The Kaiser Permanente Los Angeles Medical Center (LAMC) is a tertiary care facility that serves as a major referral center for more than three million Kaiser Permanente members throughout Southern California. LAMC is a center of excellence for cardiac services, oncology, stroke therapy and neurosurgical conditions just to name a few. The Department of Diagnostic Radiology plays an integral part in the diagnostic work-up and management of patients by providing expertise in all of the Radiology subspecialties. In addition, the department maintains cutting edge facilities and equipment. We recently moved into a brand-new hospital with state of the art facilities including brand new MRI, CT scanners, fluoroscopy and interventional suites. Kaiser Permanente LAMC is a major teaching institution, with over 20 residency and fellowship programs, ranging from Internal Medicine to Endourology. In addition, it is a teaching hospital for the University of California, Los Angeles (UCLA) School of Medicine and the University of Southern California (USC) School of Medicine. Students and residents from both schools rotate through many of the services. Many members of the medical faculty are members of the UCLA and USC teaching faculties.

Kaiser Permanente is a non-profit organization dedicated to the care of its members. It ranks among the nation's largest, most highly regarded integrated health care organizations. As a member of our residency program, you will learn to practice high-quality medicine in a caring environment—an indispensable approach to providing quality health care in all future medical settings. There is strong support for resident education in our department and we take great pride in giving the resident a great unique educational experience in clinical radiology in a health care model that is becoming embraced nationally.
The Program

Three residents are accepted annually at the first postgraduate (intern) level through the National Resident Matching Program. Generally, the residency does not accept applicants at the PGY-2 level who have completed internships elsewhere.

Residency training in Diagnostic Radiology at Kaiser Permanente LAMC provides experience in all subspecialties of Radiology, including thoracic, genitourinary, gastrointestinal, musculoskeletal, pediatric, neuro-radiology, breast imaging and nuclear medicine. Experience is obtained with all imaging modalities, including fluoroscopy, ultrasound, computed tomography (CT), and magnetic resonance imaging (MRI). Due to the extremely busy cardiac program at our center, the residents get a world calls education in all modalities of cardiovascular imaging. The neuroradiology department benefits from an extremely busy neurosurgery, neurointerventional and neurology department. The neuroradiology department is well known with the faculty receiving many teaching awards. There is a highly specialized and extremely busy interventional radiology and neurointerventional service where the resident gains extensive hands-on experience and teaching. The IR department is heavily involved in the evaluation and management and global care of patients with various diseases including hepatocellular carcinoma (chemoembolization, ablative therapy), aortic disease (dissections/aneurismal disease), vascular malformations, neurointerventional treatments (cerebral aneurysm coiling, stroke interventions, AVM embolizations). The radiology department has a busy admitting service and admits between 10 and 15 patients to the IR service weekly and performs the full gamut of IR procedures. The radiology residents are also involved in IR continuity clinics.

Residents participate in daily educational conferences (up to 3 a day) and are relieved of clinical responsibilities to attend scheduled conferences and lectures in the department. There is a combination of didactic talks and interactive case presentations. There is an emphasis on “knowing the disease,” and so multiple interdepartmental conferences are held regularly with Neurosurgery, Neurology, Head and Neck Surgery, Hepatology, Oncology, Surgery, Vascular Surgery and Sports Medicine. These conferences are felt to be vital to learn the full spectrum of radiology and to enable the imaging resident to effectively communicate with the referring physician. The Radiology Journal Club meets monthly, at which academic articles in Radiology and medicine are presented and discussed by the faculty and residents. Local meetings, particularly the Los Angeles Radiologic Society meetings, may be attended with the approval of the director of residency training. Residents are actively encouraged to become junior members of the American College of Radiology (ACR), the American Roentgen Ray Society, the Radiological Society of North America, and the Los Angeles Radiological Society.

Residency Teaching

The residency program is a structured, comprehensive course in diagnostic Radiology, with the residents working under the direct supervision of numerous fellowship trained faculty radiologists. As the resident progresses, clinical responsibility increases. The 27 faculty members of the Department of Diagnostic Imaging are responsible for the majority of instruction and formal teaching. Additional teaching is provided by faculty from other departments of the LAMC, and from UCLA, USC, and Children’s Hospital of Los Angeles. Guest lecturers also give conferences in the department on a regular basis.
During the course of the residency, five months are spent rotating through the Radiology Departments of UCLA, USC, and Children’s Hospital of Los Angeles. In addition, there are several months of elective rotation where the resident can pursue additional training or research. There is also a lot of flexibility in arranging the schedule for the motivated resident and we have had multiple mini-fellowships including mammography, cardiovascular imaging, neuroradiology, pediatric radiology, and MRI. There is also the opportunity to do up to 16 months in one subspecialty if the candidate desires. Courses in physics and radiation biology are provided, giving residents the knowledge necessary to pass the written physics examination of the American Board of Radiology. Residents attend the four-week Radiology Pathology course at the Armed Forces Institute of Pathology in Washington, D.C.

Additional resources available to residents include computer facilities with Internet and e-mail access, the American College of Radiology online teaching files and CD-ROM series, StatDx online subscription, Medical Center Library, and an audiovisual center containing lectures and educational CD-ROMs. Subspecialty Radiology textbooks are available for reference at the resident room in the Radiology Department.

Research is an integral part of the program, and residents complete at least one research project during their residency. Dedicated research months are given to the residents. Residents with a penchant for research will be given additional months of dedicated research time, pending program director approval. Publication and/or presentation of the project at a scientific meeting is strongly encouraged.

If a resident presents a paper on the project at a national meeting, expenses are paid by the Medical Center. All residents attend the Department of Diagnostic Imaging’s research committee meetings, at which research projects are suggested, including collaborative efforts with other departments in the Medical Center. Ongoing projects are presented and discussed, and guidance is provided by the faculty. Evidence-based medicine is practiced and critical evaluation of the literature is routinely performed.

Residents perform on-call Radiology duties in house during the evening and overnight they are on home call. On-call duties are taken with and supervised by faculty and staff, including general and interventional radiologists and a neuroradiologist. A remote teleradiology service is available daily from 7 p.m. to 7 am.

First Postgraduate Year (Internship)

The first year is devoted to either a year of preliminary medicine or preliminary surgery. We feel that this is a critical year to develop a strong background in clinical medicine. The internal medicine and surgical departments are well respected and provide great training. Two months at the end of the year are spent in the Diagnostic Imaging Department. This includes a one-month introductory course in Neuroradiology.

Second Postgraduate Year

This year is spent learning the basic procedures of diagnostic imaging and the fundamentals of film interpretation. Computed tomography, ultrasound, nuclear medicine, MRI and interventional radiology are introduced during this year. All work is closely supervised by the Radiology faculty.
Third Postgraduate Year
Rotations include general radiology, neuroradiology, pediatric radiology, nuclear medicine, ultrasound, Chest radiology, Musculoskeletal radiology, PET imaging, GI/GU radiology, mammography and vascular and interventional radiology. The resident is given increased responsibility and develops more advanced skills including vascular and interventional radiology, angiography, CT and US guided procedures.

Fourth Postgraduate Year
Rotations include general radiology, Mammography, neuroradiology, nuclear medicine, ultrasound (including obstetrical ultrasound), Muscular skeletal radiology, chest radiology, pediatric radiology vascular and interventional radiology and Neuro interventional radiology. The radiology pathology course at the Armed Forces Institute of Pathology in Washington, D.C., is generally scheduled during this year. The resident gains increasing independence in performing procedures and interpreting imaging studies in all modalities, while under faculty supervision. They also have a dedicated cardiac imaging rotation where they learn echocardiography, cardiac angiography, coronary CT and cardiac MRI under the tutelage of a national expert in cardiovascular imaging.

Fifth Postgraduate Year
In response to the ABR change in boards, we have already implemented mini-fellowships in radiology. The radiology resident has the opportunity to do mini-fellowships in the various fields of radiology including but not limited to vascular interventional radiology, women's imaging, cardiovascular imaging, neuroradiology, MRI, MSK radiology, nuclear medicine, pediatric radiology and others. Upon completion of this year, the resident will have developed the professional ability and knowledge to practice diagnostic radiology and nuclear medicine competently and independently, and satisfy the requirements of the American Board of Radiology (ABR).

Upon graduation from the program, residents go on to complete a fellowship year in a Radiology subspecialty. Recent graduates have been accepted into fellowships at UCLA, USC, UCSF, UVA, Cornell, Washington University and Children’s Hospital of Los Angeles.