UCLA RONALD REAGAN MEDICAL CENTER / OLIVE VIEW UCLA MEDICAL CENTER
EMERGENCY MEDICINE RESIDENCY

GENERAL CURRICULUM

MISSION STATEMENT

The mission of the UCLA / Olive View-UCLA Emergency Medicine Residency is to train all residents to provide efficient state of the art emergency care throughout their careers and to assume leadership roles in either academic or community practice of Emergency Medicine so as to improve the standard of emergency care as well as the overall welfare of society.

I. INTRODUCTION

It takes a team effort for residents to master emergency medicine. The training is challenging, physically, emotionally, and intellectually, but incredibly rewarding. The time spent in residency is a period of tremendous personal growth, and knowledge acquisition. The residency program empowers residents by creating a supportive environment, and comprehensive training program to insure the resident gains all the skills necessary to practice emergency medicine independently and excel. This includes gaining skills that allow the resident to self-evaluate their performance, and monitor their physical and mental well-being in residency and in their future career.

Residency builds on the fundamentals learned as a medical student, providing the resident with graded and progressive responsibility while under direct supervision of faculty. The faculty values the interactions and training of residents. The experiential training provides the resident independence commensurate with their level of training, and supervision to insure safe and effective patient care.

The success of training and the residency depends on all of us, faculty, residents, and other hospital staff, working together. Residents must be capable, energetic, engaged and focused. The residency must create an environment where learning can flourish. Residency education is not only experiential, with bedside teaching in the context of the health care delivery system, but also includes a didactic component (conferences), self-directed reading, and scholarly work.

We expect our residents to be intelligent and dedicated learners, industrious and compassionate care providers, and generous, supportive colleagues. Our faculty and residency leadership have spent more than 30 years optimizing our clinical and educational experiences. UCLA and Los Angeles County support the program well. We have excellent emergency departments, outstanding faculty, and ample educational resources. Our training sites and rotations have been selected to provide the broadest diversity of clinical experience, to maximize resident learning. We continually re-evaluate our program, and implement innovative teaching adjuncts as well as changes in the rotations based on resident evaluation.

Emergency physicians like variety and activity, and our conferences are designed with this in mind. We understand that knowledge acquisition is only one component of mastering EM, so our education addresses all six ACGME Competencies. We also understand that learning is best achieved when the residents are engaged and participate. Residents prepare and present many of our educational activities with assistance and mentoring by the faculty. Teaching enhances resident learning and builds skills for a future career, whether in academics or community practice.

We are a four year (R1 – 4) program. Our rationale for why is very simple. There is a lot to learn in emergency medicine and it takes time to master it all. And mastery, not simply competency is

our goal. Our residency seeks to train the future leaders of emergency medicine. And leaders should be outstanding clinicians, and teachers. We structure our program to provide residents an opportunity to learn the basics of EM, and then add additional layers of experience and clinical acumen. Our 4 year curriculum affords time to learn to teach, and to explore individual clinical, educational, or research interests. Many of our residents pursue careers in academic emergency medicine. Some pursue fellowships after completing the residency, while others secure full time or part time faculty positions straight out of residency. On completion of the program residents are capable of practicing emergency medicine in any environment, and have obtained the skills needed to continue with life long learning needed to incorporate new skills and knowledge throughout their EM career.

II. GOALS and OBJECTIVES

The goals and objectives for the residency are based on the ACGME six core competencies, the program requirements as set forth by the Residency Review Committee (RRC) for Emergency Medicine, and the ABEM Model of Clinical Practice of Emergency Medicine. The goals and objectives are summarized here. Additional goals and objectives are provided for resident rotations, experiences such as EMS and Scholarly Projects, and to guide the conference curriculum. These documents are available on the residency website.

1. Patient Care

Emergency Medicine (EM) residents will learn to practice *Patient Care* that is timely, effective, appropriate, and compassionate for the management of health problems and the promotion of health.

Residents will:
1) have more than four months full time equivalent dedicated to the care of infants and children; including emergency department encounters in pediatric experience (which is defined as the care of patients less than 18 years of age). Residents provide care to infants and children, including critical care, in our ED at RR UCLA, during their PICU rotation, on the Children's Hospital LA rotations, and at Antelope Valley Hospital. In addition critical, and ambulance transported pediatric cases at OV-UCLA Medical Center are co-managed by the EM residents and pediatric resident under the supervision of an EM attending;

2) treat a significant number of critically ill or critically injured patients in the ED at the Ronald Reagan Medical Center, constituting at least 3% or 1,200 of the emergency department patients per year (whichever is greater). These are defined as patients admitted to monitored care settings, operative care, or the morgue following treatment in the emergency department. Residents gain additional experience with critically ill and injured patients under the supervision of EM attendings at our other training sites, including OV-UCLA Medical Center and AVH. Additional critical care experience is accrued during off-service rotations on the MICU, and CCU;

3) have at least two months of inpatient critical care rotations during their PGY2 , a MICU rotation and a CCU rotation. During this experience, residents will have decision-making experience that allows them to develop the skills and judgment necessary to manage critically ill and injured patients who present to the emergency department;

4) have at least 50% of their clinical experience take place under the supervision of emergency medicine faculty. In addition to our RRMC, OVMC, and AVH ED experiences, these experiences always include emergency medical services, pediatric emergency medicine,

emergency medicine administration, and research in emergency medicine, and may include sports medicine, and toxicology.

5) have experience in out-of-hospital care, that begins in the intern year. This includes: participation in paramedic base station communications; emergency transportation and care in the field, including ground units and if possible air ambulance units; teaching and oversight of out-of-hospital personnel; and disaster planning and drills. Residency applicants are notified of this requirement during the resident recruitment process and via the residency website.

6) have sufficient opportunities to perform invasive procedures (discussed in more detail in PROCEDURES AND RESUSCITATION below), monitor unstable patients and direct major resuscitations of all types on all age groups. Residents perform procedures and resuscitations throughout their residency with a process of graded responsibility. A major resuscitation is patient care for which prolonged physician attention is needed and interventions such as defibrillation, cardiac pacing, treatment of shock, intravenous use of drugs (e.g., thrombolytics, vasopressors, neuromuscular blocking agents), or invasive procedures (e.g., central line insertion, tube thoracostomy, endotracheal intubations) that are necessary for stabilization and treatment. Residents make admission recommendations and direct resuscitations;

7) master the ability to gather accurate, essential information in a timely manner from all sources, including medical interviews of the patient or proxy, health care providers, out-of-hospital care personnel, medical records, physical examinations, and diagnostic/therapeutic procedures;

8) master the integration of the diagnostic information gathered to generate an appropriate differential diagnosis;

9) capably implement an effective patient management plan including therapy, appropriate consultation, disposition and patient education;

10) competently perform the diagnostic and therapeutic procedures and emergency stabilization considered essential to the practice of emergency medicine;

11) master the ability to prioritize and stabilize multiple patients and perform other responsibilities simultaneously;

12) provide health care services aimed at preventing health problems or maintaining health; and,

13) master the ability to work with health care professionals, including consultants and ancillary staff to provide compassionate patient-focused care.

2. Medical Knowledge

EM residents will master the core topics in the ABEM Model of Clinical Practice of Emergency Medicine. Residents will master the knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care. Residents:

1) will learn from a curriculum that includes didactic and clinical information to allow them to achieve the goals and competencies of the training program. These include knowledge and skill-based competencies as listed in the Model of the Clinical Practice of Emergency Medicine (www.acgme.org);

2) will learn from a curriculum that includes measurable competency objectives for each year of training, a description of how the objectives will be assessed and remediated when necessary. Measurable objectives exist for each non-emergency medicine rotation with assessment tools described;

3) will master essential emergency medicine skills, including the ability to identify life-threatening conditions, the most likely diagnosis, synthesize acquired patient data, and identify how and when to access current medical information;

4) will master the skill of properly sequencing critical actions for patient care and generating a differential diagnosis for an undifferentiated patient; and,

5) will complete disposition of patients using available resources, considering the constraints of the various practice environments.

3. Practice-based Learning and Improvement

Residency training is structured to allow residents to master the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents will develop skills and habits to be able to meet the following goals:

1) identify strengths, deficiencies, and limits in one's knowledge and expertise;

2) set learning and improvement goals;

3) identify and perform appropriate learning activities;

4) systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement;

5) incorporate formative evaluation feedback into daily practice;

6) locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems;

7) use information technology to optimize learning and improve patient care; and,

8) participate in the education of patients, families, students, residents and other health professionals;

9) apply knowledge of study design and statistical methods to critically appraise the medical literature, and,

10) use information technology to improve patient care.

4. Interpersonal and Communication Skills

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. Residents are expected to:

1) communicate respectfully and effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds including:

a) Demonstrate respect for diversity and cultural, ethnic, spiritual, emotional, and age-specific differences in patients and other members of the health care team;

b) Demonstrate effective listening skills and the capacity to elicit and provide information using verbal, nonverbal, written, and technological skills;

c) Demonstrate the ability to develop flexible communication strategies and be able to adjust them based on the clinical situation;

d) Demonstrate the ability to develop flexible communication strategies and be able to adjust them based on the clinical situation

e) Demonstrate the ability to elicit patient's motivations for seeking health care

f) Demonstrate the ability to negotiate as well as resolve conflicts

2) communicate effectively with physicians, other health professionals, and health related agencies;

3) work effectively as a member or leader of a health care team or other professional group;

4) act in a consultative role to other physicians and health professionals; and,

5) maintain comprehensive, timely, and legible medical records, if applicable.

6) develop effective written communication skills;

7) demonstrate the ability to handle situations unique to the practice of emergency medicine (intoxicated patients, patients with altered mental status, delivering bad news, difficulties with consultants, DNR/end of life issues, patients with communication barriers, high-risk refuse of care patients, communication with pre-hospital and non-medical personnel, acutely psychotic patients, and disaster medicine; and,

8) effectively communicate with out-of-hospital personnel as well as non-medical personnel.

9) successfully implement feedback provided by others, and provide respectful, formative feedback to others.

5. Professionalism

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:

1) compassion, integrity, and respect for others;

2) responsiveness to patient needs that supersedes self-interest;

3) respect for patient privacy and autonomy;

4) accountability to patients, society and the profession; and,

5) sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.

6) ability to discuss death honestly, sensitively, patiently, and compassionately, and

7) openness and responsiveness to the comments of other team members, patients, families, and peers.

8) become familiar with the following:

a) Code of Conduct for Academic Emergency Medicine and the ACEP Code of Ethics

b) Definitions of justice, autonomy, beneficence, non-malfeasance, health care decision-making capacity, living will, advanced directive, health care power of attorney, informed consent

c) HIPAA requirements

d) Documentation and billing requirements

e) Mechanisms for appropriate transfer of patients, COBRA and EMTALA

9) knowledge of and adherence to the residency professionalism standards of behavior as provided in the Residency Manual

a) Arrive on time and prepared for work

b) Be well groomed and dressed appropriately

c) See patients willingly throughout the entire shift

d) Give and receive tranistions of care appropriately

e) Be a patient advocate in the disposition of patients from the ED

f) Complete medical records honestly and punctually

g) Treat patients, family, colleagues and staff with respect

h) Protect patient confidentiality

i) Demonstrate sensitivity to patient's pain and emotional state, as well as ethnic background, sexual orientation, and gender identity

j) Actively seek and be responsive to feedback from other team members, patients, families, and peers and immediately self-correct

k) Introduce self to the patient and family appropriately, and all consultants and staff

l) Recognize the influence of marketing, advertising, and conflict of interests and adhere to the University Conflict of Interest Policies

m) Participate in peer review activities

n) Demonstrate fairness in the recruitment of residents, faculty, and staff

o) Respond to email, or complete tasks as requested by the chief or program director

p) Take every available learning opportunity, by preparing for conference, and journal club, and be present whenever available for the required conferences

q) Call jeopardy when illness precludes safe ability to work, and abide by jeopardy regulations

6. Systems-based Practice

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents are expected to:

1) work effectively in various health care delivery settings and systems relevant to emergency medicine;

2) coordinate patient care within the health care system relevant to emergency medicine, and the community in which they practice taking into account patient resources;

3) incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate;

4) advocate for quality patient care and optimal patient care systems;

5) work in interprofessional teams to enhance patient safety and improve patient care quality; and,

6) participate in identifying system errors and implementing potential systems solutions;

7) understand different medical practice models and delivery systems and how to best utilize them to care for the individual patient, and

8) actively participate in emergency department continuous performance quality improvement (PI) programs. Program components should include:

8).(a) basic principles and application of PI;

8).(b) formal regular clinical discussions, rounds, and conferences that provide critical review of patient care and promote PI and quality care, such as mortality and morbidity conferences that analyze system factors in medical errors; and,

8).(c) evidence of development, implementation and assessment of a project to improve care, such as a clinical pathway, a patient satisfaction survey, or improvement of a recognized problem area.

CONFERENCES

Mission

Provide all UCLA / OVMC EM residents with an outstanding didactic education program to complement their experiential education.

Core values

1. Education is primarily focused on enhancing residents' ability to provide care for Emergency Department patients.

    a. The principle learners are the emergency medicine residents. Secondary learner groups include medical students, EM attendings, and residents from other services, particularly residents from services involved in the joint trauma, medicine, and pediatrics conferences. The needs of these secondary learner groups should be considered, but should not take precedence over the needs of the EM residents.

    b. Conference time should be used for educational purposes. Very little conference time should be devoted to administrative matters or promoting the relationship with other services. That can be done in other venues.

    c. Sessions should focus almost exclusively on emergency medicine topics. Other areas of medical practice can be learned elsewhere.

    d. Sessions should focus on practical care related aspects of a topic and only include information not related to ED patient care only in so far as it enhances a broader understanding of the issue or the overall care the patient is receiving. For example presenting the pathophysiology of DKA is beneficial to the extent in which it helps the learner understand how it leads to presenting signs and symptoms and influences therapy. Similarly learning the basics of current urological procedures is valuable if it allows residents to understand the anatomy of a patient presenting to the ED or predict likely complications.
2. EM physicians live and practice in a real world. Accordingly topics that help prepare residents to understand and function effectively in the world are to be included. Examples include practice topics, wellness, and ethics. Issues of access to care, social equality, and the economics of health care system are important, too.

3. Time efficient education: maximize learning per hour. This means:

    a. Sessions start and end on time.

    b. Sessions progress at a reasonable rate

    c. Discussion or digressions to topics of narrow interest should be curtailed

4. All residents' educational needs are met. This means individual education sessions are tailored to offer something to residents at each learning level or alternate sessions specific to resident sub groups are created.

5. Education is curriculum based.

    a. Presentation topics should be selected based on how they accomplish curricular goals.

b. The curriculum should reflect the six ACGME Core Competencies, that includes education not just on Patient Care and Medical Knowledge, but sufficient attention is paid to Communication and Interpersonal Skills, Professionalism, Practice-Based Learning, and Systems-Based Practice.

c. The curriculum should reflect the Program Requirements for Emergency Medicine, and the pertinent documents used to inform EM residency training nationally.

d.

d. The curriculum should be assessed and updated periodically to ensure that it remains current and continues to meet the educational needs of the residents.

e. e. Presentations should be matched against the curriculum and content monitored to ensure all aspects of the curriculum are addressed.

6. Content is current and evidence-based.

7. Curriculum incorporates advances in medical education.
   a. Advances in medical education techniques are incorporated.
   b. Current technology is utilized to the extent to which it can enhance education.

8. Education takes full advantage of available educational resources

   a. The skills of the EM faculty are used to good advantage.

   b. Outside EM faculty are invited to address topics not part of the UCLA and OVMC EM faculties' expertise and occasionally to broaden the perspective of the education.

   c. Residents are active participants in the educational process, but are not intended to be the primary educators.

   d. Non-EM faculty are utilized when there is an important learning area is identified for inclusion that is outside of the broad EM faculty expertise and the educator is known to be capable of addressing the EM content of the issue without devoting excessive time to irrelevant content.

9. Educational content is effectively presented.

   a. Consideration is paid to the most effective format for presenting a topic (Case Conference, Grand Rounds, Journal Club, a procedure lab, etc.)

   b. Every effort should be made to ensure that Educators present the content that meets the learner needs.
   c. Novice educators should receive instruction on how to best fulfill their teaching obligation. This is true for each type of conference: presenting and discussing at case conference, delivering a senior lecture, presenting at journal club, etc.

   d. Efforts should be made to ensure the audience does not interfere with the educational process through interruptions, digressions, or unruly behavior.

   e. Attempts to make sessions entertaining should complement and not detract from the educational goals.

10. Instruction should be systematically evaluated and modified in response to evaluation.

    a. Appropriate evaluation tools should be used for each educational experience.

b. Efforts should be made to ensure an adequate cross section of learners evaluate their education.

c. Feedback mechanisms should be respectful of the educator, but effective at promoting quality improvement.

d. d. Both residents and UCLA and OVMC EM faculty instruction should receive feedback.

11. Education should be as free of conflicts of interest as humanly possible.

    a. No drug company sponsored speakers or events

    b. Speakers with financial conflicts of interest must declare those conflicts.

12. Speakers and conference organizers are busy people whose time is valuable. Every effort should be made to ensure their time and efforts are respected and the organization and management of conferences is done in directed, organized, and time-efficient manner.

    a. Conference organizers will work cooperatively to ensure educational goals are met with the least imposition on themselves or others.

    b. Faculty and residents will be expected to actively cooperate and participate.

    c. Effective succinct communication is expected.

Residents' Scholarly Activities

The residency is committed to advancing residents' knowledge of the basic principles of research, including how research is conducted, evaluated, explained to patients, and applied to patient care. The program teaches residents to have an understanding of basic research methodologies, statistical analysis, and critical analysis of current medical literature

We teach about research methodology throughout residency because a career in emergency medicine requires lifelong learning skills. Both during training, and in your career in academics or community practice, on a daily basis you need to be able to know how to locate new knowledge, interpret the information and apply it in a clinical setting. For those interested in an academic and research career we lay the foundation to developing the necessary skills of both critical appraisal and research design so residents gain an appreciation of how to formulate a testable research question, decide on a study design and understand the trade-offs of feasibility and minimization of any threats to the validity of the study.

We teach about research methodology in a number of settings, and the residents have a number of excellent faculty resources to learn these skills well. These skills will be reinforced during bedside clinical teaching and morning rounds, Journal Club, Scholarly Projects, LLSA (Life Long Learning Self-Assessment and Skills) review sessions, Research day, and optional research meetings. Residents are active participants in rounds, journal club, LLSA sessions, and must all complete a scholarly project.

The most specific approach to teaching residents about research methodology and interpretation of the literature occurs during Journal Club (JC). We have developed a model of JC based upon principles of critical appraisal. Residents actively participate in to develop the

skills needed to use information technology to locate, and then appraise and assimilate evidence from scientific studies and apply it to their practice.

Journal Club occurs once a month, in which we employ two different formats, rotating bimonthly, to teach core skills. The first JC follows an experimental design in which residents work with faculty mentors to search the recent literature and major journals for relevant articles, or search for articles to answer a controversial clinical question. Following searching, refining, and screening of several articles, two with strong methodology are selected for critical appraisal. The articles are systematically reviewed, from introduction through discussion, focusing on the strengths and weaknesses of the experimental method, and the threats to the validity of the study. During the JC discussion of the articles the critical appraisal is supplemented with a discussion of the clinical context and impact on practice, as well as how one would redesign the studies to diminish bias and improve the investigation. The second JC approach utilizes a more focused approach with preset clinical and methodological questions developed for the Annals of Emergency Medicine Journal Club feature <http://www.annemergmed.com/content/journalclub>. These in depth evaluations of a single article include several questions designed to explore in detail both novice and advanced questions on one or two methodological concepts and clinical context of the article. This second format applies many adult learning theory principles as residents must search out the evidence to prepare answers to the questions.

In addition to critical appraisal and assimilation of knowledge JC discussion exposes residents to some of the inner workings of peer-review and editing and discusses the impact of conflict of interests in biomedical publishing. The residency has several faculty members on the board of Annals of Emergency Medicine, including two of the statistics/methodology editors and senior editor for the Annals of Emergency Medicine Journal Club feature.

Residents employ their critical appraisal skills in the development of the core emergency medicine lectures they give as senior residents. In addition, all residents participate in the LLSA review sessions run in small groups regularly during the conference calendar year.

Residents must participate in scholarly activity prior to completion of the program. Some examples of suitable resident scholarly activities are the preparation of a scholarly paper such as a collective review or case report, active participation in a research project, or formulation and implementation of an original research project. Central to these activities however is that they must reinforce the skills required for life long learning, including identification of articles, critical appraisal of the methodology and results of the articles, and assimilation of that knowledge, with the development of a paper of publishable quality.

While development of the specific skills to transform an idea into a research question, choosing an appropriate design, developing data collection instruments, managing and analyzing the data, cannot be learned in a single project and require training beyond residency, we provide the residents guidance to perform their own study and the opportunity to see the various stages of faculty research projects. The research faculty, with history of NIH, AHRQ and CDC grants, are resources for the resident's development of research projects. The faculty, oversee the UCLA Emergency Medicine Research Fellowship, one of the oldest research fellowships in EM, with collaborative efforts with UCLA RWJ program, RAND Health, and the UCLA School of Public Health. At monthly research meetings, open to interested residents, faculty, research fellows, and residents present, discuss and develop their research projects, grants, and research papers. All residents gain exposure to research projects as all core training hospital sites have active emergency medicine research associate programs and residents help in the collection of data on a daily basis. Five hours of conference is dedicated on Research Day to expose all residents to the ongoing faculty, fellow and resident research projects.

EXPERIENCES

Participating Sites

The ideal emergency physician can manage any medical, surgical, gynecological, pediatric, or psychiatric emergency in any type of emergency department. Emergency physicians attain this ability by caring for all types of emergencies in a broad variety of emergency departments. We have been building an emergency medicine residency that provides that breadth of clinical experience for more than 30 years.

Established in 1978 under the sponsorship of the UCLA School of Medicine at the UCLA Medical Center, the residency incorporated Olive View-UCLA Medical Center as its second major training site in 1985. This combined the benefits of training at both an internationally renowned university hospital and a large academic public hospital. Together the two facilities provide an unusually diverse spectrum of patients and a greater breadth of educational and research opportunities than any single institution could provide.

Our residency supplements the core resident experience with Emergency Medicine rotations at two other southern California hospitals. Children's Hospital of Los Angeles has the busiest pediatric ED California and a strong teaching faculty, so our residents rotate there.

Antelope Valley Hospital is the busiest community hospital ED in southern California with approximately 110,000 patient visits per year, a particularly large volume of major procedures and no other residents. These characteristics make the AVH ED an ideal community EM rotation. The AVH ED rotations are important complementary experiences that allow our residents to achieve a superior mastery of critical care and invasive procedures. During their AVH ED rotations our residents work solely in the high acuity areas (Red and Blue Zones, daily census of these zones is 110 patients of which 30% are admitted). Only one EM resident is assigned at any time. The two residency-trained, ABEM certified attendings on duty direct the resident to the highest acuity patients and offer all invasive procedures to the resident. This experience is tremendously important to the education of our residents. On completion of this rotation residents demonstrate vastly improved procedural competence and confidence. Our residents routinely rate the AVH rotations among the best learning experiences of their training, and have consistently supported the continuation of these rotations despite the requisite travel.

Potential resident stress during the AVH rotations has been addressed by the following interventions: 1) A fully furnished modern condo is provided for the exclusive use of the residents near the hospital; 2) Duty hours are reduced during the AVH rotation to average approximately 36 hours per week; 3) Weekly shifts are routinely scheduled on consecutive days so as to minimize travel time, allowing residents to make one round trip per week and stay in the condo in the off hours between shifts and; 4) Resident social isolation is minimized by a) allowing families to stay with them during the rotation, and b) the shift schedule is flexible to allow for personal activities. All residents on the AVH rotations are free to attend conference -- they are not scheduled the night before or the morning of conferences.

Required Rotations

Rotation specific curriculum describing the rotations and providing rotation specific goals and objective are available for each of our required rotations on the residency website.

Electives

A successful career in Emergency Medicine requires a broad range of skills, but provides a wealth of opportunities from which to choose. Our residency offers 20 weeks of electives to provide residents the opportunity to expand their skills and to explore the breadth of career opportunities.

Electives allow residents to gain mastery in core EM and supplementary areas, and to develop research projects or areas of clinical focus that are the beginnings of an academic niche. Residents may choose clinical rotations, for example an ophthalmology rotation to improve eye exam skills, a radiology rotation to learn the basics of reading an abdominal CT, or a cardiology elective geared to improve the interpretation of common and complex EKGs. Electives allow residents time and focus to master skills. Residents interested in research, education or administration may choose electives to supplement those experiences. With the added benefit of their electives our residents graduate with both the range of skills and the clarity of purpose to succeed in their chosen EM niche.

All electives must:

1) Contribute to the emergency medicine educational goals of the individual resident.

2) Have defined goals and objectives.

3) Provide appropriate resident supervision.

4) Include an assessment of resident performance.

5) Comply with UCLA Graduate Medical Education office policies.

6) Be approved by the Program Director prior to the start of the rotation.

The specific procedures governing elective rotations are described in the Residency Manual.

PROCEDURES AND RESUSCITATIONS

Residents gain mastery of all procedures within the scope of Emergency Medicine practice during their training. Residents gain procedural experience through experiential practice in the ED under the supervision of an EM attending, as well as during routine simulation labs and cadaver labs.

The ACGME sets the minimum number of required procedures for culmination of training. The residency sets the higher minimums to ensure every resident completes the program with a high level of procedural competence. All residents must meet the program minimums to graduate.

PROCEDURE	REQUIRED MINIMUMS	
	Departmental	ACGME
Adult Medical & Nontraumatic Cardioversion/defibrillation		
Adult Medical Resuscitation	**60**	**45**
Adult Trauma Resuscitation	**47**	**35**
Arthrocentesis		
Bedside Ultrasound	*	*
Central Lines	**27**	**20**

Closed Fracture Reduction Splinting		
Cricothyrotomy	**4**	**3**
Dislocation Reduction	**14**	**10**
Laceration Repair		
Lumbar Puncture	**20**	**15**
Naso and Endotracheal Intubation	**47**	**35**
Open Chest Massage		
Pacing: external and transvenous	**8**	**6**
Paracentesis		
Pediatric Medical Resuscitation	**20**	**15**
Pediatric Trauma Resuscitation	**14**	**10**
Pericardiocentesis	**4**	**3**
Peritoneal lavage		
Procedural Sedation	**20**	**15**
Thoracotomy		
Tube Thoracostomy	**14**	**10**
Vaginal Delivery	**10**	**10**

Medical and trauma resuscitations are managed by residents under the supervision of the EM faculty on EM rotations. The residents' involvement follows our graded policy of progressive independence. PGY1s and PGY2s assist with the resuscitation and perform procedures while PGY3 and PGY4 residents manage and run the resuscitations. Residents perform all trauma resuscitations and nearly all major procedures on these patients under the direction of the attending emergency physician. On off-service critical care rotations (PICU, MICU, and CCU) the EM resident participates in the medical resuscitations of patients, with supervision by fellows and faculty.

Residents must log the procedures and resuscitations they perform on Verinform, theweb based procedure used by the program. In addition to reporting key index procedures and resuscitations residents must log patient follow-up assessments. Following up on patients seen in the ED is an important way to learn emergency medicine and build knowledge and skills. Residents are expected to complete follow-up on patients both admitted and discharged from the ED (PGY4 150 follow-ups per year, PGY3 150 follow-ups per year, PGY2 140 follow-ups per year, PGY1 120 follow-ups per year). The residents' progress to competency is monitored with procedure logs reviewed during advisor meetings, and mid-year meetings with program directors.

Residents performance of the key index procedures is assessed regularly for each EM block rotation. Faculty evaluate residents, and residents perform self-assessment of their competency. The program director and faculty determine procedural competency prior to graduation.

PROGRESSIVE RESPONSIBILITY

Residents assume greater responsibility for patient care, teaching, and emergency department administration commensurate with increasing experience and ability. Evaluation tools utilized by the program provide data to the Program Directors and the faculty allowing them to determine

when residents have developed sufficient competence to progress to the next level of authority and responsibility.

Our approach to progression of resident responsibility can be summed up using the heuristic Initial Encounter, Familiarity, Proficiency, and Mastery with each stage of development coinciding with the progression through the four years of the residency.

Competency Levels

1) Initial Encounter

Residents at this level of proficiency are typically encountering the complaint or condition for the first time. They may have some pertinent knowledge prior through reading or instruction, but not sufficient knowledge or experience to recognize, evaluate or manage the condition without detailed specific instruction.

This level of ability is expected for common complaints and conditions at the start of the PGY1, but as the year progresses residents are expected to demonstrate familiarity with common conditions. This level of ability may extend into the PGY2 and PGY3 for uncommon conditions.

This level of competency is sufficient for residents completing training only for conditions that are outside the Emergency Medicine (EM) scope of practice and are sufficiently benign or chronic to pose no immediate threat to patients encountered in the Emergency Department (ED).

2) Familiarity

Residents at this level have typically encountered the complaint or condition one or a few times, and can identify the basic components of the evaluation and management, but require considerable input to effectively plan the evaluation and management.

This level of ability is expected for common complaints and conditions at the start of the PGY2, but as the year progresses residents are expected to demonstrate proficiency with common conditions. This level of ability may extend into the PGY2 and PGY3 for uncommon conditions.

This level of competency is sufficient for residents completing training only for clinical conditions that are either benign or chronic, do not pose an imminent threat to patients' health or well-being, and for which emergency department diagnosis and management are either unnecessary or beyond the scope of standard practice. Referral to other specialists is generally required for the diagnosis or management of these conditions.

3) Proficiency

Residents at this level have sufficient familiarity with the complaint or condition to effectively plan the evaluation and management with little or no input, and can explain the rationale for their actions.

This level of ability is expected for all common and many less common complaints and conditions at the start of the PGY3, but as the year progresses residents are expected to demonstrate proficiency with all conditions encountered in the Emergency Department and begin to demonstrate mastery of common conditions. This level of ability may extend into the PGY4 for uncommon conditions.

This level of competency is sufficient for residents completing training for clinical conditions that are routinely managed in the ED, but do not require immediate independent diagnosis or management to avoid death or serious morbidity. Emergency physicians functioning at this level are broadly competent to provide care without posing a risk to patients' health or well-being, but lacking in-depth knowledge or skill, may need to review references, consult other specialists, or refer to other physicians.

4) Mastery

Residents at this level have a thorough understanding of the complaint or condition and can effectively plan the evaluation and management, explain the rationale for their actions, and are aware of the variations in care and controversies in the care of the condition. Residents at this level are not only capable of managing this problem independently, but are sufficiently expert to teach others. Mastery of life threatening conditions includes the ability to make comprehensive, critically important, time-dependent decisions and interventions without the benefit of consultation.

This level of ability is expected for most common and some less common complaints and conditions as the PGY4 progresses. At the conclusion of training residents are expected to demonstrate mastery of a sufficient breadth of complaints and conditions encountered in the Emergency Department to function as an attending physician.

This level of competency is expected of residents completing training for clinical conditions that require prompt diagnosis or management in the ED to avoid death or serious morbidity and are within the scope of EM practice.

Incorporating Competencies Levels into EM Training

Competency Levels inform the experiences and expectations for each year of training.

PGY1 residents begin the year with an average of 8 weeks of prior clinical emergency medicine experience as a medical student, and while familiar with the evaluation and management of some conditions they typically have never encountered many emergency conditions. In their initial encounter with clinical conditions the PGY1 resident learns basic skills in evaluation, stabilization, management and disposition of emergency patients. The resident acquires initial experience in performing minor and major procedures. All patients are formally presented to an EM faculty attending and all procedures supervised. Rotations on other specialty services provide complementary clinical experiences, with more senior residents, fellows and faculty from those services supervising the EM PGY1.

PGY2 residents are expected to demonstrate increasing familiarity with the evaluation and management of ED chief complaints by presenting an appropriate differential diagnosis assessment and plans with diminishing need for correction. PGY2 residents receive priority for performing procedures during resuscitations. All patients seen by a PGY2 resident are presented to EM attendings. MICU and CCU rotations build critical care skills and provide the EM PGY2 the opportunity to supervise internal medicine PGY1 residents under the supervision of fellows and faculty. PGY2s are responsible for presenting a case conference and presenting an article at Journal Club (JC), teaching of 4th year medical students on our EM subintenship, and may help participate in teaching students as part of EMIG courses.

PGY3 residents are expected to become increasingly proficient in the fundamental aspects of emergency medicine while assuming greater clinical responsibilities. PGY3 residents function more independently and lead resuscitations. They take a role in directing ED operations, assisting in managing patient flow and directing junior residents and medical students. PGY3

residents continue to present their patients to an attending, but it is expected that the PGY3 is increasingly proficient in care and needs significantly less direct guidance. PGY3 residents are expected to engage in teaching. medical student subinterns in the ED, teaching the EM Interest Group, present a case conference, present at JC, and give intern lectures.

The PGY4 year provides residents the additional clinical and educational experiences to develop mastery of emergency medicine and become optimally prepared for independent practice. PGY4s assume broader administrative responsibility for ED patient care and operations with faculty supervision. PGY4s discuss their patients with the attending in a briefer more case based educational dialogue. The Administrative Rotation affords residents the opportunity to function as an attending with the supervising faculty member taking a passive role. Teaching responsibilities include running case conference, preparing a grand rounds lecture, supervising article selection and leading JC discussion, giving intern lectures, teaching medical student subinterns, and overseeing and teaching procedures to more junior residents in the ED.

We employ multiple evaluation tools to assess performance on the six ACGME Competencies. Using data from our evaluations we have identified normative benchmarks for each of the six competencies. Residents must achieve each of these benchmarks annually to progress to the next level of responsibility and authority. Resident progress is assessed on an ongoing basis throughout the year and is discussed at the monthly Education and Assessment Committee meetings. This process allows for the accurate assessment of residency performance and the safe implementation of progressive responsibility.

PERFORMANCE ASSESSMENT

We are committed to the resident experience and maintaining the highest standards for the residency. The resident performance, faculty performance and program are evaluated regularly and the feedback or information gathered used for improvement.

RESIDENT PERFORMANCE EVALUATION:
Residents are evaluated on their performance following each learning experience, with written electronic evaluations. The electronic assessment system (Verinform) and rating scales are reviewed annually with the assessors to ensure the evaluators are educated and up to date with the assessment methods and process.

Multiple methods are used to evaluate residents' performance on the 6 core ACGME competencies (Patient Care, Medical Knowledge, Systems Based Practice, Practice Based Learning and Improvement, Interpersonal and Communication Skills, and Professionalism). Methods of assessment, vary by competency, but include direct observation, global assessments, multisource assessments, oral examinations, patient survey, record/chart review, simulation, in-training examination, computer-based learning modules, anatomic or animal models, practice/billing audits, review of case or procedure log, and review of patient outcomes in follow-up. The resident evaluations are from multiple sources, including evaluation committee, faculty member, program director, peer-resident, nurse, clerical staff, patient/family member, and self-evaluation. Faculty evaluate residents following each block rotation, and self-assessment, peer assessment, and staff assess residents semiannually.

Residents have access to review their electronic evaluations on Verinform throughout the year. Each resident meets with their faculty advisor at a minimum of semiannually (fall and spring) to review evaluations and discuss plans to improve or continue high level of performance. The advisor meetings typically include review of: competencies, procedure and follow-up logs, conference attendance, and discusses scholarly projects, planned electives and assesses resident well-being. Each resident additionally meets with a Program Director semiannually

(mid year Dec-Jan, and end of year June-July) to review the accumulated performance evaluations, advisor notes, portfolio contents, and provide feedback to update the resident's learning plan. Summaries of these meetings are documented and placed in the resident file, and residents may review the content of the PD meetings documents at any time.

FACULTY PERFORMANCE EVALUATION

Residents annually evaluate the teaching faculty using Verinform. The electronic evaluations are confidential. Faculty are also evaluated by peer faculty. Feedback is provided to faculty through these evaluations.

PROGRAM EVALUATION

Resident evaluation of rotations and the program is obtained multiple times throughout the year. Approximately quarterly resident meetings are held on conference days to solicit resident issues and problems with the program, and/or resident needs.

Residents evaluate the program each spring prior to the Spring Program Retreat using an annually updated survey created by the Program Directors and Chief Residents. The survey is administered using a web base survey instrument (and the evaluations submitted are confidential. Faculty evaluate the program at faculty meetings, and we administer a confidential electronic program evaluation survey for the faculty mirroring the resident survey. This survey is updated and administered annually each spring. The results of the resident and faculty program evaluations serve as a guiding tool for our 3 day Spring Program Retreat at which all aspects of the program are reviewed and plans for improvement formulated through collaborative discussion of residents, faculty and staff.

At the Fall Program Retreat the ACGME survey results are discussed, progress is assessed on the program improvement plans made at the Spring Retreat, and new concerns raised during the intervening six months are addressed.

Residents and faculty are encouraged to bring forth concerns and suggestions for improvement to the Program Directors, the Chief Residents, or any of the members of the Education Committee at any time. In a manner analogous to how a board of directors provides oversight and guidance to the CEO of a corporation, our Education and Assessment Committee is charged oversight of the residency and providing guidance to the Program Director. Residency issues or suggestions for improvement are brought to the monthly committee meeting for discussion and plans made for implementation of improvements.