

**DUKE RADIATION DOSIMETRY LABORATORY  
RADIATION FACILITIES ON THE CAMPUS OF DUKE UNIVERSITY**

Name	Description
Joint Radiation Safety Office-TUNL Neutron Calibration and Measurement Laboratory	NIST-calibrated 5 Ci Am-Be source; Bonner sphere system for neutron spectrometry, twin ionization chambers for n-gamma mixed field measurements, 2" TEPC, two Keithley electrometers, rem-meter with <sup>3</sup> He counter, long counter, set of moderators used with <sup>6</sup> LiF/ <sup>7</sup> LiF TLDs.
Duke Radiation Dosimetry Laboratory (DRDL)	This laboratory has state-of-the art MOSFET and TLD detectors for organ dose determinations in radiology and cardiology. Various sizes of anthropomorphic phantoms are available for pediatric and adult dosimetry. Various Monte Carlo Code based CT dose calculation packages are available for student training.
Radiation Safety Office Calibration Laboratory	The laboratory provides dual Cs-137 sources for detector and meter calibrations. To be used for student training.
Duke Triangle Universities Nuclear Laboratory	The laboratory is capable of generating various energies of neutron beams for basic physics, radiation dosimetry, and small animal studies.
Duke University Free Electron Laser Laboratory	Students will experience health physics and radiation protection program in physics accelerator environment unique to Duke University.
Duke University Irradiator Laboratory	The lab provides Cs-137 and orthovoltage x-ray irradiators for small animal irradiations
Duke University Department of Radiation Oncology Linear Accelerators	clinical linear accelerators and other radiation therapy equipment.
Duke Radiation Oncology Physics Laboratory	Harshaw automatic TLD reader, various ion chambers and phantoms for radiation therapy dosimetry, film dosimetry and other associated physics equipment
Duke Radiation Safety Office Physics Laboratory	The lab provides various radiation detectors and counting equipment including automatic Panasonic TLD reader, neutron detectors, LSC, gamma counter for student training
Duke University PET Facility	Production of PET isotopes with a 30 MeV cyclotron.
Hock Radiation Teaching Laboratory	The laboratory is designed for hands-on teaching facility for health physics and medical physics students.
Whole Body Counter	The newly upgraded laboratory is designed to provide hands-on laboratory experience in internal dosimetry.
Duke Medical Physics Radiation Laboratory	Equipped with modern x-ray machine, liquid scintillation counter, and SPECT/gamma camera.