

Syllabus: Radiobiology for Residents 2013-2014
Thursdays, 1:00 – 2:00 pm
 Conference Room LL412 (Vault E), Smilow Lower Level

<u>Date</u>	<u>Topic</u>	<u>Instructor</u>	<u>Room</u>
September 12, 2013	Basic Molecular Biology	Ryan Jensen	LL412
September 19, 2013	Molecular Biology Techniques	Ryan Jensen	LL412
September 26, 2013	ASTRO		
October 3, 2013	Molecular Mechanisms of Radiation Damage	Dean Rupp	LL412
October 10, 2013	Molecular Mechanisms of DNA Repair	Dean Rupp	LL412
October 17, 2013	Repair at the Cellular Level	Dean Rupp	LL412
October 24, 2013	DNA Strand Breaks & Chromosomal Aberrations	Faye Rogers	LL412
October 31, 2013	Heritable Effects of Radiation	Faye Rogers	LL412
November 07, 2013	EXAM	Jensen Rogers Rupp	LL412
November 14, 2013	Mechanisms of Cell Death	Doug Brash	LL412
November 21, 2013	Molecular Signaling –Cytoplasmic	Doug Brash	LL412
November 28, 2013	HOLIDAY		
December 5, 2013	RESIDENT INTERVIEWS		
December 12, 2013	RESIDENT INTERVIEWS		
December 19, 2013	Molecular Signaling – Nuclear	Doug Brash	LL412
December 26, 2013	HOLIDAY		
January 2, 2014	HOLIDAY		
January 9, 2014	Cancer	Ranjit Bindra	LL412
January 16, 2014	Radiation Carcinogenesis	James Hansen	LL412
January 23, 2014	Cell and Tissue Kinetics	Joann Sweasy	LL412
January 30, 2014	Exam	Brash Bindra Hansen Sweasy	LL412
February 6, 2014	Models of Cell Survival	David Carlson	LL412
February 13, 2014	Solid Tumor Systems	William Summers	LL412
February 20, 2014	Cell & Tissue Survival Assays	William Summers	LL412
February 27, 2014	Radiosensitizers, Bioreductive Drugs, Radioprotectors	William Summers	LL412
March 6, 2014	IN-TRAINING EXAM		
March 13, 2014	Tumor Microenvironment	Zhong Yun	LL412
March 20, 2014	Oxygen Effect	Zhong Yun	LL412
March 27, 2014	Exam	Carlson Summers Yun	LL412

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April 03, 2014	Therapeutic Ratio, Time–Dose, Fractionation	Joe Contessa	LL412
April 10, 2014	Low Dose Hypersensitivity, Bystander Effects, Genomic Instability	Joe Contessa	LL412
April 17, 2014	Total Body Irradiation – Therapeutic & Accidental	Abhi Patel	LL412
April 24, 2014	Biological Aspects of Alternative Dose Delivery Systems	Abhi Patel	LL412
May 01, 2014	Biology of Brachytherapy	Suzanne Evans	LL412
May 08, 2014	Exam	Contessa Evans Patel	<ul style="list-style-type: none"> • No in-class discussion of exam questions. • Contact individual lecturers for questions.
May 15, 2014	Interaction of RT with Chemotherapeutic Agents, PDT; MDR, Gene Therapy	Bruce McGibbon	LL412
May 22, 2014	Clinically Relevant Normal Tissue Responses & Mechanisms	Shari Damast	LL412
May 29, 2014	Cataracts; Radiation Effects in the Developing Embryo	Bryan Chang	LL412
June 05, 2014	Hyperthermia	Meena Moran	LL412
June 12, 2014	Exam	Chang Damast McGibbon Moran	<ul style="list-style-type: none"> • No in-class discussions of exam questions. • Contact individual lecturers for questions.

Lectures last one hour.

- 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 for uploading onto the Department Server BEFORE your lecture.**
- 3. Please give practice questions for each lecture. Practice questions can be taken from the in-service exam and other exam books.**
- 4. Please e-mail exam questions to [Amrit Dhawan \(amrit.dhawan@yale.edu\)](mailto:amrit.dhawan@yale.edu) one week prior to the exam date.**
- 5. For basic science lectures, the instructors will go over the questions with the residents on the exam date.**

For clinical lectures, exam questions will be emailed after the lecture and the residents may email the lecturer that week to ask about any points they don't understand. The exams are not graded.

- 6. To better prepare the residents for the Board Exam, it is recommended that you use the format found in the in-service exam and other relevant exam books. Alternatively, you may want to include questions from the in-service exam and previous Boards. Include the answers on a separate sheet.**

[Directions to Smilow Cancer Center and the Radiation Oncology Conference Room \("Room E"\) from the Hunter Building:](#)

Go through the Atrium in the main hospital into the Smilow lobby; take an elevator to the lower level, LL.

Enter the Radiation Oncology patient reception area (sign). Take an immediate right, go through the wooden door, go past the receptionists' desk, and go through the wooden double doors. Turn right and go halfway down the long hallway to the overhead sign that says "E" (near ceiling on left). The conference room is in Room E.

To use a laptop with the projector, it looks like you unplug the existing Dell computer connection at the projector and plug in the connector from your laptop.