

Radiobiology for Residents 2022-2023
8:00 am – 8:50 am, Thursdays

Date	Topic	Instructor	Location
September 8, 2022	Basic Molecular Biology & Techniques	Ryan Jensen	Smilow LL-505
September 15, 2022	Molecular Mechanisms of Radiation Damage & Repair at the Cellular Level	Ryan Jensen	Smilow LL-505
September 22, 2022	DNA Strand Breaks & Chromosomal Aberrations	Faye Rogers	Smilow LL-505
September 29, 2022	Heritable Effects of Radiation	Faye Rogers	Smilow LL-505
October 6, 2022	Molecular Mechanisms of DNA Repair	Faye Rogers	Smilow LL-505
October 13, 2022	Mechanisms of Cell Death	Doug Brash	Smilow LL-505
October 20, 2022	Molecular Signaling –Cytoplasmic	Doug Brash	Smilow LL-505
October 27, 2022	ASTRO		
November 3, 2022	Molecular Signaling – Nuclear	Doug Brash	Smilow LL-505
November 10, 2022	Discussion & Review	Brash, Jensen, Rogers	Smilow LL-505
November 17, 2022	Cancer	Ranjit Bindra	Smilow LL-505
November 24, 2022	THANKSGIVING HOLIDAY		
December 1, 2022	RESIDENT INTERVIEWS		
December 8, 2022	RESIDENT INTERVIEWS		
December 15, 2022	Solid Tumor Systems	Joseph Contessa	Smilow LL-505
December 22, 2022	CHRISTMAS HOLIDAY		
December 29, 2022	CHRISTMAS HOLIDAY		
January 5, 2023	RESIDENT INTERVIEWS		
January 12, 2023	Cell & Tissue Survival Assays	Tim Robinson	Smilow LL-505
January 19, 2023	Cell and Tissue Kinetics #1	James Hansen	Smilow LL-505
January 26, 2023	Cell and Tissue Kinetics #2	James Hansen	Smilow LL-505
February 2, 2023	Models of Cell Survival #1	David Carlson	Smilow LL-505
February 9, 2023	Models of Cell Survival #2	David Carlson	Smilow LL-505
February 16, 2023	Tumor Microenvironment	Luisa Escobar-Hoyos	Smilow LL-505
February 23, 2023	Oxygen Effect	Henry Park	Smilow LL-505
March 2, 2023	IN-TRAINING EXAM		

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Date	Topic	Instructor	Location
March 9, 2023	Radiosensitizers, Bioreductive Drugs, Radioprotectors	Ranjit Bindra	Smilow LL-505
March 16, 2023	Discussion & Review	Bindra, Contessa, Robinson, Hansen, Carlson, Park Escobar-Hoyos	Smilow LL-505
March 23, 2023	Radiation Carcinogenesis	James Hansen	Smilow LL-505
March 30, 2023	Biology of Brachytherapy	Melissa Young	Smilow LL-505
April 6, 2023	Therapeutic Ratio, Time–Dose, Fractionation	Joseph Contessa	Smilow LL-505
April 13, 2023	Biological Aspects of Alternative Dose Delivery Systems	Abhi Patel	Smilow LL-505
April 20, 2023	Total Body Irradiation – Therapeutic & Accidental	Abhi Patel	Smilow LL-505
April 27, 2023	Discussion & Review	Contessa, Hansen, Patel, Young	Smilow LL-505
May 4, 2023	Cataracts; Radiation Effects in the Developing Embryo	Kimberly Johung	Smilow LL-505
May 11, 2023	Low Dose Hypersensitivity, Bystander Effects, Genomic Instability	Thomas Hayman	Smilow LL-505
May 18, 2023	Interaction of RT with Chemotherapeutic Agents, PDT; MDR, Gene Therapy	Yi An	Smilow LL-505
May 25, 2023	Clinically Relevant Normal Tissue Responses & Mechanisms	Yi An	Smilow LL-505
June 1, 2023	Immunotherapy and Radiation Therapy	Thomas Hayman	Smilow LL-505
June 8, 2023	Hyperthermia	Meena Moran	Smilow LL-505
June 15, 2023	Discussion & Review	An, Hayman, Johung, Moran	Smilow LL-505
June 22, 2023	General Discussions/Feedback?		Smilow LL-505

Lecture Instructions:

1. Handouts are to be given to residents before each lecture. Handouts can be the slides plus other reading materials or a list of references.
2. Provide a PowerPoint file or PDF of your lecture to Lisa Zucaro (lisa.zucaro@yale.edu) for uploading onto the [Department Website](#) before your lecture. The lecture materials will be made available to the residents and lecturers only via our secured intranet.
3. For Exams & Reviews, please provide a small set of questions in the format of the Board Exam for in-class discussion. Practice questions can be taken from the in-service exams and other study guides, some of which can be downloaded from the [Department Website](#).
4. For any comments and suggestions, please contact Dr. Faye Rogers (faye.rogers@yale.edu) or Dr. Ryan Jensen (ryan.jensen@yale.edu).