UC Davis Division of Pain Medicine
Pain Fellowship Overview

ACGME ACCREDITATION: Yes
NUMBER OF FELLOWS: 6
PROGRAM DURATION: 1 year
FELLOWSHIP START/END DATES: August (5 Fellows)
                                       January (1 Fellow)

HOSPITAL OVERVIEW:
University of California, Davis (UC Davis) Medical Center serves a 65,000-square-mile area that includes 33 counties and 6 million residents across Northern and Central California. The acute-care teaching hospital is licensed for 619 beds and maintains an annual budget of roughly $1 billion.

With more than 6,500 employees, UC Davis provides vital care to more than 200,000 patients every year, admitting 25,000 patients for extended care and handling more than 900,000 visits. The medical center's emergency room sees an average of 150 patients every day.

FELLOWSHIP OVERVIEW:
The UC Davis Pain Medicine Fellowship is a 1-year, ACGME-accredited program that accepts 6 Fellows per year. Because our 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. 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, Kreis, Sheth, and N. Singh), Internal Medicine (Drs. Fishman, MacMillan, and McCarron), Psychiatry (Drs. Fishman, McCarron and Moskowitz), Physical Medicine and Rehabilitation (Dr. Mahajan), Neurology (Drs. Gorin and Dr. Lenaerts), Addiction Medicine (Dr. Kreis), Hospice & Palliative Medicine (Drs. Fishman and MacMillan), Acupuncture (Ian Koebner), Radiology (Dr. Dublin), Public
Health (Dr. Moskowitz), Psychology (TBA), Pharmacology (Dr. Holtsman), Law and Bioethics (Dr. Rich), Physical Therapy (Tim McGonigle and Michael Moore), and Mindfulness Based Stress Reduction (Dennis Warren). The multidisciplinary faculty is dedicated to training and educating future leaders in Pain Medicine who utilize comprehensive and innovative approaches to the evaluation and management of acute, cancer-related and chronic non-cancer pain.

The mission of the fellowship is to fully prepare future pain specialists for the demands of practice in Pain Medicine. The focus of the fellowship is on 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 the goals of interventional, medical, and interdisciplinary pain care, as well as to acquire the necessary skills to substantially contribute to the field. 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. As a symbol of the importance we place on this role, at the end of each Fellowship year, the faculty gives an award to one Fellow in recognition for “Excellence in Teaching.”

Teaching is a core activity within the fellowship, as reflected in our faculty maintaining one of the most didactically intensive Pain fellowships. The fellowship year begins with an intensive 4-week “Introduction to Pain Medicine Seminar” (two hours per day, Monday – Friday) that introduces the fellow to key areas of Pain Medicine. Upon conclusion of the 4-week orientation seminar, the regular didactic program of the fellowship begins. There are two learning sessions each day, except on Wednesday when there is usually just one session. The first daily learning session occurs each day from 7:45 am – 8:15 am. The second learning session takes place from 12:00 pm – 1:00 pm. every day, except most Wednesdays.

Individual didactic sessions, case conferences, and direct outpatient and inpatient care are the cornerstone of the fellowship year. Fellows are constantly challenged and encouraged to enhance their competency in patient care skills, medical knowledge, interpersonal communication skills, professionalism, practice based learning, and systems based practice. Through intensive discussion among all of the clinicians in our clinic during daily case conferences, patients benefit from a remarkably broad-based and diverse brand of pain care.

Patient care is delivered within a large academic medical school and tertiary medical center. Patients are referred from a wide catchment area, representing an unusually diverse population of adults and children with almost every possible pain disorder. Care is delivered in both outpatient and inpatient settings where fellows assume the role of lead physician, under the supervision of experienced staff. All treatments offered at the UC Davis Medical Center are individually based, taking into account physical and psychological dimensions of pain. Treatments are offered in collaboration with the patients’ primary care providers. These include a full range of pharmacological therapies, including oral and IV infusions, neuropathic analgesics, and chronic opioid therapies; interventional procedures; acupuncture; psychological treatment, including cognitive behavioral therapy, stress reduction, biofeedback, etc.; and, physical therapy.

Outpatient care takes place in our modern 375,000 square foot facility with a large medical suite for new patient evaluations and follow-up visits, as well as three fluoroscopy suites/operating rooms for the many interventional procedures (some of which are performed with ultrasound) that are performed each day. Additionally, interventional
procedures may be performed in our fluoroscopy suite within the multidisciplinary UC Davis Spine Center, Folsom clinic, or in the main hospital operating rooms for our permanent advanced implantable devices, such as spinal cord stimulators or intrathecal pumps. Consistent with our fellowship's tradition of providing our trainees with the broadest experience in Pain Medicine, fellows are taught many of the state-of-the-art interventional procedures necessary in order to offer patients the most comprehensive pain management options possible. These procedures include:

## Interventional Procedures
- Intrathecal pump refill, trial, and implantation
- Bier block
- Blood patch
- Celiac plexus block
- Coccyx injection
- Dorsal root ganglion stimulation
- Epidural steroid injection (caudal, translaminar and transforaminal)
- Facet joint injection
- Genitofemoral nerve block
- Ilioinguinal nerve block
- Impar ganglion block
- Infusions (ketamine and lidocaine)
- Hip joint injection
- Intrathecal pump refill
- Intercostal nerve block
- Knee joint injection
- Lumbar discography
- Lumbar sympathetic ganglion block
- Medial branch nerve block
- Occipital nerve block
- Piriformis injection
- Pulsed radiofrequency ablation
- Radiofrequency neurotomy
- Sacroiliac joint injection
- Shoulder joint injection
- Spinal cord stimulator trial and implantation
- Stellate ganglion block
- Superior hypogastric ganglion block
- Third occipital nerve block
- Trigger point injection

In summary, 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 modalities.