

# Free Radical and Radiation Biology

## Director

- Douglas R. Spitz (Radiation Oncology/Pathology)

**Faculty:** <https://frrbp.medicine.uiowa.edu/faculty-and-staff>

**Website:** <https://frrbp.medicine.uiowa.edu/>

The Free Radical and Radiation Biology Program provides in-depth training and research experience in the physical, chemical, and biological effects of radiation. It also focuses on the metabolic production of free radicals and their role in biology and medicine.

Free radicals are of interest to researchers and clinicians due to their role in a variety of diseases and pathological states, including degenerative diseases of aging and cancer. Manipulation of free radical reactions and redox biology holds great promise for the future development of new therapies for a variety of human diseases. The Free Radical and Radiation Biology Program stresses the importance of these areas of research to basic science, translational research, and public health.

## Undergraduate Education

Three courses offered by the Free Radical and Radiation Biology Program are open to University of Iowa undergraduate students: FRRB:3130 Radiation Safety and Radiobiology; FRRB:4000 Special Topics: Advanced Undergraduates; and with instructor approval, FRRB:5000 Radiation Biology. Students looking for an overview of the biological effects of radiation, including the role of free radicals, will find FRRB:5000 especially appropriate.

## Graduate Education

See Carver College of Medicine and Graduate College in the Catalog for general information about study in medicine and graduate study at the University.

## Postgraduate Training

Postdoctoral training is available by arrangement with the program's director and individual faculty members. Contact the Free Radical and Radiation Biology Program.