Residents are required to undertake one research project during their residency, thus engaging in a scholarly activity. Research rotations must be arranged ahead of time with a willing faculty member whose lab or office is located at the specified site. Research rotations may also be arranged with faculty in other UCSF Departments, such as pediatric or adult hematology/oncology by advanced arrangement.

The resident must complete at least one investigative project under supervision of the identified faculty mentor. This may take the form of biological laboratory research, clinical research, translational research, medical physics research, or other research approved by the program director. The results of such projects shall be suitable for publication in peer-reviewed scholarly journals or presentation at scientific meetings.

Below are general Goals and Objectives for research rotations. However, the resident must work with a faculty member to discuss a list of specific goals and objectives for their research rotation.

1. **Professionalism**

   Junior residents will:
   - Demonstrate commitment to ethical principles regarding provisions or withholding of medical care, patient confidentiality and informed consent
   - Function well as a member of a team and be respectful of co-workers and referring physicians
   - Maintain comprehensive, accurate and timely medical records and research records.
   - Demonstrate they are reliable in carrying out orders from the research mentors.
   - Learn the role and guidelines of Institutional Review Boards, and under what circumstances applications to these Committees are appropriate and required.
   - Discuss with the mentoring faculty how to best maintain approval from all required Institutional Review Boards and submit regular Progress Reports as required by the approved IRB application.

2. **Practice Based Learning and Improvement**

   - Through discussion with the faculty mentor, develop the ability to use information technology and feedback to improve their fund of knowledge and skills and contribute to research endeavors.
   - Meet at least weekly with the faculty mentor to review progress on the research project, acquisition of data, analysis of results, and conclusions to be drawn.
3. **Interpersonal skills and communication**

- Communicate with colleagues and collaborators in an easily understood and culturally sensitive manner. Learn these skills by observing various communications styles of various faculty and the faculty mentor and discussing these issues with faculty mentors.

- Maintain patient confidentiality

- Through close discussion and meeting with the faculty mentor, learn to maintain accurate and timely experimental and research records

4. **Patient care**

- Most research projects are not expected to involve patient care. However, if follow up details of patient status is acquired as part of the research project, the resident must ensure that the medical chart is updated appropriately.

5. **System based Learning**

- Through discussions with the faculty mentor, begin to understand how medical and scientific research and patient care affect other health professionals and the health care organization.

- Develop the skills to coordinate medical and scientific research with other health care investigators involved in the research project.

6. **Medical Knowledge**

- Gain understanding of the disease process and scientific research topic that is the focus of the research rotation.

- Gain understanding of the statistical issues and approaches required to analyze the data collected during the research rotation.

- Gain understanding of the approaches to collecting the data required for the research project.

- Write up all details of the research project including Purpose, Materials and Methods, Results, and Conclusions in a formal presentation that includes a poster, lecture, or manuscript.

- Gain understanding of the principles of research, including how research is conducted, evaluated, explained to patients, and applied to patient care.

- Make progress in completing the investigative project under supervision of the faculty mentor.