OVERALL GOALS AND OBJECTIVES

PGY-2

The resident will complete 3-month rotations in radiation oncology assigned to a clinical faculty member who represents for the resident the "hub" in an interactive learning process. It is a one-to-one, ongoing educational process throughout each day, through consultations, simulation, dosimetry/treatment planning, review of disease pathology, radiology scans, discussions and interactions with family members, medical oncologist regarding chemotherapy and radiation as well as other referring physicians involved in patients care. This teaching method continues through the 4-year program with the resident increasingly acquiring knowledge, proficiency, confidence and professionalism. The resident will learn standard radiation techniques as well as use treatment aids and treatment planning, radiation safety, the principles of normal tissue tolerance to radiation and tumor dose-response, record keeping, patient consent process, dictating patient reports and other department procedures. The resident will observe and assist in brachytherapy procedures.

Clinical and basic sciences are taught regularly throughout the four years of training by way of scheduled QA conferences, lectures, case presentations, multi-disciplinary site specific conferences and discussions relevant to the practice of radiation oncology.

Ongoing throughout the all years of radiation oncology, separate physics and radiobiology courses are taught each year to all levels of residents. The resident will receive instruction and gain proficiency in the physics, biology and clinical applicability of radiosurgery, conformal therapy, 3-D treatment planning, radioimmunotherapy, total body irradiation, total skin irradiation, high dose brachytherapy, plaque therapy and intensity modulated radiation therapy. The resident must pass USMLE Step 3 before he/she can enter the PGY-3 level. The state of Pennsylvania requires that the resident is evaluated and meets with the Program Director at the end of each rotation.

The resident is required to begin engagement in an investigative project under faculty supervision during this year as well. Residents should make an appointment with Dr. Brady to discuss ideas for projects.

Faculty complete evaluation forms on the performance of each resident. The Program Director will meet with each resident as rotation is completed to discuss pertinent issues. While at Christiana Hospital, the resident will have similar responsibilities as at Hahnemann Hospital. They are expected to see consultations, perform simulations, take part in treatment planning, and
Overall Goals and Objectives
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participate in brachytherapy procedures. They present at Journal Clubs, attend tumor conferences, and review films and slides with attending physicians. As the skill level increases, the resident gains more responsibility.

PGY-3

Three month rotations with clinical faculty members continue. The resident is encouraged to engage in an investigative project under faculty supervision such as laboratory research, clinical research or the retrospective analysis of data from treated patients, and results should be suitable for publication or presentation at scientific meetings.

Residents are trained in the use of external beam modalities, including superficial irradiation; megavoltage irradiation, low and high energy x-rays; electron beam; simulation to localize anatomy; and computerized treatment planning. The resident should be able to personally perform technical procedures, including treatment set-ups as well as intracavitary and interstitial placement of radiation sources with attending physician guidance and supervision.

The resident is evaluated for increasing initiative and proficiency in judgment, patient relations, record keeping, ability to evolve a meaningful plan for patient management, teaching performance and knowledge of radiobiology. Knowledge of pathology and radiology evolves through experiences in the routine pathology conferences and radiology reviews, continued throughout this year. All conferences have attendance and evaluation sheets. The Program Director obtains feedback from these forms and direct interaction with the residents at monthly meetings and Educational Committee Meetings.

Ongoing throughout all years of radiation oncology, the residents attend the physics/biology course taught each year to all levels of residents. The resident will receive instruction and gain proficiency in the physics, biology and clinical applicability of radiosurgery, conformal therapy, 3-D treatment planning, radioimmunotherapy, total body irradiation, total skin irradiation, high dose brachytherapy, plaque therapy and intensity modulated radiation therapy.

PGY-4

A three month rotation with clinical faculty continues. The Physics/Dosimetry rotation may be taken at this time. Resident is required to choose a physics topic of interest and present a didactic lecture. Lectures and laboratory demonstrations of radiation safety procedures, calibration of radiation therapy machines, use of the computer for treatment planning, construction of treatment aids and the safe handling of sealed and unsealed radionuclides occurs during this period.

Residents have the opportunity to also work in dosimetry with the dosimetrist involving treatment plans.
The Radiation Biology curriculum continues and includes lectures on all aspects of radiation effects on normal and neoplastic tissues; familiarizes resident with medical statistics, and oncologic pathology, with special emphasis on neoplasia and radiation effects.

The resident is required to maintain each year, an experience log of patients irradiated, procedures performed and observed, and modalities used.

The resident continues receiving instruction in the physics/biology course which is taught each year to all levels of residents. The resident will receive instruction and gain proficiency in the physics, biology and clinical applicability of radiosurgery, conformal therapy, 3-D treatment planning, radioimmunotherapy, total body irradiation, total skin irradiation, high dose brachytherapy, plaque therapy and intensity modulated radiation therapy.

**PGY-5**

Three month rotations with clinical faculty continue at Hahnemann Hospital and Christiana Hospital. At this point, residents are given more freedom in patient management and treatment planning with guidance and supervision of attending. They are encouraged to take a more active role presenting at Tumor Board and teaching of the junior residents or students.

Resident evaluation after each rotation reflects independent thought, initiative, quality judgment, patient management and patient relations, teaching ability, performance and professionalism.

Ongoing throughout the 4 years of radiation oncology, a separate physics/biology course is taught each year to all levels of residents. The resident will receive instruction and gain proficiency in the physics, biology and clinical applicability of radiosurgery, conformal therapy, 3-D treatment planning, radioimmunotherapy, total body irradiation, total skin irradiation, high dose brachytherapy, plaque therapy and intensity modulated radiation therapy. During the PGY-5 year the physics/radiation biology course attendance is not required.

Upon completion of the program, the resident must submit an experience log with combined numbers from the four-year training program of patients irradiated, procedures performed and observed.