Goals and Objectives for Radiobiology

A. Curriculum Components

Overall Educational Goals
- Instruct residents in the basic and clinical applications of radiation biology as they apply to radiation oncology
- Teach the resident to intercalate radiobiology with radiation physics and radiation oncology for a deeper understanding of the impact of radiation oncology in patient treatments

Competency-based goals and objectives for each assignment
- Learn and understand the fundamental concepts for each topic covered in the didactic classes
- Prepare for periodic exams on material taught
- Answer pertinent radiobiology questions that may arise during chart rounds and patient conferences
- Review handouts, lecture notes, and distributed journal papers and additional text supplements for yearly in-service exam
- Assimilate educational lectures and be well-prepared for American Board of Radiology certification exam at PGY-4
- Use collection of pertinent papers as foundation for future key topic papers in the field

Didactic sessions
- Radiation biology lectures are taught in a 1 ½ hour block weekly
- The current schedule is the beginning of September until the end of May
- Typically, one topic is covered during each session

Delineation of resident responsibilities
- Prompt attendance at weekly lecture series
- Be prepared for class
- Pay close attention to instructor and actively listen
- Limit class distractions
- Submit assignments in a timely manner
- Provide handouts for fellow residents for any presentations
- If necessary, schedule time with the instructor for any topics that need further explanation
Teaching Methods
Residents are taught by the attending faculty member one-to-one or through didactic lecture and visiting professors

Assessment Methods
- Residents: Each resident is expected to complete a rotation evaluation on an annual basis
- Program: Each resident is expected to complete an evaluation of the program on an annual basis.

Supervision
- Supervision of the resident is one-on-one by the attending faculty member

Education Resources
- Residents have access to the Drexel College of Medicine library 24/7.
- Basic radiation oncology, anatomy, radiology, medical oncology, physics and radiation biology textbooks are available in the radiation oncology library/conference room and/or the residents’ room.
- Pertinent journals are available on-line. Access to the NCCN, NCI, ACS, and ASTRO guidelines is available.
- Additionally, the Policy and Procedures manual kept in the residents’ room contains suggested key articles by anatomic site

B. Required Textbooks

Radiobiology


C. Suggested Readings


3. Selected Health Physics journal articles, provided by instructor.

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Currently, all PGY-2 to PGY-4 residents are taught in the same class. Both residents and instructor believe there is a strong benefit from partaking in the class discussions as well as absorbing information from the class on a repetitive basis. As textbooks and new data become available, all residents have the opportunity to capture this new information and expand their knowledge base. New residents are encouraged to meet with the professor if any concepts need further explanation. More senior residents are expected to answer class questions more readily and are questioned more frequently. They are welcome to present questions for clarification as well.

Assessment of Residents: Resident progress is assessed by semiannual board-type and essay written examinations, as well as weekly class participation.