

Materials List for:

Diffuse Optical Spectroscopy for the Quantitative Assessment of Acute Ionizing Radiation Induced Skin Toxicity Using a Mouse Model

Lee Chin^{1,2}, Elina Korpela³, Anthony Kim¹, Darren Yohan², Carolyn Niu⁴, Brian C. Wilson³, Stanley K. Liu^{1,3}

¹Department of Radiation Oncology, University of Toronto

²Department of Physics, Ryerson University

³Department of Medical Biophysics, University of Toronto

⁴Ontario Cancer Institute / Campbell Family Institute for Cancer Research

Correspondence to: Lee Chin at lee.chin@sunnybrook.ca

URL: <https://www.jove.com/video/53573>

DOI: [doi:10.3791/53573](https://doi.org/10.3791/53573)

Materials

Name	Company	Catalog Number	Comments
Nude mice	e.g., Charles River	Athymic nude CrI:NU(NCr)-Foxn1nu, or immunocompetent nude CrI:SKH1-Hrhr	
Small animal irradiator	e.g., Faxitron X-Ray Corp.	Faxitron CP160	
Animal anaesthesia			If using isoflurane vaporizer machine with induction chamber, need tube and nose cone.
Lead jig and plexiglass stage	Custom made		If irradiator device exposes whole animal body to radiation, lead shielding must be used to expose only the skin flap.
Medical tape			
Permanent marker/ear puncher			
Matlab	Mathworks Inc., Natick, MA		With StatisticsToolbox
Labview	National Instruments, Vaudreuil-Dorian, QB		
DOS system			
Optical multiplexer	Ocean Optics, Dunedin, FL	Model MPM-2000	
Spectrometer	Ocean Optics, Dunedin, FL	Model S200	
White light source	Ocean Optics, Dunedin, FL	Model LS-1	
Intralipid-20%	Kabi Pharmacia, New York, NY		
Reflectance standard	INO, Quebec City, QB		