

Syllabus: Radiobiology for Residents 2015-2016
Thursdays, 8:15 – 9:00 am
Smilow LL-505 Conference Room

Date	Topic	Instructor	Room
September 10, 2015	Cancer	Ranjit Bindra	Smilow LL-505
September 17, 2015	Radiation Carcinogenesis	James Hansen	Smilow LL-505
September 24, 2015	Basic Molecular Biology	Ryan Jensen	Smilow LL-505
October 01, 2015	Molecular Biology Techniques	Ryan Jensen	Smilow LL-505
October 08, 2015	DNA Strand Breaks & Chromosomal Aberrations	Faye Rogers	Smilow LL-505
October 15, 2015	Heritable Effects of Radiation	Faye Rogers	Smilow LL-505
October 22, 2015	ASTRO		
October 29, 2015	Molecular Mechanisms of Radiation Damage	Dean Rupp	Smilow LL-505
November 05, 2015	Molecular Mechanisms of DNA Repair	Dean Rupp	Smilow LL-505
November 12, 2015	Repair at the Cellular Level	Dean Rupp	Smilow LL-505
November 19, 2015	Mechanisms of Cell Death	Doug Brash	Smilow LL-505
November 26, 2015	THANKSGIVING HOLIDAY		
December 3, 2015	RESIDENT INTERVIEWS		
December 10, 2015	RESIDENT INTERVIEWS		
December 17, 2015	NO CLASS		
December 24, 2015	CHRISTMAS HOLIDAY		
December 31, 2015	NEW YEAR DAY HOLIDAY		
January 07, 2016	Molecular Signaling –Cytoplasmic	Doug Brash	Smilow LL-505
January 14, 2016	Molecular Signaling – Nuclear	Doug Brash	Smilow LL-505
January 21, 2016	Cell & Tissue Survival Assays	Ranjit Bindra	Smilow LL-505
January 28, 2016	Cell and Tissue Kinetics-#1	Joann Sweasy	Smilow LL-505
February 04, 2016	Cell and Tissue Kinetics-#2	Joann Sweasy	Smilow LL-505
February 11, 2016	Models of Cell Survival-#1	David Carlson	Smilow LL-505
February 18, 2016	Models of Cell Survival#2	David Carlson	Smilow LL-505
February 25, 2016	Reviews, Q&A	Bindra, Johung, Young	Smilow LL-505
March 3, 2016	IN-TRAINING EXAM		
March 10, 2016	Solid Tumor Systems	Joseph Contessa	Smilow LL-505
March 17, 2016	Tumor Microenvironment	Zhong Yun	Smilow LL-505
March 24, 2016	Oxygen Effect	Zhong Yun	Smilow LL-505
March 31, 2016	Radiosensitizers, Bioreductive Drugs, Radioprotectors	William Summers	Smilow LL-505

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April 07, 2016	Therapeutic Ratio, Time–Dose, Fractionation	Joseph Contessa	Smilow LL-505
April 14, 2016	Low Dose Hypersensitivity, Bystander Effects, Genomic Instability	Sameer Nath	Smilow LL-505
April 21, 2016	Total Body Irradiation – Therapeutic & Accidental	Abhi Patel	Smilow LL-505
April 28, 2016	Biological Aspects of Alternative Dose Delivery Systems	Abhi Patel	Smilow LL-505
May 05, 2016	Biology of Brachytherapy	Melissa Young	Smilow LL-505
May 12, 2016	Interaction of RT with Chemotherapeutic Agents, PDT; MDR, Gene Therapy	Sameer Nath	Smilow LL-505
May 19, 2016	Clinically Relevant Normal Tissue Responses & Mechanisms	Shari Damast	Smilow LL-505
May 26, 2016	Cataracts; Radiation Effects in the Developing Embryo	Kimberly Johung	Smilow LL-505
June 02, 2016	Hyperthermia	Meena Moran	Smilow LL-505
June 09, 2016	Radiation Protection	Nick Dainiak	Smilow LL-505
June 16, 2016	Q&A	Zhong Yun	Smilow LL-505

Lecture Instructions:

1. **Handouts are to be given for each lecture. Handouts can be the slides. Please cite references in the handouts.**
2. **Provide a PowerPoint file of your lecture to Amrit Dhawan (amrit.dhawan@yale.edu) for uploading onto the Department Server BEFORE your lecture.**
3. **Please incorporate and/or provide practice questions for each lecture. Practice questions can be taken from the in-service exams and other study guides, some of which can be found in the Department website.**