

## **SECOND Year (PGY-3)**

### **Clinical Radiation Oncology**

### **Clinical Pathology**

### **Research**

#### **PATIENT CARE:**

**Goal:** The resident will have greater participation in treatment decision-making process and radiotherapy procedures.

**Objective:** The resident shall demonstrate that he/she has learned skills and techniques that give resident greater responsibility in patient care by:

1. Obtaining patient informed consent by outlining and explaining to patients with regard to all the therapeutic options, the acute and late toxicity of radiation while in the presence of the attending.
2. Actively participating in simulation procedure with good understanding of the procedure including appropriate patient positioning, the use of immobilization device, and the use of contract and field arrangement as needed.
3. Exhibiting a more in-depth understanding of how to integrate imaging modalities in radiation treatment planning, such as CT, MRI, and PET scan.
4. Actively participating in drawing conventional radiotherapy fields, and defining the treatment volumes for 3D-CRT and IMRT under the supervision of the attending physician.
5. Becoming more involved in patient management during radiotherapy under the supervision of the attending.
6. Taking an active role in special procedures: brachytherapy including correct placement of sources, its verification, treatment planning, loading dose, and dosimetry for both LDR and HDR sources.
7. Taking an active role in the patient care during and after the procedure under the supervision of attending physicians.
8. Actively participating in stereotactic radiosurgery including appropriate patient selections, treatment planning, and execution under the supervision of attending physicians.

#### **MEDICAL KNOWLEDGE:**

**Goal:** The resident will expand knowledge and perspective.

**Objective:** The medical knowledge of a PGY-3 is expected to encompass the following:

1. Principles of oncology, especially surgical oncology and medical oncology.
2. Principles of chemotherapy, radiotherapy, immunotherapy, and hormonal therapy.
3. Management of pain and the use of narcotic analgesics and adjunctive medications.
4. Principles and management of terminal care of patients including hospice programs, emotional and psychological issues.

**Objective:** Demonstrate mastery of basic definitions, concepts and units of radiation oncology including: dose, Gray, exposure, Coulomb, radioactivity, Becquerel, curie, radiation safety, Sievert.

**Objective:** Demonstrate a commitment to learning by placing an increased emphasis on literature review and participation in Journal Club.

## **PRACTICE-BASED LEARNING IMPROVEMENT:**

**Goal:** Identify personal and practice improvement strategies.

**Objective:** Residents will demonstrate the ability to:

- 1) Recognize limitations in own knowledge base and clinical skills
- 2) Understand and address the need for lifelong learning
- 3) Develop skills for obtaining and evaluating up-to-date information from scientific and practice literature and other sources to assist in the quality care of patients. This shall include, but not be limited to:
  - a. Use of medical libraries
  - b. Use of information technology, including internet-based searches and literature databases (e.g., Medline)
  - c. Use of drug information databases
  - d. Active participation, in weekly teaching conferences and weekly chart rounds, M&M conferences, and multidisciplinary tumor boards including Thoracic, Head and neck, Breast, GI, GU, CNS, GYN, Lymphoma, and Pediatric.
- 4) Evaluate caseload and practice experience in a systematic manner. This may include:
  - a. Case-based learning
  - b. Use of best practices through practice guidelines or clinical pathways
  - c. Review of patient records
  - d. Obtaining evaluations from patients (e.g., outcomes and patient satisfaction)
  - e. Employment of principles of quality improvement in practice
  - f. Obtaining appropriate supervision and consultation
  - g. Maintaining a system for examining errors in practice and initiating improvements to eliminate or reduce error

**Goal:** Be aware of own limitations, strengths and weaknesses.

**Objective:** A resident shall demonstrate a desire for learning and the ability to comprehend and develop strategies for further learning in order to always provide the best patient care, and continuous self-improvement.

- 1) Faculty should be able to observe a resident's ability to identify areas of personal strengths and weaknesses.
- 2) A resident shall provide to the Program Director twice annually (during evaluation process) a list of strengths and weaknesses. A resident-written list of learning goals should be included as well as steps necessary for success in attaining those goals.

## **RESEARCH:**

**Goal:** Develop a research proposal to be carried out during the PGY-3 and subsequent residency years.

**Objective:** A resident shall:

1. Be able to explain his/her interest in this area so that the Program Director can suggest additional areas of interest, introduce other UNMC faculty members with the same area of interest, or recommend other research on campus.
2. Identify a faculty member with whom he/she would like to work, or current research project underway in which he/she would like to engage. The Program Director together with the resident will contact the identified faculty member to seek mentorship.

The resident will continue to be provided:

1. Exposure to ongoing clinical protocols and research projects within the Radiation Oncology department.

2. Exposure to ongoing clinical protocols and research projects within the University of Nebraska Medical Center.
3. A research rotation during his/her PGY-4 to further develop and carry out the proposed research project.

### **INTERPERSONAL AND COMMUNICATIONS SKILLS:**

**Goal: While continuing excellent communication skills with patient and family members, and co-workers, the PGY-3 resident will communicate effectively as a member of the healthcare team.**

**Objective: The resident will demonstrate increasing participation in:**

1. Discussions with other specialists such as surgical oncologists, medical oncologists, diagnostic oncologists, pathologists and referral physicians in the presence of attending physicians.
2. Tumor Board discussions.

### **PROFESSIONALISM:**

**Goal: Continued progress in professionalism.**

**Objective:**

**Objective: Demonstrate a commitment to one's own professional advancement by making plans (even if only tentative) for the post-graduation period.**

### **SYSTEMS-BASED PRACTICE:**

**Goal: Continued progress in systems-based practice.**

**Objective: Demonstrate the ability to plan and study for the American Boards of Radiology examination(s).**