

# David Grant Medical Center (DGMC)

## Emergency Medicine Clerkship Syllabus



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### CONTACT INFORMATION:

Associate Program Director: Roderick W. Fontenette, Lt Col, USAF, MC, FS, FACEP  
Office Number: (916)-734-8570  
E-mail: [ucdafem@gmail.edu](mailto:ucdafem@gmail.edu)

Assistant Program Director: Rory Stuart, Lt Col, USAF, MC, FS  
Office Number: (916)-734-8570  
E-mail: [ucdafem@gmail.edu](mailto:ucdafem@gmail.edu)

## DESCRIPTION/OVERVIEW

The emergency medicine clerkship is a required fourth year clerkship at many institutions. Students must successfully complete all required third year clerkships as a prerequisite for the emergency medicine rotation. Following an initial didactic series, students will work approximately 12 nine-hour shifts where they will be supervised by board-certified emergency medicine faculty. We believe that autonomy and responsibility are essential for the student to learn the fundamental approach to the patient with undifferentiated urgent or emergent conditions. On our clerkship, students function as the primary caregiver for their patients, working closely with supervising faculty to develop and implement management plans. There is ample opportunity for the performance of procedures.

The clerkship team regularly reviews student feedback for ways to improve the clerkship.

## CLERKSHIP GOALS AND OBJECTIVES

### Clerkship Goals:

The student will learn the fundamental approach to caring for the undifferentiated patient with urgent or emergent conditions. The student will be required to identify the patient's problem with a focused history and physical examination, taking into consideration not only the patient's medical condition, but also the psychosocial aspects of the problem. The student will implement solutions to these problems under the direct supervision of the emergency medicine faculty. The student will also learn to consider unexpected circumstances that arise in the emergency department.

### Clerkship Objectives:

The DGMC Department of Emergency Medicine endorses six core competencies. All of them are applicable to the Emergency Medicine Clerkship. The course objectives reflect the emphasis of the clerkship but are not an all-inclusive list of what you will learn in the emergency department.

Upon completion of the emergency medicine clerkship, learners will...
Obtain an accurate problem-focused history and physical examination from a patient presenting to the emergency department with an undifferentiated complaint.
Interpret clinical data and be able to recognize immediately life-threatening conditions that present to the emergency department.
Formulate a differential diagnosis for their patient's chief concern, prioritizing the likelihood of the diagnosis and considering worst-case diagnoses.
Develop a diagnostic and therapeutic plan, based on the differential diagnosis, for both an undifferentiated concern and specific disease processes.
Describe the underlying pathophysiology of common cardiovascular, neurologic, traumatic, and toxicologic emergencies and use this information in the development of a therapeutic plan for an acutely ill patient
Determine the appropriate care setting for management of patients presenting with an acute medical condition
Demonstrate appropriate communication during provider changes and transitions of care, using effective strategies to ensure patient safety
Demonstrate effective communications skills with patients, families, and other members of the health care team.
Act in a professional manner, including being punctual, conscientious, responsible and honest.

Upon completion of the emergency medicine clerkship, learners will...
Recognize the role of emergency medicine in the health care system, including providing access to care at all hours to all patients.
Identify health care challenges faced by underserved populations and deliver quality and equitable care to all patients presenting with an acute condition

## CLERKSHIP POLICIES

### Attendance

*If the student feels they are going to arrive to a shift late, they are to notify the DGMC Emergency Department immediately. Multiple infractions will not be tolerated and will result in disciplinary actions as well as the student being dismissed from the rotation.*

### Professionalism

#### What it means to be a professional in the Emergency Department.

- As the patient's primary care giver you are an integral part of the ED team. You are expected to be present and on time for your clinical shifts. Please see the Clinical Shift Schedule Change and Illness Policy below. If an extraordinary circumstance occurs that precludes you from reporting for clinical duties, you must notify both the attending physician and the military Program Director immediately.
- Emergency medicine is a specialty with a fluctuating pace depending on patient flow. As such, being present in the department at all times during your clinical shifts is important to your education. Meals during a shift should be eaten on the go. If time permits you may have time to grab some food and bring back to the department, but extended absence from the department for meals is not permitted.
- Appropriate attire for duty in the emergency department is scrubs. White coats may be worn but are not required.
- Students must respect patient confidentiality.

### Student Evaluation of the Clerkship

Students will have an opportunity to evaluate the Emergency Medicine Clerkship after taking the final exam.

Each student is provided access a short survey about the rotation and its different elements. Suggestions on improving the rotation are welcome.

## Learner Accommodations

Students can fly into Sacramento, Oakland or San Francisco International Airports. If flying into Oakland or San Francisco, there will be toll roads, so please bring cash with you for the drive.

Please obtain a rental car as per your school's policy.

You will be responsible for making your lodging accommodations.

During your four weeks here, you will stay at:

Westwind Inn, Travis AFB  
570 Travis Ave., Bldg. 402  
Travis AFB, California, 94535  
Phone: 707-424-8000  
E-mail: [westwindinn@travis.af.mil](mailto:westwindinn@travis.af.mil)  
Website: <http://af.dodlodging.net/propertys/Travis-AFB>

**Note:** If you are rotating here on an ADT, you will spend two weeks on base and two weeks rotating at UC Davis. Please refer to the end of this document for lodging options while at UC Davis.

## LEARNING EXPERIENCES

### Clinical Learning Experiences:

Students will work twelve nine-hour shifts or equivalent during their rotation, divided between day, evening, and night shifts. The schedule will be distributed at the beginning of the month. Any schedule requests should be directed to the Clerkship Director/Assistant Program Director Maj Rory Stuart [ucdafem@gmail.edu](mailto:ucdafem@gmail.edu) at least one month prior to the beginning of the rotation. Students will be scheduled for shifts through the last day of the month. If any scheduling conflicts arise, please contact Maj Helbling immediately.

- One of the challenges of emergency medicine is the need to cover the emergency department 24 hours a day, 7 days a week, 365 days a year. This will result in very different schedules than the more common normal business hours from Monday-Friday. Accepting this challenge is part of understanding the life of an emergency medicine physician, i.e. we need to step up to cover weekends, nights, and holidays. We are confident that you can meet this challenge during these next 4 weeks and will find this rotation an important component of your transition from medical student to physician.
- During the clinical shifts, the student will be the primary caregiver for his/her assigned patients. He/she will be responsible for evaluating the patient and with faculty guidance, will develop and implement a focused diagnostic and treatment plan.
- Students perform (or assist with) procedures on their patients as needed, including suturing, arterial puncture and/or line placement, central venous access, and airway management. They will also interpret radiographs and ECGs.

## Clinical Shift Schedule Change and Illness Policy

Each student is scheduled for approximately twelve clinical shifts. The schedules are posted in the department and are included in the orientation folder. The schedules have been thoughtfully constructed to accomplish the following:

- Exposure to a wide variety of emergency department patients. The types of patients and problems encountered, and the types of resources available to care for these patients, vary by the time of day and the day of the week. Each student is therefore scheduled for both weekend and weekday shifts, which are distributed among days, evenings, and nights.
- Ample time for reading and independent study.
- Exposure to faculty at the off-campus venues with a special interest in teaching.
- Maintenance of an optimal faculty to student ratio.
- Facilitation of learning by respecting circadian physiology and avoiding long stretches of clinical shifts with no interposed days off.

Accordingly, changes to your assigned schedule are not permitted. Exceptions will be made on a case-by-case basis for extraordinary circumstances, such as a death or illness in the family. Schedule changes are not granted for personal reasons. Any request for changes must be submitted to the clerkship director or clerkship site coordinator for approval and must conform to duty hour guidelines.

In the case of illness, you should not work if your illness poses a threat to patients or if you are physically incapacitated. You must contact the clerkship director or clerkship site coordinator, and the attending physician on duty in the emergency department where you are scheduled to work, prior to the beginning of the shift for which you are scheduled. You are expected to seek medical evaluation from your personal physician or in the emergency department if your illness lasts more than one day. Be sure to obtain the phone number to the department.

## Student Patient Encounters

It is required that each student sees a variety of patients with different patient presentations to meet the educational objectives of the clerkship. The purpose of this is to ensure that every student gets a minimum exposure to different patient types and problems. Every student's experience will vary, but we require that they experience the following patient chief complaints. The conditions in parentheses are examples, but not an all-inclusive list, of conditions that would qualify for each chief complaint.

- Trauma (MVC, fall, other blunt trauma, penetrating trauma)
- Chest Pain (acute coronary syndrome, PE, aortic dissection, pneumothorax, pneumonia, idiopathic chest pain)
- Dyspnea (asthma, COPD, PE, pneumonia, CHF, acute coronary syndrome, idiopathic dyspnea)
- Neurologic emergency (acute weakness/stroke/TIA, seizure, cauda equine)
- Abdominal pain (appendicitis, cholecystitis, biliary colic, pancreatitis, gastritis, PUD, diverticulitis, SBP, small bowel obstruction, mesenteric ischemia, gastroenteritis, idiopathic abdominal pain)
- Toxicology/intoxication (alcohol intoxication, sympathomimetic intoxication, opioid intoxication, sedative intoxication, anticholinergic intoxication, aspirin overdose, acetaminophen overdose)
- Headache (SAH, ICH, meningitis, CO poisoning, temporal arteritis, migraine, idiopathic headache)
- OB/GYN (pelvic pain, cervicitis, PID, ectopic pregnancy, ovarian torsion, vaginal bleeding)
- Pediatric fever
- Pain management (local anesthesia, narcotic analgesia, oral analgesia, IV analgesia, procedural sedation)
- Orthopedic (fracture, joint dislocation, ankle sprain, osteomyelitis, septic arthritis)
- Wound care (simple laceration, complex laceration, burn management)

- Infectious disease (pneumonia, UTI, bacteremia, cellulitis, abscess, acute gastroenteritis, strep pharyngitis)

### Performing a History and Physical

It is important that your work be observed. A faculty member should observe you taking some portion of the history and performing the relevant portions of the physical/mental exam every rotation. You will also be observed doing a focused history and physical examination during your clinical shifts. Every student should be observed within their first 2-3 shifts, and this will be tracked as part of your clinical evaluations.

### Non-Clinical Learning Experiences:

#### Introduction to Clinical Emergency Medicine Didactic Series

Throughout the month, there are a number of lectures, workshops, and clinical orientations aimed at providing the student with the tools necessary to excel during their clinical duties. **Attendance at the initial lecture series and Tuesday morning didactics is mandatory.**

There are also a number of supplemental learning materials provided, including required readings:

#### Required Readings

Approach to Wound Management
Approach to Headache
Approach to OB/GYN Emergencies
Orthopedic Emergencies
Approach to the Septic Patient
Approach to Anaphylaxis
Approach to Syncope
Approach to Gastrointestinal Bleeding
Approach to Acute Scrotal Pain
Environmental Emergencies
Approach to Low Back Pain

## LEARNER ASSESSMENT

### Clinical Shift Evaluations

#### Description:

The majority of student assessment, both in terms of summative evaluation and formative feedback, comes through clinical shift evaluations. **For each shift the student should submit an evaluation to faculty and resident preceptors with whom he or she had meaningful contact (at least one and possibly multiple per shift). This should be done immediately at the end of the shift.** Students will be evaluated based on their performance in seven areas: professionalism, communication, data gathering, data interpretation/integration, medical knowledge, clinical judgment, and procedural skills. They will also be given an overall performance score.

#### Suggestions for preparation:

Students should prepare by viewing the demonstration videos on the proper emergency medicine style oral presentation, actively participating in the initial didactic component of the course, preparing themselves to formulate wide differential diagnoses for multiple common complaints, and working to capture case-based reading and actively incorporate feedback throughout the month.

## Pretest and Post-test

### Description:

Students will take a pretest examination at the beginning of the rotation to evaluate their baseline knowledge of the management of emergent conditions. At the end of the rotation, the students will take a post-test evaluating their knowledge obtained throughout the rotations and readings. Minimum passing score is an 80%.

### Suggestions for preparation:

Students should read all required readings found in the course binder to fill in knowledge gaps, and work to capture additional case-based reading after each shift.

## CONTINUOUS FEEDBACK

Self-assessment, feedback and improvement should happen throughout your rotation. Faculty responses to each patient you staff is an excellent example of real-time feedback. We encourage you to frequently ask your preceptors for feedback at the end of your shifts and to contact the clerkship director any time if you have concerns. Additionally, however, you will be provided with more formal feedback anytime throughout the rotation if there are areas of concern that need to be addressed.

## GRADING

The grade for this rotation will be derived primarily from the clinical shift evaluations and examinations. The student should submit an evaluation for each shift to the faculty member with whom he/she worked most closely during each shift. It is expected that the student will submit this evaluation prior to leaving the emergency department, and failure to submit these evaluations for each shift could negatively impact the student's grade and even result in failure of the course. These evaluations are compiled at the end of the rotation and the clerkship leadership team compares student performance in each of the competencies, as well as overall performance, with that of their peers. This, along with attendance at the weekly didactic lecture series, composes 90% of the grade. The post-test at the end of the rotation will make up the remaining 10% of the grade. The grade distribution will be approximately 10% Honors, 30-50% High Pass, 40-60% Pass.

Students who receive Honors or High Pass are generally those who are motivated and work hard, exhibit professional behavior, have comprehensive differential diagnosis and sound clinical plans on the majority of their patients, and do well on the final examination.

### Student Remediation Policy

It is anticipated that students who have met the required prerequisites, maintain professional behavior, and put forth an appropriate effort will pass the emergency medicine clerkship. Specific expectations will be explained to the students at the beginning of the rotation and are outlined in this syllabus. Occasionally, students may fail to meet these expectations. Our goal is to identify these students early in the rotation and work with them to remediate any deficiencies.

### **Identification of Deficient Students**

The clinical activity of each student will be evaluated daily. Supervising faculty will complete Clinical Shift Evaluation forms after each emergency department shift. The clerkship director will review these forms on a regular basis to facilitate early identification of any deficiencies. Unprofessional behavior is to be reported immediately to the clerkship director. In addition, the clerkship director will review any complaints from patients, nurses, or ancillary staff.

### **Remediation**

The clerkship director and site coordinator will work with the student to identify specific areas for improvement and to develop a specific plan for remediation. Remediation may include additional clinical shifts, one on one instruction with faculty, or focused reading. Any plan for remediation will be tailored to the individual needs of the student. A student may be required to repeat the course if he/she fails to meet expectations established in a remediation plan. **Students may be removed from the rotation immediately and receive a failing grade for any unprofessional behavior.** Examples of unprofessional behavior include academic dishonesty, unethical behavior, and neglect of clinical responsibilities.

### **Academic Dishonesty**

The emergency medicine clerkship team take academic dishonesty very seriously. Any academic dishonesty could result in immediate removal from the rotation and a failing grade for unprofessional behavior.

### **Grade Appeal**

Students who receive a failing grade and would like to appeal should discuss appeal options with clerkship director and site coordinator.

## **Emergency Medicine Clerkship Didactic Learning Objectives**

### Introduction:

The Emergency Medicine clerkship takes place at DGMC on Travis Air Force Base and UC Davis Medical Center in downtown Sacramento. During your two-week rotation on base, you will be required to attend didactic lectures at UC Davis Medical Center on Tuesday mornings. Because of this structure, the learning experience for each student completing the Emergency Medicine (EM) rotation will be unique. However, certain core concepts are essential for all students to grasp upon completing this rotation. Listed below are objectives pertaining to the medical knowledge competency that all students completing the rotation are expected to achieve.

### Delivery method:

The concepts relating to the objectives below are delivered to students through standardized lectures, hands-on patient experiences, and bedside teaching with attending physicians.

### Assessment:

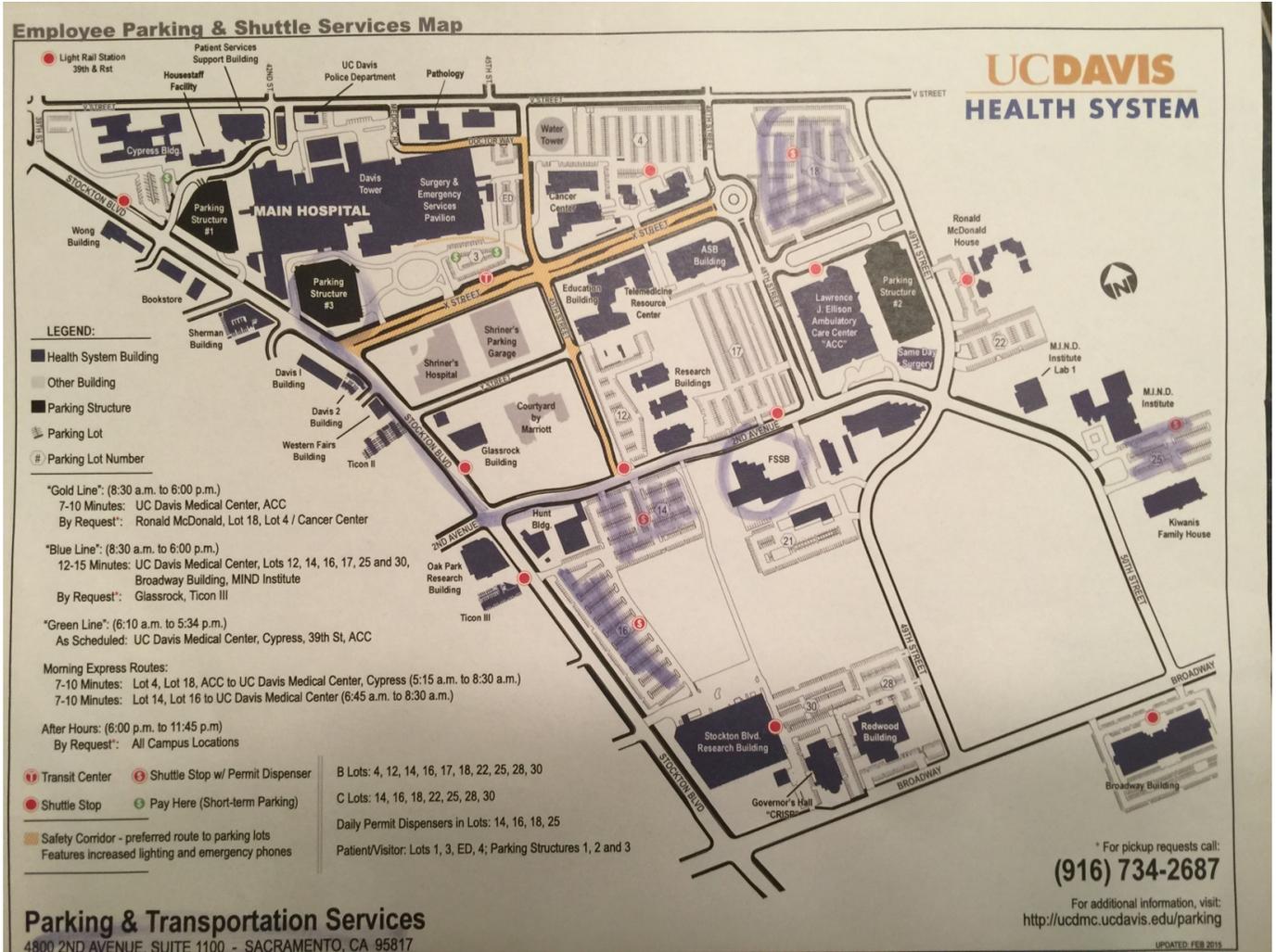
Mastery of the objectives below will be assessed by individual attending's completing a shift evaluation after each shift. The objectives primarily assessed will be medical knowledge and data interpretation. In addition to this clinical assessment, the objectives will be assessed in the end of rotation examination.

## Objectives:

1. Describe the approach and challenges associated with the undifferentiated patient presenting to the Emergency Department.
2. Identify the life-threatening causes of chest pain.
3. Discuss the diagnostic evaluation and therapeutic options for a patient presenting to the Emergency Department with chest pain.
4. Interpret electrocardiographic (ECG) findings of ST-elevation myocardial infarction, myocardial ischemia, and non-ST elevation myocardial infarction (NSTEMI).
5. Differentiate between causes of acute dyspnea in Emergency Department patients (pulmonary embolism, anaphylaxis, pneumonia, asthma/COPD).
6. Outline the potential treatment modalities for acutely dyspneic patients.
7. Describe the approach to children presenting to the Emergency Department with fever of unknown origin, including how the approach varies with the age of the child.
8. Demonstrate a broad differential diagnosis to the infant presenting to the Emergency Department with increased fussiness.
9. Identify the cardiac rhythm (VF, VT, PEA, asystole) in a patient presenting in cardiac arrest.
10. Appreciate and apply the interventions necessary in a cardiac arrest with an appreciation of how the interventions may differ based upon the initial rhythm and clinical scenario.
11. Describe the initial diagnostic and resuscitative approach of the trauma patient.
12. Describe the procedures used in the resuscitation of the critically ill patient (endotracheal intubation, needle thoracotomy, central line placement, tube thoracotomy, and FAST examination).
13. Discuss the differential diagnosis of a patient presenting to the Emergency Department with altered mental status.
14. Identify the appropriate candidate for thrombolytic therapy in the Emergency Department.
15. Discuss the diagnostic approach and develop a broad differential diagnosis in patients presenting to the Emergency Department with abdominal pain.
16. Describe the indications for imaging studies and laboratory evaluations in a patient presenting with abdominal pain.
17. Appreciate the need to provide adequate analgesia in Emergency Department patients.
18. Identify toxidromes based upon clinical presentation of potentially poisoned patients—including cholinergic, anticholinergic, sympathomimetic, and opiate.
19. Identify the appropriate antidote for specific toxins as well as the appropriate candidate for gastrointestinal decontamination.
20. Define the difference between SIRS, sepsis, and septic shock.
21. Describe Early Goal Directed Therapy and its implementation in the septic patient, and how management has changed over the past 2-3 years in regards to sepsis management.
22. Describe the “red flag” ECG findings in patients presenting with syncope (dysrhythmia, prolonged QTc, WPW, and Brugada)
23. Recognize the signs and symptoms of a compartment syndrome in a patient presenting with an acute fracture.
24. Demonstrate proper management of an acute fracture in the Emergency Department, including description of the fracture, analgesia, and appropriate splinting.
25. Describe a systematic approach to the patient presenting to the Emergency Department with vaginal bleeding.
26. Discriminate accurately headache patients in need of further workup for subarachnoid hemorrhage, meningitis/encephalitis, temporal arteritis, acute angle closure glaucoma, or carbon monoxide poisoning.
27. Differentiate upper gastrointestinal bleeding from lower gastrointestinal bleeding.
28. Describe the initial resuscitative approach to GI bleed patients in the Emergency Department.
29. Outline the diagnostic criteria for anaphylaxis and the initial treatment of patients presenting with this entity.
30. Differentiate between testicular torsion and epididymitis.
31. Discuss the role of compression only CPR in the out of hospital cardiac arrest patient.

32. Identify a subset of trauma patients who may have their cervical spine cleared without radiographs using the NEXUS criteria.
33. Describe the prevalence of and demonstrate an increased understanding of the challenges associated with the domestic violence patient presenting to the Emergency Department.
34. Discuss the approach to and acute treatment of epistaxis in the Emergency Department.
35. Differentiate between disorders causing ocular emergencies and discuss their initial management.
36. Discuss the approach to the actively seizing patient, new onset seizure patient, chronic seizure patient, and febrile seizure patient in the Emergency Department.
37. Demonstrate an understanding of the basic principles of wound management and associated procedures in the Emergency Department.
38. Describe the approach to skin and soft tissue infections presenting to the Emergency Department.
39. Identify red flags associated with lower back pain.
40. Describe an approach to the management of the hypothermic or hyperthermic patient.

# UC Davis Campus Map



## UC Davis Area Hotel Information

### Hotel Med Park

Ph: [916-455-4000](tel:916-455-4000)

2356 Stockton Blvd

Sacramento, CA 95817

0.3 miles from UC Davis Medical Center

### Courtyard by Marriott - UC Davis Medical Center location

Ph: [916-455-6800](tel:916-455-6800)

4422 Y Street

Sacramento, CA 95817

0.5 miles from UC Davis Medical Center

### Larkspur Landing Home Suites Hotel

Ph: [916-646-1212](tel:916-646-1212)

555 Howe Ave

Sacramento, CA 95825

3.8 miles from UC Davis Medical Center

### Ramada Inn

Ph: [916-371-2100](tel:916-371-2100)

1200 Halyard Dr

West Sacramento, CA 95691

6.3 miles from UC Davis Medical Center