

**University of California, San Francisco,
Department of Radiation Oncology
Residency Training Program
Educational Objectives for PGY-5 Residents
Alexander R. Gottschalk, M.D., Ph.D.**

Patient Care

- Communicate effectively and demonstrate caring and respectful behavior when interacting with patients and their families
- Gather essential and accurate information about patients
 - Learn how to interpret PSA , free PSA, PSA doubling time and PSA velocity
 - Learn how to use biopsy results to alter the treatment plan for the patient
 - Learn how to read a diagnostic CT scan, MRI and transrectal ultrasound
 - Learn the details of MRI and endorectal MRI/MRS of the prostate
 - Accurately stage and risk stratify patients based on the information available
- Develop the ability to make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
 - Learn indications for bone scans, CT scans, MRI, MRI/MRS, prostatascint, transrectal ultrasound, repeat biopsy.
 - Learn how to define PSA failures after radiation therapy
 - Learn the clinical significance of PSA doubling time after PSA failure
- Begin to develop and carry out patient management plans
 - Learn when hormonal therapy is appropriate in prostate cancer therapy
 - Learn appropriate duration of hormonal therapy for patients
 - Counsel and educate patients and their families
 - Use information technology to support patient care decisions and patient education
 - Provide health care services aimed at preventing health problems or maintaining health
 - Work with health care professionals, including those from other disciplines, to provide patient-focused care
 - Perform competently all medical and invasive procedures considered essential for radiation oncology including:
 - a. Selection of appropriate radiotherapeutic technique and modality for treatment of GU, thoracic and soft tissue tumors
 - b. Selection of immobilization technique, design of treatment portal, selection of beam modifier, common application of contrast material for simulation
 - c. Evaluation of radiotherapy treatment plan, dose and fractionation
 - d. able to outline tumor and organs of interest on CT/MR
 - e. Evaluation port films and identify and correct any systematic error in the treatment process

- f. Intraoperative radiation therapy
- g. Master interstitial brachytherapy for GU malignancy
- h. Stereotactic body radiotherapy

Medical Knowledge

Demonstrate a sound understanding of the basic science background of oncology and apply this knowledge to the clinical care of patients with GU, thoracic and soft tissue malignancy

Demonstrate the ability to use the scientific method and the deductive reasoning process

Know and apply the basic and clinically supportive sciences which are appropriate to their discipline

Natural history of disease

- Staging
- Indications for whole pelvic radiotherapy and/or hormonal therapy for prostate cancer
- Master and manage radiation therapy side effects and complication
- Master the risks, benefits, side effects, long-term complications of, and alternatives to radiation therapy
- Understand the body of literature to support the treatment recommendations
- Be able to independently evaluate and make treatment recommendation
- Be able to independently perform simulations and treatment planning

Practice-Based Learning and Improvement

- Demonstrate the ability to use information technology and feedback to improve the practitioner's fund of knowledge and technical skills and, ultimately, provide a better care to patients.
- Keep a log of all patients being treated
- Identify scientific studies related to their patient's health problems
- Perform literature searches and read relevant material for new patient consultations
- Attend weekly teaching sessions given by myself
- Facilitate the learning of students and junior radiation oncology residents
- Attend GU, thoracic, and sarcoma tumor boards

Interpersonal Skills and Communication

- Communicate effectively with other healthcare professionals.
- Communicate with patients and their families in easily understood and culture-sensitive language.
- Work effectively as a member of a professional group and lead a team of residents.
- Consistently demonstrate sensitivity to patients from different cultures.
- Maintain comprehensive, timely, and legible medical records.

- Be able to communicate the risks, benefits, side effects, long-term complications of, and alternatives to radiation therapy

Professionalism

- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities
- Work effectively as a member of a professional group and lead a team of residents
- Maintain comprehensive, timely, and legible medical records.

Systems-Based Practice

- Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:
 - a. Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice
 - b. Practice cost-effective health care and resource allocation that does not compromise quality of care
 - c. Advocate for quality of patients care and assist patients in dealing with system complexities
 - d. Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance