

# 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/>

## Facilities

The Free Radical and Radiation Biology Program is the home of the Radiation and Free Radical Research Core Lab (RFRR). The lab operates radiation sources including an Xstrahl Small Animal Radiation Research Platform (SARRP) and a 5,000-Curie Cs-137 irradiator (Ionizing Radiation Services). Students and staff have access to additional core lab support through RFRR, with services and expertise related to analytical chemistry (Electron Paramagnetic Resonance Services) and redox biology, biochemistry (Antioxidant Enzyme Services), and linear accelerators in the Department of Radiation Oncology.

The program has a number of radiation detectors and counters, including liquid scintillation counters. It also has ultraviolet/visible spectrophotometers; various types of equipment for densitometry, chromatography, and electrophoresis; modern tissue culture facilities; seahorse metabolic profiling instruments; molecular biology equipment, including thermal cyclers; an automatic cell counter and particle sizer; tissue culture facilities; Typhoon phosphorimager; high performance liquid chromatography (HPLC); electron spin resonance spectrometers; and nitric oxide analyzers. Visit Research Core on the program's website to learn more.