RADIATION ONCOLOGY

Courses offered by the Department of Radiation Oncology are listed under the subject code RADO on the ExploreCourses website (http://explorecourses.stanford.edu/CourseSearch/search/?view=catalog&catalog=&page=0&q=RADO&filter-catalognumber-RADO=on) and Stanford Bulletin’s (http://explorecourses.stanford.edu/CourseSearch/search/?view=catalog&catalog=&page=0&q=RADO&filter-catalognumber-RADO=on) website. ExploreCourses is a site where you can search for courses by subject code, catalog number, or keyword.

Radiation Oncology focuses on the use of radiation for cancer therapy and research. The department does not offer degrees; however, its faculty teaches courses open to medical students, graduate students, and undergraduates. The department also accepts students in other curricula as advisees for study and research. Graduate students in Biophysics and Cancer Biology may perform their thesis research in the department. Undergraduates may arrange individual research projects under supervision of faculty.

At the present time, the major areas of basic research investigation in the department include: DNA repair in mammalian cells after ionizing irradiation; studies of the mechanism of tumor hypoxia in animal tumors; development of new anti-cancer drugs to exploit tumor hypoxia; cytotogenetic and molecular methods of predicting the sensitivity of individual tumors to cancer therapy; radiolabeled monoclonal antibodies for cancer detection and treatment; studies of oxygen levels in human tumors using polarographic electrodes; clinical trials of a new hypoxic cytotoxic agent (tirapazamine); studies of the late effects of cancer therapy; and techniques of conformal and intensity modulated radiation therapy.

Faculty

Emeriti: Malcolm A. Bagshaw, Peter Fessenden, Don R. Goffinet, George M. Hahn, Kendric Smith

Chair: Richard T. Hoppe

Professors: J. Martin Brown, Sarah S. Donaldson, Amato J. Giaccia, Steven L. Hancock, Richard T. Hoppe, Quyhn-Thu Le, Daniel S. Kapp, Steven A. Liebel

Associate Professors: Iris C. Gibbs, Paul Keall, Christopher R. King, Susan J. Knox, Gary Luxton, Lei Xing

Assistant Professors: Laura Attardi, Daniel Chang, Nicholas Denko, Edward Graves, Albert C. Koong

Consulting Professor: Robert M. Sutherland

Courses

RADO 101. Readings in Radiation Biology. 1-18 Unit.

RADO 199. Undergraduate Research. 1-18 Unit.

RADO 202. The Basic Science of Radiation and Cancer Biology. 1 Unit.

RADO 203. Perspectives on Clinical Research. 1 Unit.

RADO 280. Early Clinical Experience in Radiation Oncology. 1-2 Unit.

RADO 299. Directed Reading in Radiation Oncology. 1-18 Unit.

RADO 300A. Radiation Oncology Clerkship. 6 Units.

RADO 370. Medical Scholars Research. 4-18 Units.

RADO 244. Program in Radiation Biology Seminar Series. 1 Unit.

RADO 210. Current Topics in Oncology. 1 Unit.

RADO 244. Program in Radiation Biology Seminar Series. 1 Unit.

RADO 280. Early Clinical Experience in Radiation Oncology. 1-2 Unit.

RADO 299. Directed Reading in Radiation Oncology. 1-18 Unit.

RADO 300A. Radiation Oncology Clerkship. 6 Units.

RADIOLOGY

Visiting students will need to get prior approval before submitting their applications by emailing Jessica Frank at jefrank@stanford.edu. Please state the period you are applying for.

This lunch seminar will introduce students to current topics in oncology, including research, ethics, clinical care, health policies, humanities, etc. Speakers will come from multiple areas of cancer care, research and industry.
RADO 398A. Clinical Elective in Radiation Oncology. 6 Units.
VISITING: Closed to visitors. TYPE OF CLERKSHIP: Elective.
DESCRIPTION: Provides an opportunity for a student in the clinical years to have an in-depth clinical experience in Radiation Therapy, of a quality and duration to be decided upon by the student and a faculty preceptor in the Department of Radiation Oncology to build on the RADO 300A experience. Please note: Students cannot add 398A clerkships directly to their fishbowl schedules through the regular shuffles. Please contact Caroline Cheang in the Office of Medical Student Affairs at cheang@stanford.edu or 650-498-7619 with the faculty preceptor's name and email address to add this clerkship. PREREQUISITES: RADO 300A and permission from the Program Director. PERIODS AVAILABLE: 1-12, full time for 4 weeks, 4 students per period. CLERKSHIP DIRECTOR: Erqi Pollom, M.D., MS. CLERKSHIP COORDINATOR: Jessica Frank (650-724-7673; jefrank@stanford.edu). REPORTING INSTRUCTIONS:
Where: Contact Jessica Frank @ 650-724-7673 for time and location;
Time: TBA. CALL CODE: 0. OTHER FACULTY: P. Dubowski and staff.
LOCATION: SUMC.

RADO 399. Graduate Research. 1-18 Unit.
Students undertake investigations sponsored by individual faculty members. Prerequisite: consent of instructor.