
RADIATION RESOURCES CORE FACILITY

Resources

Radiation Resources Core equipment is available to all Cancer Center members. The most commonly used sources are the Co-60 and Cs-137 gamma-irradiators. The Cs-137 irradiator provides a large chamber for irradiation of animals or multiple tissue culture dishes. The Co-60 irradiator is convenient for preparation of metabolically viable but reproductively dead cells for feeder layers and for generation of radicals in small samples. The staff of the Core Facility will assist users in choosing the most appropriate equipment for their purposes.

<u>Source</u>	<u>Location</u>	<u>Effective Energy</u>	<u>Maximum Dose-Rate</u>
Gamma Radiation Sources			
Co-60 US Nuclear Model GR-9	BRB 350	1.1/1.3 MeV	1.5 Gy/min
Cs-137 Shepherd Mark I	BRB 350	0.66 MeV	29 Gy/min
Low-dose-rate Ir-192 Irradiator	BRB 350	Mixed	1-2 cGy/hour
X-ray Generator			
150 kVp HP Portable	Wearn B17 storage	Variable	1.5 cGy/min
Accelerator			
Scandatronics Cyclotron	PETT Facility	16 MeV	
Clinical Radiation Therapy Equipment (potentially available for research upon request)			
Varian Clinac-2100 CD	6 and 18 MeV x-rays; electrons at 6, 9, 12, 16, & 20 MeV		
Varian Clinac-4	4 MeV x-rays		
Siemens Mevatron MD	6 and 10 MeV x-rays; electrons at 5, 6, 7, 9, 10, & 12 MeV		
Linac	Electrons at 5-12 MeV		
Various LDR sources	Cs-137, Ir-192, I-125, Pd-103		
Gamma Knife	Co-60, 1.25 MeV		
HDR	Ir-192, 10 Ci		