

Syllabus: Radiobiology for Residents 2012-2013**Thursdays, 1:00 – 2:00 pm**

Rad. Onc. Conference Room E, Smilow Lower Level

<u>Date</u>	<u>Topic</u>	<u>Instructor</u>	<u>Room</u>
September 13, 2012	Basic Molecular Biology	Ryan Jensen	Classroom LL412
September 20, 2012	Molecular Biology Techniques	Ryan Jensen	Classroom LL412
September 27, 2012	DNA Strand Breaks & Chromosomal Aberrations	Brooks Low	Classroom LL412
October 4, 2012	Molecular Mechanisms of Radiation Damage	Dean Rupp	Classroom LL412
October 11, 2012	Molecular Mechanisms of DNA Repair	Dean Rupp	Classroom LL412
October 18, 2012	Repair at the Cellular Level	Dean Rupp	Classroom LL412
October 25, 2012	Exam	Jensen Low Rupp	Classroom LL412
November 1, 2012	ASTRO		
November 08, 2012	Mechanisms of Cell Death	Doug Brash	Classroom LL412
November 15, 2012	Cancer	Ranjit Bindra	Classroom LL412
November 22, 2012	HOLIDAY		
December 6, 2012	RESIDENT INTERVIEWS		
December 13, 2012	RESIDENT INTERVIEWS		
December 20, 2012	Radiation Carcinogenesis	James Hansen	Classroom LL412
December 27, 2012	HOLIDAY		
January 3, 2013	HOLIDAY		
January 10, 2013	RESIDENT INTERVIEWS		
January 17, 2013	Molecular Signaling –Cytoplasmic	Doug Brash	Classroom LL412
January 24, 2013	Molecular Signaling – Nuclear	Doug Brash	Classroom LL412
January 31, 2013	Exam	Brash Bindra Hansen	Classroom LL412
February 7, 2013	Cell and Tissue Kinetics	Joann Sweasy	Classroom LL412
February 14, 2013	Models of Cell Survival	David Carlson	Classroom LL412
February 21, 2013	Solid Tumor Systems	Sara Rockwell	Classroom LL412
February 28, 2013	Cell & Tissue Survival Assays	Sara Rockwell	Classroom LL412
March 7, 2013	IN-SERVICE		
March 14, 2013	Tumor Microenvironment	Zhong Yun	Classroom LL412
March 21, 2013	Oxygen Effect	Zhong Yun	Classroom LL412
March 28, 2013	Exam	Carlson Rockwell Sweasy Yun	Classroom LL412

DRAFT 07/17/12

Syllabus: Radiobiology for Residents 2012-2013**Thursdays, 1:00 – 2:00 pm**

Rad. Onc. Conference Room E, Smilow Lower Level

<u>Date</u>	<u>Topic</u>	<u>Instructor</u>	<u>Room</u>
April 04, 2013	Radiosensitizers, Bioreductive Drugs, Radioprotectors	Sara Rockwell	Classroom LL412
April 11, 2013	Therapeutic Ratio, Time–Dose, Fractionation	Joe Contessa	Classroom LL412
April 18, 2013	Low Dose Hypersensitivity, Bystander Effects, Genomic Instability	Joe Contessa	Classroom LL412
April 25, 2013	Total Body Irradiation – Therapeutic & Accidental	Abhi Patel	Classroom LL412
May 02, 2013	Biological Aspects of Alternative Dose Delivery Systems	Abhi Patel	Classroom LL412
May 09, 2013	Biology of Brachytherapy	Suzanne Evans	Classroom LL412
	Exam	Contessa Evans Patel Rockwell	There will be no in-class discussions of exam questions. Residents can contact individual lecturers for questions.
May 16, 2013	Interaction of RT with Chemotherapeutic Agents, PDT; MDR, Gene Therapy	Bruce McGibbon	Classroom LL412
May 23, 2013	Hyperthermia	Meena Moran	Classroom LL412
May 30, 2013	Clinically Relevant Normal Tissue Responses & Mechanisms	Shari Damast	Classroom LL412
June 06, 2013	Cataracts; Radiation Effects in the Developing Embryo	Bryan Chang	Classroom LL412
June 13, 2013	Heritable Effects of Radiation	Faye Rogers	Classroom LL412
	Exam	Chang Damast McGibbon Moran Rogers	There will be no in-class discussions of exam questions. Residents can 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. **NEW!!** 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.