PGY-2, PGY-3, PGY-4, PGY-5

Goals and Objectives for Genitourinary Patients

PGY-2

This rotation provides training in diagnosis, staging, treatment of all GU malignancies, including prostate, bladder, testicular, penile and renal malignancies.

Patient Care:

- Provide training in diagnosis, work-up, and different treatment options for prostate cancer depending on stage of the disease, risk category (low, intermediate and high risk). Residents will also learn indication for androgen ablation, adjuvant radiation post prostatectomy and for recurrent disease after surgery
- Provide training in diagnosis, work-up and different treatment options including surgery, organ conservative therapy with chemotherapy and radiation, and indications for post-operative therapy for bladder cancer
- Provide training in diagnosis, work-up, and different treatment options for primary testicular cancer, including surgery, surveillance post surgery, radiation and chemotherapy
- Provide training in diagnosis, work-up, and different treatment options in cancers including kidney, ureter, and penile cancer
- Able to utilize CT, MRI, and nuclear studies for staging and treatment planning for genitourinary cancers
- Able to use CT simulation and contour relevant structures including prostate, seminal vesicles, bladder, rectum, small bowel, penile bulb and pelvic lymph nodes
- To learn acute and late side effects of radiation treatments for genitourinary cancers and their management

Medical Knowledge:

- To develop an understanding of natural history of genitourinary malignancies, epidemiology, patterns of spread, AJCC staging, and NCCN guidelines
- Knowledge of medical literature and ongoing clinical trials for GU cancers and apply it to clinical practice
Practice Based Learning and Improvement:

- Able to participate in multidisciplinary GU tumor board to discuss patient management and pertinent literature
- Ability to evaluate 3D and IMRT treatment plans. Ability to review and evaluate port films & IGRT ability to review dosimetry of prostate implants and critique for possible improvement

Interpersonal and Communication Skills:

- Ability to explain to the patient and family members different treatment options available and side effects of each modality
- Able to communicate with other physicians and other health care personnel to coordinate patient care

Professionalism:

- Demonstrate sensitivity in respect to ethnic and social needs of the patients
- Demonstrate compassion and respect to the patient

System Based Practice:

- Ability to coordinate the patient’s comprehensive care and other socio-economic needs during radiation therapy
- Become proficient in searching the data base and literature

Teaching Methods:

Residents are taught by attending physician one to one or through didactic lecture and visiting professors

Assessment Methods (Residents):

Each resident is expected to fill out an evaluation of rotation form annually

Assessment Methods of Program:

Each resident is expected to fill out evaluation of program annually

Supervision:

One on one by the attending physician
PGY-3

Continue development in each of the competencies addressed at the PGY-2 level and additionally:

Patient Care

- Further refine history and physical consultation skills including ability to perform prostate/rectal exams
- Recognize and manage acute and chronic treatment effects with guidance of the attending
- In follow up, begin to manage post treatment care and evaluate for recurrent/metastatic disease with appropriate diagnostic studies.
- Upon review of current standards of care, propose alternatives for clinical or translational research in this patient population.
- Become more proficient at prostate brachytherapy procedures with help of attending.

Medical Knowledge

- Develop proficiency in staging, extent of disease evaluation, and NCCN guidelines by disease site. Evaluate RTOG trials relevant to disease site for possible referral.
- Recommend evidence based treatment options and discuss and compare outcomes such as local control rate, survival probability and toxicities associated with the options identified.
- Develop basic understanding of other disciplines in oncology including chemotherapy and surgery.
- Become comfortable with developing presentations for our own department as well as others, including journal clubs.
- Begin developing research project to continue during residency.
- Understand radiobiology concepts and apply to clinical radiation oncology.
- Understand physics concepts and apply to clinical radiation oncology.
- Further understanding of prostate brachytherapy procedures and dosimetry

Practice-based Learning and Improvement

- Formulate complete comprehensive cancer treatment plans with the guidance of the attending.
- Perform simulations and develop treatment plan under the direct supervision of the attending.
**Interpersonal and Communication Skills**

- Elicit and provide information to patients and their families using effective nonverbal, explanatory, questioning and writing skills.
- Respond promptly to patients’ queries and requests.
- Develop team leadership skills to promote effective care delivery and a wholesome educational environment.

**Systems-based Practice**

- Exhibit sufficient computer skills to access appropriate medical records and patient data from both department and hospital-based systems.
- Advocate for high quality radiation oncology patient care and assist patients in dealing with system complexities.

**Professionalism**

- Demonstrate a commitment to carrying out professional responsibilities and a responsiveness to the needs of patients that supersedes self-interest.

**Teaching Methods:**

Residents are taught by attending physician one to one or through didactic lecture and visiting professors.

**Assessment Methods (Residents):**

Each resident is expected to fill out an evaluation of rotation form annually.

**Assessment Methods of Program:**

Each resident is expected to fill out evaluation of program annually.

**Supervision:**

One on one by the attending physician.
PGY-4

Continue development in each of the competencies addressed at the PGY-2 and PGY-3 level and additionally:

Patient Care
- Comprehensively evaluate GU patients with cancer and understand multidisciplinary aspects of patient’s care.
- Be able to perform simulation with only observation by attending.
  - Be able to perform prostate brachytherapy procedures with little assistance from attending.

Medical Knowledge
- For effective consultation and referral and for patient education, assess and describe common presentations of radiation interactions with antineoplastic/hormonal and/or biologic agents.
- Develop in-depth knowledge of chemotherapeutic and surgical roles in multi-disciplinary care.
- Distinguish between important and non-important problems of each patient; prioritize and resolve issues with minimal direct action by the attending physician.
- Understand in-depth concepts in radiobiology and apply to clinical practice.
- Understand in-depth concepts in radiation physics, be able to perform calculations, and apply to clinical practice.

Practice-based Learning and Improvement
- Refine practice experience through use of chart reviews, M&M and QA monitors to assess performance and management skills.
- Where appropriate and with guidance from the mentoring faculty, review tumor site specific patient experience for outcomes analysis and submission of abstract(s) for presentation.

Interpersonal and Communication Skills
- Develop a style of interaction with staff, attending physicians and colleagues in a manner that promotes and fosters cooperation, trust and respect.
- Become proficient in communicating and educating medical students and junior residents in the program.
Systems-based Practice

- Utilize services within the hospital setting or those available externally to assure patient access to quality care and management.

Professionalism

- Demonstrate appropriate ethical activities and professional behaviors at all times.
- Recognize challenging issues and seek appropriate guidance to resolution.

Teaching Methods:

Residents are taught by attending physician one to one or through didactic lecture and visiting professors.

Assessment Methods (Residents):

Each resident is expected to fill out an evaluation of rotation form annually.

Assessment Methods of Program:

Each resident is expected to fill out evaluation of program annually.

Supervision:

One on one by the attending physician.

PGY-5

Continue development in each of the competencies addressed at the PGY-2, 3 and 4 level and additionally:

Patient Care

- Independently evaluate GU patients and report findings to attending mentor and autonomously manage patients undergoing radiation therapy.
- Be able to perform standard brachytherapy procedures for prostate under observation of an attending.
- Be able to independently perform simulation, write a clear radiation prescription and devise an appropriate treatment plan with dosimetrist.
• Be able to implement IMRT, IGRT, standard 3D and Cyber knife treatment for GU patients.

Medical Knowledge
• Acquire an attitude consistent with life-long learning habits.
• Demonstrate a depth of knowledge that will allow residents to practice independently without direct supervision.

Practice-based Learning and Improvement
• Formulate and execute comprehensive treatment prescriptions, plans and simulations in an independent fashion (subject to approval by the attending faculty).
• Evaluate patient during on-treatment visits and in follow up clinic for assessment of acute or late toxicities and present and carry out a comprehensive management plan with minimal attending physician oversight.

Interpersonal and Communication Skills
• Exemplify empathy and conscientious attention to patient/family related concerns surrounding their cancer care and management.

Systems-based Practice
• Integrate necessary non-radiation interventions to facilitate patient care in multidisciplinary practice environment.
• Identify system and process errors in order to improve quality of care delivery and patient safety.

Professionalism
• Recognize and act quickly to protect patients from risk.
• Recognize the limits of professional competence and scope of practice.
• Develop a level of confidence and professionalism that confers trust by your patients.

Teaching Methods:
Residents are taught by attending physician one to one or through didactic lecture and visiting professors.

Assessment Methods (Residents):
Each resident is expected to fill out an evaluation of rotation form annually.
Assessment Methods of Program:

Each resident is expected to fill out evaluation of program annually.

Supervision:

One on one by the attending physician.

Educational resources:

- Residents have access to the Drexelmed library 24/7.

- Basic Radiation Oncology, Anatomy, Radiology, Medical Oncology, Physics and Radiation Biology texts are available in the Radiation Oncology library/conference room or in the residents’ room.

- Pertinent journals are available on-line. There is also a list of suggested articles, by site, in our Residency Program’s Policy and Procedure manual located in the residents’ room.

- Access to NCCN guidelines are accessible and are free on line along with guidelines from NCI, ACS, ASTRO.