Course description: During the Hematology & Medical Oncology elective the student acts as a consultant to patients with hematologic or oncologic problems on Teams L (hematology inpatient service) and S (solid tumor consult service), at UC Irvine Medical Center and are supervised by the Hem/Onc fellow. Attending rounds are held daily and are for decision-making in patient management. The rounds include presentation of all patients on these services. The student sees these patients under guidance of the Hem/Onc Fellow. These patients have a wide variety of hematologic and oncology problems. Students have the opportunity to follow Hem/Onc inpatients, bone marrow transplant patients, consultations and outpatient visits.

Department: Internal Medicine, Division of Hematology/Oncology

Prerequisites: UC Irvine students must have successfully completed the basic science curriculum and their Inpatient Medicine Clerkship. Extramural students must be in their final year of undergraduate medical education.

Restrictions: None

Elective Director: Edward L. Nelson, MD, FACP, Department of Internal Medicine, Division of Hematology/Oncology, 101 The City Drive South, Building 56, Room 247, Orange, CA 92686, 714-456-5153

Instructing Faculty: Elizabeth Brém, MD; Farshid Dayyani, MD, PhD; Samuel Ejadi, MD; Angela Fleischman, MD, PhD; John Fruehauf, MD, PhD; Deepa Jeyakumar, MD; Fa-Chyi Lee, MD; Lisa Lee, MD; Nataliya Mar, MD; Rita Mehta, MD; Edward Nelson, MD, FACP; Susan O’Brien, MD; Ignatius Ou, MD, PhD; Ritesh Parajuli, MD; Lauren Pinter-Brown, MD; Richard Van Etten, MD, PhD; Jason Zell, DO, MPH; Viola Zhu, MD, PhD.

Course Website: None

Who to report to on the first day: Christopher Song, Education Programs Assistant Analyst

Location to report on the first day: UC Irvine Medical Center, 101 The City Drive South, Building 56, Room 246W, Orange, CA 92868

Time to report on the first day: 8:00 a.m.

Course coordinator: Christopher Song, Education Programs Assistant Analyst, Department of Internal Medicine, Division of Hematology/Oncology, 101 The City Drive South, Building 56, Room 246W, 714-456-6589 or csong3@uci.edu.

Site: UC Irvine Medical Center

Duration: 2 to 4 weeks (Approval from course coordinator needed for a 3 week rotation)

Periods available: Throughout the year

Number of students: 2 (includes intra and extramural) - additional students require approval from the Elective Director and Site Coordinator.
Scheduling coordinator:

UC Irvine students must officially enroll for the course by contacting the Scheduling Coordinator via email or phone (714) 456-8462 to make a scheduling appointment.

Extramural students enrolled at a U.S. LCME medical school must use VSAS to apply. To apply please refer to this website https://students-residents.aamc.org/attending-medical-school/electives-and-make-courses/applyingaway-electives-vsas/

Course objectives: At the end of this rotation the student will
- Be knowledgeable about a wide variety of the acute medical problems of cancer patients.
- Be experienced in the evaluation and treatment of patients with primary Hematologic or Oncologic disease.
- Be familiar with hematologic complications of other illnesses in patients seen on the consult service.
- Be proficient in physical examination; clinical differential diagnosis; interpretation of abnormal laboratory tests related in particular to hepatic, renal, cardiac and pulmonary functions; interpretation of peripheral blood and bone marrow smear findings; surgical pathology review; roentegenographic findings; and interpretation of radionuclide scans, sonograms, and CT scans
- Demonstrate professionalism by attending assigned rounds, conferences and lectures.

Key topics:
- Treatment of neutropenic fever, oncologic emergencies, benign hematology, leukemia and solid tumors

Competencies:
- Physical examination in oncology patients
- Knowledge concerning treatment decisions for cancer patients
- Recognition of oncologic emergencies
- Care of the neutropenic patient

Attitudes and commitments:
- Compassion in dealing with cancer patients and their families
- Academic inquisitiveness

Educational activities:

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mondays</td>
<td>8 a.m. - 5 p.m.</td>
</tr>
<tr>
<td>Tuesdays</td>
<td>8 a.m. - 5 p.m.; 5:30 p.m. - 6:30 p.m. (didactic lectures, Journal Club or Morbidity &amp; Mortality conference)</td>
</tr>
<tr>
<td>Wednesday</td>
<td>8 a.m. - 5 p.m.</td>
</tr>
<tr>
<td>Thursdays</td>
<td>8 a.m. - 5 p.m.</td>
</tr>
<tr>
<td>Fridays</td>
<td>7 a.m. - 8 a.m. (didactic lectures); 8 a.m. - 5 p.m.</td>
</tr>
<tr>
<td>Saturdays</td>
<td>An occasional morning</td>
</tr>
</tbody>
</table>

What the student should do to prepare for the rotation: Satisfactorily completed the Medicine Core Clerkship

Clinical responsibilities of the student: Follow patients and consult patient under the supervision of intern, resident, fellow and attending.
Patient care responsibilities: Supportive of intern, resident, fellow and attending in care of patients.

Call schedule of the student: None

Procedures the student will learn:

- Bone marrow aspirate/biopsy
- Lumbar puncture for intrathecal chemotherapy.

Percentage of time in ambulatory setting: Can vary from 10-40 percent depending upon the student’s interest.

Conference/lecture/small group sessions: Although there is no standardized lecture series for this rotation, all students will participate in small group discussions, core lecture series, Journal Club lecture, Morbidity and Mortality conference lectures, and tumor board discussions.

Course Hours - Weekly Summary:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>Case-based</td>
</tr>
<tr>
<td>5.0</td>
<td>Conference</td>
</tr>
<tr>
<td>5.0</td>
<td>Clinic</td>
</tr>
<tr>
<td>30.0</td>
<td>Inpatient/ward</td>
</tr>
<tr>
<td>2.0</td>
<td>Lecture</td>
</tr>
<tr>
<td>10.0</td>
<td>Other: reading, writing, journaling</td>
</tr>
<tr>
<td>54.0</td>
<td>Total</td>
</tr>
</tbody>
</table>

Content Theme Integration:

- Alternative medicine
- Biostatistics
- Death and dying
- Ethics
- Evidence-based medicine
- Family violence/abuse
- Nutrition
- Palliative care
- Pain management

Recommended Reading:

- Hematology, Williams et al.
- Cancer-Principles & Practice of Oncology, Devita et al.
- Clinical Hematology, Wintrobe

Official grading policy: Students receive a grade of Honors, Pass or Fail. The final grade is submitted on the standard UC Irvine elective form. The student is evaluated by attendings and residents in the areas of knowledge base; ability to perform a history and physical exam; case presentations; clinical judgment; relationship with physicians, other medical personnel and patients. If the student fails the elective, a grade of "F" is permanently recorded on his/her transcript. The student can repeat the course for a second grade; however, the "F" cannot be removed from the transcript.