stages.
 - Principles of managing acute, procedural and chronic pain in children.

Pain in the Elderly

- Understand pain management in the elderly, taking into account:
 - The epidemiology of pain syndromes in the elderly.
 - Physiological changes associated with ageing and effects of these on pain and pain management (including changes in pharmacokinetics, pharmacodynamics, and pain biology).
 - Effects of concurrent disease, and psychological, social and cognitive changes on assessment and management of pain.
 - Risks associated with polypharmacy in the elderly.

Use of Diagnostic Studies

- Understand the indications for ordering various diagnostic studies and to develop treatment plans based on the results.
 - X-rays.

- CT.
- MRI.
- Ultrasound.
- Electro-diagnostic studies (EMG/NCS).

Clinical Skills

Fellows will provide, or assist with, appropriate pain management in both inpatient and outpatient settings.

Fellows must document involvement with a minimum of:

- 50 different patients for whom they had primary responsibility, followed over at least two months.
- 15 new inpatients with chronic pain.
- 50 new inpatients with acute pain.
- 25 patients who undergo interventional procedures.
- 20 cancer patients.
- 10 palliative care patients.

Clinical evaluation

Fellows will demonstrate skills in the clinical evaluation of patients with acute and chronic pain by:

- Obtaining a specific pain history
 - Onset, location, nature, duration, intensity, aggravating and relieving factors.
 - Physical, psychological and social consequences of the patient's pain.
 - Current and past pain treatments and outcome.
 - Other relevant history (past patterns of drug use or misuse, family history, medical and surgical history).
 - Pain beliefs.
 - Treatment expectations.
- Interpreting relevant investigations.
- Formulating a management plan and evaluating outcome.

Anesthesiology skills

- Demonstrate competency in obtaining intravenous access in a minimum of 15 patients.
- Demonstrate competency in basic airway management, including a minimum of mask ventilation in 15 patients and endotracheal intubation in 15 patients.
- Obtain and maintain certification in basic life support and advanced cardiac life support.
- Demonstrate competency in the management of sedation, including direct administration of sedation to a minimum of 15 patients.
- Demonstrate competency in the administration of neuraxial analgesia, including placement of a minimum of 15 thoracic or lumbar epidural injections using an interlaminar technique.

Physical Medicine and Rehabilitation skills

- Understand how to perform a comprehensive musculoskeletal and appropriate neuromuscular history and examination with emphasis on both structure and function as it applies to diagnosing acute and chronic pain problems and developing rehabilitation programs for them.
- Understand how to assess static and dynamic flexibility, strength, coordination and agility for peripheral joint, spinal, and soft tissue pain conditions.
- Understand the natural history of various musculoskeletal pain disorders and how to appropriately integrate therapeutic modalities and surgical intervention in the treatment algorithm.
- Be able to perform a comprehensive musculoskeletal and neuromuscular exam on a minimum of 15 patients.
- Be able to demonstrate proficiency in the clinical evaluation and rehabilitation plan development of a minimum of 5 patients.
- Understand the indicators and interpretation of electro-diagnostic studies.
- Understand the concepts of functional disability assessment.
- Understand the concepts of functional and vocational rehabilitation.

Psychiatry skills

- Understand how to perform a complete psychiatric history with special attention to psychiatric and pain co-morbidities.
- Be able to a complete mental status examination under the supervision of a faculty observer on a minimum of 15 patients.
- Understand the impact of frequent psychiatric and pain co-morbidities, which include substance related, mood, anxiety, somatoform, factitious, and personality disorders.
- Understand the effects of pain medications on mental status.
- Understand the principles and techniques of psychosocial therapies, with special attention to supportive and cognitive behavioral therapies, sufficient to explain to a patient and make a referral when indicated.

Neurology skills

- Understand how to elicit a directed neurological history, perform a detailed neurological examination to include at least mental status, cranial nerves, motor, sensory, reflex, cerebellum examinations, and gait in 15 patients. Faculty shall verify this experience in a minimum of 5 observed patient examinations.
- Understand how to interpret basic neuro-imaging and identify significant findings, to include at least MRI and CT of the spine and brain on a minimum of 15 CT and/or MRI studies drawn from the examples within the following areas: brain, cervical, thoracic, and lumbar spine.
- Understand the indicators and interpretation of electro-diagnostic studies.

Technical skills

Fellows are required to obtain competency and proficiency in:

- Obtaining informed consent from the patient, including discussing and answering any patient questions related to the risk and benefits associated with both the procedure and the medications utilized for the procedure.
- Setting up the procedure suite with the appropriate medications, needles, and other equipment needed for performing the intended procedure.
- Being able to perform procedures in patients who do and do not require sedation.

- Being able to manipulate C-arm fluoroscope to allow him/her to safely advance a needle to its intended target while at the same time being cognizant of radiation safety to the patient, self, nurse, medical assistant, and other personnel in attendance.
- The anatomy, technique, indications, contraindications, complications and management of complications of various interventional procedures.
- Central neuraxial injections:
 - Epidural injections.
 - Translaminar/interlaminar.
 - Transforaminal.
 - Caudal.
 - Facet joint procedures:
 - Intra-articular facet joint injection.
 - Medial branch nerve block.
 - Radiofrequency ablation of medial branch nerve.
- Peripheral nerve blocks.
- Peripheral joint injections.
- Soft tissue injections.
- Sympathetic ganglion blockade:
 - Stellate ganglion blockade.
 - Celiac plexus blockade.
 - Lumbar sympathetic blockade.
 - Superior hypogastric blockade.
 - Impar ganglion blockade.

Fellows need to understand the anatomy, technique, indications, contraindications, complications and management of (but not necessarily be able to perform):

- Intradiscal procedures.
- Spinal cord stimulator implantation.
- Intrathecal pump implantation.
- Regional techniques (including knowledge of anatomy, technique, indications, contraindications, complications and their management) including:
 - Peripheral and plexus blocks of the upper and lower limb.
 - Cranial nerve blocks.

Medical Knowledge

Medical knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

Basic sciences

Fellows are required to review the relevant subjects in the basic sciences and to apply basic science principles to clinical practice. Basic science subjects relevant to pain management include the following:

Neurobiology of Pain

- Overview of nociceptive pathways, neurotransmitters, “wind-up” and other phenomena.

- Multi dimensional aspects of pain; role of physiological, psychological and environmental factors.
- Concepts of incident and background pain, the concept of the biopsychosocial model of illness.

Pharmacology of Analgesic Agents

This includes pharmacokinetic and pharmacodynamic principles, drug interactions, side effects, and toxicities.

- Knowledge of the pharmacology of:
 - Opioids.
 - Acetaminophen.
 - Non-steroidal anti-inflammatory drugs (NSAIDs).
 - Corticosteroids.
 - Antidepressants (TCAs, SNRIs and SSRIs).
 - Anticonvulsants.
 - Benzodiazepines.
 - Alpha-2 agonists.
 - NMDA-receptor antagonists.
 - Experimental agents for analgesia.
 - Local anesthetics.
 - Anti-emetics.
 - Agents used to treat hypotension associated with neuraxial blockade.
 - Anti-migraine agents.
 - Topical agents (e.g., NSAIDs, capsaicin).
 - Transdermal agents (e.g., lidocaine patch).
 - Neurolytic agents.
- Knowledge of different routes of analgesic drug delivery:
 - Oral.
 - Sublingual.
 - Buccal.
 - Intramuscular.
 - Intranasal.
 - Rectal.
 - Subcutaneous (including continuous infusion).
 - Intravenous (including continuous infusion).
 - Patient-controlled analgesia (PCA) via different routes (i.e., intravenous, subcutaneous, and epidural).
 - Neuraxial
 - Other routes: e.g., topical; transdermal; intra-cerebroventricular; intra-articular; incisional.
 - Factors governing choice of route.
 - Side effects relevant to particular route.
 - Principles of additive and synergistic effects when agents are combined.

Interventional Therapies

- Understand how to interpret relevant investigations (including x-rays, CT scans, MRIs and electro-diagnostic studies) and apply the findings when determining which intervention is appropriate.
- Knowledge of which interventions are appropriate for individual patients.
- Understand the indications, risks, and complications of procedures.
- Understand if surgical approaches are appropriate, including referral to the appropriate surgical specialty.

Principles of Pain Medicine

History, Philosophy and Medicolegal Aspects

- Concepts of pain and suffering.
- Relevance of the subjective nature of pain report to pain assessment.

- Relevant ethical principles including professional responsibility (professional power, vulnerable groups), autonomy and dignity, national and regional legislative and ethical issues regarding death, particularly with respect to euthanasia.
- National and regional issues relevant to the prescription of controlled substances.
- Informed consent with focus on issues relevant to the patient with pain.
- Confidentiality principles, including relevant national and regional legislation.
- Principles of evidence-based medicine as they apply to the assessment of pain interventions.
- Epidemiological aspects of persistent pain, including social cost.

Psychological, Social and Cultural Issues

- The importance of psychological (emotional and cognitive), social, and other factors in the presentation and management of pain with emphasis on:
 - Factors involved in the wide variation in individual response to tissue injury.
 - The relationship between depression and persistent pain.
 - The role of anxiety and/or depression in acute pain.
 - Differentiation of active and passive coping strategies
 - The role of illness behavior.
 - Factors that contribute to impairment and disability.
 - The role of national and regional compensation and other third party issues in the presentation of pain and response to treatment.
 - The influence of the health care provider on the response to pain treatment.
 - The importance of an interdisciplinary approach to pain assessment and treatment including the potential role of other members of the pain team (particularly psychiatrist, clinical psychologist, physical therapist, nursing staff, occupational therapist, social worker).
 - The placebo effect and its implications for treatment of pain.

General Topics, Research, and Ethics

- Epidemiology of pain.
- Gender issues in pain.
- Placebo response.
- Multidisciplinary pain medicine.
- Organization and management of a pain center.
- Continuing Quality Improvement, Utilization Review and Program Evaluation.
- Patient and provider safety.
- Designing, reporting, and interpreting clinical trials of treatment for pain.
- Ethical standards in pain management and research.
- Animal models of pain and ethics of animal experimentation.

Substance Abuse

- Concepts of tolerance, physical dependence, addiction and pseudo-addiction.
- Iatrogenicity in tolerance and dependence.
- Common licit and illicit drugs of abuse.
- The importance of a multidisciplinary approach to pain management in patients with a history of substance abuse (including monitoring, drug therapy, rehabilitation).

- Principles of detection, initial intervention and ongoing treatment of substance abuse in doctors (including awareness of services available for treatment of the impaired doctor).

Practice Based Learning and Improvement

Practice based learning that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care.

Educational Skills

Fellows are expected to build on the educational skills and develop the following:

- A review of their personal learning plan.
- Identification of the factors that lead to deviation from their original learning plan.
- A learning plan in which basic science teaching is linked to clinical practice.

The Fellow should acquire the following core skills:

- Maintain an independent learning program.
- Develop a study plan for the rest of the training period.
- Review study plans and correct for deviations: e.g., develop corrective action plan to address deficiencies in knowledge or experience.
- Reflect on previous learning experiences with the aid of the Self Learning Program.
- Link basic science teaching with clinical practice.
- Study effectively.
- Participate in small-group learning and educational activities.
- Be aware of decision-making processes.
- Manage time effectively for study, work, and home/leisure.
- Give and receive feedback.
- Develop insight into personal limitations.
- Use the internet as a clinical resource.
- Conduct and appraising literature searches.
- Appraise journal articles including the application of statistics.
- Apply evidence-based medicine to direct clinical care.
- Develop presentation skills in both informal presentations of patients to the Attending and in a more formal presentation given during Grand Rounds.

Interpersonal and Communication Skills

Interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and other health professionals.

Fellows are expected to develop interpersonal and communication skills relevant to the team approach to pain management in the following areas:

- Demonstrate communication skills in dealing with patients in pain, including:
 - Dealing with issues of grief and loss.
 - Undertaking conflict management (e.g., in dealing with difficult patients, in dealing with other staff).

- Appropriate use of (non-medical) language in communicating with patients and their families, including with specific patient groups such as children.
- Demonstrate communication skills with other health professionals by
 - Presenting results of patient assessment at multidisciplinary meetings where appropriate.
 - Undertaking consultation (verbal and/or written) with other medical and paramedical specialists, as indicated by the clinical situation.
 - Completing daily progress notes in a timely manner.
- Communicate effectively with colleagues, patients and others.
- Establish effective relationships with patients, families, colleagues and other healthcare workers.
- Develop an empathetic approach to patients that is appropriate and respectful for their age, developmental, social and other factors.
- Communicate effectively with language translators for patients who have limited or no English language skills.
- Communicates effectively over the telephone with patients, family members and colleagues.
- Develop facilitation skills, such as tutoring in small-group learning and conducting small-group meetings.
- Understand and comply with institutional and federal regulations pertaining to patient confidentiality; i.e., HIPAA regulations.
- Use the internet, EMR and other informational databases effectively to communicate with colleagues and patients regarding clinical and within the HIPAA regulations respecting patient confidentiality.
- Manage patient care, institutional and personal issues effectively with patience, calm, good humor and insight.
- Work as a member of a team, but to assume responsibilities and/or delegate duties as a team leader when necessary.
- Resolve conflicts and issues using sound ethical reasoning.
- Demonstrate exemplary practice as a member of a multidisciplinary team, by exercising flexible leadership, consultation and appropriate delegation.
- Show respect for the expertise and concerns of other team members.
- Demonstrate insight into one's own limitations, abilities and areas of expertise.
- Demonstrate respect for others, including a responsibility to work as a team and to practice conflict resolution.
- Value human diversity.
- Respect the views of others.

Professionalism

Professionalism, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

Attitudes and Behaviors

Fellows are expected to develop the attitudes and behaviors that are obligatory in specialist medical practice. Core attitudes and behaviors that Fellows must cultivate during the whole period of training include the following.

Specialist Practice

- To attain the attributes of a specialist as a:
 - Medical expert
 - Communicator
 - Collaborator
 - Manager
 - Health advocate
 - Scholar and teacher
 - Professional
- To practice good communication with colleagues, patients and others.
- To show respect for nurses and other health care professionals involved in the care of the patient.
- To conduct pain rounds in an efficient manner and make sure all the required documentation is fully completed.
- To dress in a way that shows respect for their patients and other health care professionals.
- To answer all pages in a timely manner.
- To work as a member of a team, but to assume responsibilities and/or delegate duties as a team leader when necessary.
- To commit to, and believe in, a culture of safety and ethical, high quality care.
- To accept that medical knowledge and skills are not the only requirements of specialist practice.
- To be aware of medico-legal obligations relating to medical practice.
- To have insight into one's own limitations, abilities and areas of expertise.
- To commit to lifelong continuing professional development.

Professionalism and Ethics

To commit to, and believe in the ethical and professional principles of:

- Altruism: the best care for the patient must be the principal driving force of practice.
- Patient autonomy: patients' ability to determine their treatment.
- Beneficence: the principle of "doing good" to patients.
- Non-maleficence: the principle of not doing harm to patients.
- Fidelity: faithfulness to one's duties and obligations. This principle underlies excellence in patient care, confidentiality, telling the truth, a commitment to continuing professional development and lifelong learning, and not neglecting patient care.
- Social justice: the right of all patients to be fairly treated.
- Utility: the principle of doing the most good for the greatest number of people.
- Duty to oneself in terms of personal health care, and maintenance of competence to practice.
- Accountability: a physician is responsible for his/her actions.
- Honor and integrity in all conduct, including the generation and use of resources.
- Respect for others, including a responsibility to work as a team and to practice conflict resolution.
- Appropriate response to clinical error.

Patient Considerations

To commit to, and believe in, the rights of patients with respect to:

- Autonomy.

- Confidentiality of the doctor-patient relationship.
- Appropriate, excellent clinical care, including pre-operative assessment.
- Informed consent including issues related to the pregnant minor.
- Comprehension of the risks of anesthesia techniques.
- Appropriate care irrespective of race, culture, gender, and socio-economic status.

Research Considerations

- To value rigorous educational and scientific processes.
- To distinguish between practices with a sound scientific basis and those that require further objective assessment.
- To commit to the ethical principles of research.

Systems-Based Practice

Systems-based practice, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.

Inpatient Hospital Environment

- The role of the Pain Management specialist in postoperative, acute, non-cancer, and cancer pain management and inpatient pain services.
- Principles of managing an inpatient pain service.
- Policies and procedures with respect to referral to other hospital services.
- Informed consent relative to pain management.
- Regulations relating to restricted drugs as per national or state guidelines.
- Principles of occupational health and safety such as lifting and positioning patients, infection control and sharps policies.

Clinic Environment

- Clinic scheduling and resource allocation for patients referred to the clinic.
- Principles of management of a specialty pain referral service.
- Patient triage and emergency scheduling of pain consultations.
- Planning and physical layout of the clinic; e.g., consultation rooms, procedure and recovery rooms.
- Lighting, safety, and infection and pollution control in procedure rooms.
- Services and equipment in procedure and recovery rooms specific for patient's undergoing invasive pain procedures.
- Principles of staffing the clinic and procedure rooms.
- Informed consent relative to invasive pain procedures.
- Regulations relating to restricted drugs as per national or state guidelines.
- Principles of occupational health and safety such as lifting and positioning patients, infection control and sharps policies.

Professional Practice

- Policies, recommendations and guidelines in professional practice as contained in professional documents from the colleges and boards responsible for pain medicine services.
- Understand the organization of a multidisciplinary outpatient pain clinic and an inpatient pain service, including the role of such services in education (of patients and staff), collaboration, documentation and administration, and the role of protocols and audit.

Assessment

- **Fellow performance on rotation:** Fellows will be assessed on their clinical performance using the standard Rotation Assessment Form residing on **eValue**.
- **Review clinical experiences on rotation:** The rotation supervisor will review the clinical experience obtained by the fellow by examining the report from **eValue** summarizing the fellow's case log.
- **Core Clinical Competency:** Assessed in the areas outlined in the Rotation Objectives of training and commensurate with the teaching mission of the UCDHS.

Our fellows are required to obtain core competencies in the six areas below to the level expected of a new practitioner. Our programs define specific knowledge, skills and attitudes required, and provide educational experiences for fellows to demonstrate:

- ☑ **Patient Care** — compassionate, appropriate and effective for treatment of health problems and promotion of health
 - ☑ **Medical Knowledge** of established and evolving biomedical, clinical and cognate sciences, and applying these to patient care.
 - ☑ **Practice-Based Learning and Improvement** involving investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care
 - ☑ **Interpersonal and Communication Skills** that result in effective information exchange and teaming with patients, their families, and other health professionals.
 - ☑ **Professionalism**, as manifested by a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population
 - ☑ **Systems-Based Practice**, as manifested by actions demonstrating an awareness of and responsiveness to the larger context and system of health care, and the ability to effectively utilize system resources to provide optimal patient care
- **Assessment of academic performance:** Currently, there is no ITE conducted by the American Board of Anesthesiology for Pain fellows. Therefore, our faculty have developed a written examination which is administered at the half-way point and end of the fellowship to document adequate medical knowledge commensurate with the fellow's level of training.