Moffitt Cancer Center at the University of South Florida

Radiation Oncology Residency Program

Departmental Handbook

Updated September, 2017

Radiation Oncology Residency Program

Program Structure

The Radiation Oncology Residency Program is sponsored by the University Of South Florida Office Of Graduate Medical Education (USF-GME). The Moffitt Cancer Center serves as the primary training site and assumes ultimate responsibility for the Radiation Oncology Residency Program. The James A. Haley Veterans Administration Hospital and University of Florida Proton Therapy Institute serve as participating training sites.

The goals of the Radiation Oncology Residency Training Program are to provide interdisciplinary care for new and established patients, develop and conduct clinical research trials that focus on radiation as the modality of treatment, establish collaborative links with appropriate basic science programs, and provide
educational programs and training. In addition, the Radiation Oncology Residency Program provides comprehensive, patient-oriented care for all types and stages of cancer using the most technically advanced equipment with concern for quality of life and education. Physicians and staff provide state-of-the-art patient care while striving to blend compassion, technology and advanced techniques.

The Radiation Oncology Residency Program provides training so that residents gain in-depth knowledge of clinical radiation oncology, including the indications for irradiation and special therapeutic considerations unique to each site and stage of disease. Residents learn standard radiation techniques, as well as the use of treatment aids and treatment planning to optimize the distribution of the radiation dose. Residents learn the principles of normal tissue tolerance to radiation and tumor dose-response. Residents learn the use of combined modality therapy and altered fractionation schemes. Education in pain management and palliative care is also provided. Residents gain in-depth knowledge in follow-up care for irradiated patients on an in-patient and out-patient basis. The program ensures that residents have the opportunity to learn about the problems of recurrent and disseminated tumors, and of late aftereffects and complications of radiation therapy.

The Radiation Oncology Residency Program provides a scholarly environment for acquiring cognitive and technical skills. In addition, the Program provides extensive supervised training and education so residents can acquire special skill and knowledge while encompassing the newest techniques in an environment that focuses on a multidisciplinary approach to patient care. Scholarly attributes of self-instruction, teaching, skilled clinical analysis, sound judgment and research creativity are strongly emphasized. Training faculty inspire all residents to develop and maintain a lifetime commitment to continued learning and expansion of their knowledge and wisdom. Faculty also encourages residents to disseminate their knowledge and wisdom to other physicians, medical students, non-physician health care professionals and patients through maintenance of personal outcome data.

Selection Criteria

Applicants must meet the following qualifications: satisfactory completion of PGY-1 level or greater year in a United States ACGME accredited residency program. The first year of postgraduate resident clinical training must be conducted in internal medicine, family practice, obstetrics/gynecology, surgery or surgical specialties, pediatrics, or a transitional-year program on or before June 30 of the academic year resident will be hired. PGY-1 training is not provided by the Radiation Oncology Residency Program. The experience will then be followed with four years of focused training in Radiation Oncology.

Residents must have passing scores on USMLE Steps 1 and 2 or equivalent, qualify for a Florida State training license, maintain BLS and ACLS certification and the fulfill general criteria set forth for residents by the University of South Florida College of Medicine. In addition, you will be required to take and pass USMLE Step 3 by March 1 of your PGY-2 year.

The Radiation Oncology Residency Program is dedicated to producing quality, highly trained radiation oncologists prepared to seek careers in either academic or private practice medicine. In order to achieve this goal, the program seeks candidates based upon their preparedness, ability, academic credentials, communication skills, motivation and integrity, and does not discriminate with regard to sex, race, age, religion, color, origin, disability, or veteran status.

Application Process

Applications and all accompanying documentation are accepted in the ERAS system only. Applications are accepted through October 15th. Interviews are held, by invitation only, by early January of the interviewing year. The program participates in the National Resident Match Program (NRMP). As such, applicants must register with ERAS and the NRMP.

Accreditation

The Radiation Oncology Residency Program is fully accredited by the Accreditation Council for Graduate Medical Education (ACGME). The Program follows all training and accreditation guidelines as set forth by the ACGME, including competency based training utilizing the six core competencies.
Graduate Medical Education

The Radiation Oncology Residency Program falls under the USF-GME which adheres to all policies of the ACGME. The office of the Graduate Medical Education provides excellent oversight and educational resources to assist in the maintenance of highly successful graduate medical education programs. The Moffitt Cancer Center, primary training site, has a designated GME Office which consists of a full-time Residency Coordinator dedicated to the Radiation Oncology Residency Program.

Affiliated Hospitals

The Moffitt Cancer Center, a 206-bed tertiary-care, free-standing cancer center established in 1986, is located on the main campus of the University of South Florida adjacent to the Medical School. Moffitt organizes services into 14 interdisciplinary, disease-oriented programs that encompass patient care, clinical research, education, and cancer control activities. The objectives of these programs are to provide interdisciplinary care for new and established patients, develop and conduct clinical research trials, establish collaborative links with appropriate basic science programs, and provide educational programs and training for medical students, house staff physicians, and fellows. Moffitt is the only National Cancer Institute (NCI) designated Comprehensive Cancer Center in the State of Florida and is listed in the U.S. News & World Report as one of the top cancer hospitals in America.

Moffitt Cancer Center Mission Statement is “To contribute to the prevention and cure of cancer.” The Department of Radiation Oncology’s vision statement is “To maintain a world-class academic Radiation Oncology Department through outstanding interdisciplinary research, treatment delivery and education.”

The James A. Haley Veterans Administration Hospital, the busiest VA hospital in the country, is a training site of the University of South Florida. The VA, a 353-bed Dean’s Committee Hospital, is connected to USF by a walkway. The Mission Statement of the Department of Radiation Oncology at the James A. Haley Veterans Administration Hospital is “to provide the highest quality radiation treatment for the veteran community by administering treatment professionally and compassionately, remaining conscious of the personal needs of patients, and maintaining an environment which promotes the overall well-being of patients, and assures the highest quality of care through the team efforts of multi-modality cancer specialists.” This includes a full range of preventative, rehabilitative and extended care, and promotes a broad base of research and education.

The residents gain a unique training experience at the James A. Haley Veterans Administration Hospital due to the exposure of a large representation of patients from socio-economically disadvantaged segments of society, and exposure to a higher incidence of advanced stage malignancies. Training faculty members are qualified experts in their field and are committed to providing the highest possible quality training experience for the residents.

Faculty and Staff - Training Faculty:

Administration
Louis B Harrison, MD, FASTRO Chair, Radiation Oncology Department
Peter Johnstone, MD Vice Chair, Radiation Oncology Department
Thomas J. Dilling, MD Residency Program Director
Angie Courtney Residency Education Coordinator

Moffitt Cancer Center

Radiation Oncology:
Kamran Ahmed, MD  
Assistant Member

Jimmy Caudell, MD, PhD  
Associate Member

Roberto Diaz, MD  
Associate Member

Thomas Dilling MD, MS  
Associate Member

Daniel Fernandez MD, PhD  
Assistant Member

Jessica Frakes MD  
Assistant Member

Louis Harrison MD, FASTRO  
Member and Chair

Sarah Hoffe, MD  
Associate Member

Peter Johnstone MD  
Member and Vice Chair

Sungjune Kim MD, PhD  
Assistant Member

Arash Naghvai, MD, MS  
Assistant Member

Michael Montejo, MD  
Assistant Member

Amber Orman MD  
Assistant Member

Bradford Perez MD  
Assistant Member

Timothy Robinson MD  
Assistant Member

Javier Torres-Roca, MD  
Associate Member

Andy Trott, MD  
Member

Kosj Yamoah MD  
Assistant Member

Michael Yu MD  
Associate Member

**Radiation Physics:**

Eduardo G Moros, PhD  
Chief of Medical Physics

Stuart Wasserman, MS  
Director of Clinical Physics

Vladimir Feygelman, PhD  
Director Medical Physicist

Dylan Hunt, PhD  
Medical Physicist

Ken Javedan, PhD, MS  
Medical Physicist

Kujtim Latifi PhD  
Medical Physicist

Richard Mueller, PhD  
Medical Physicist

Brian Noriega, MS  
Medical Physicist

Dan Opp, PhD  
Medical Physicist

AJ Saini, PhD  
Medical Physicist

Robert Sanders, BS  
Radiation Safety Officer

Siriporn Sarangkasiri, MS  
Medical Physicist

Luke Walker, MS  
Medical Physicist

Geoffrey Zhang, PhD  
Medical Physicist

**Dosimetry:**

Amber Shrewsbury CMD, RTT  
Manager, Dosimetry

Connie Mehra CMD, RTT  
Dosimetrist

Carolyn (Lynn) Turke CMD  
Dosimetrist

Dawn Gintz CMD, RTT  
Dosimetrist

Genevieve Garcia CMD, RTT  
Dosimetrist

Julie Peters BSc, CMD  
Dosimetrist

Laura Maun-Garcia CMD, RT(R)(T)  
Dosimetrist

MaryLou Demarco MS, CMD  
Dosimetrist

Stacey Kelley CMD  
Dosimetrist

Susan Leuthold CMD, RTT  
Dosimetrist

Weiqi Li CMD  
Dosimetrist

**James A. Haley Veterans Administration Hospital**

**Radiation Oncology:**

James Pearlman, MD  
Site Director

Evangelia Katsoulakis, MD  
Staff Radiation Oncology

Niroo Talwar, MD  
Staff Radiation Oncology

Babu Zachariah, MD  
Staff Radiation Oncology
Radiation Physics:

Shawn Paras, MS  Medical Physicist
Gareth Williams, PhD  Medical Physicist
Terry Zhu, MS  Medical Physicist

Program Administration

Department Chair:

Louis B. Harrison, MD, FASTRO is a Member of the faculty and Department Chair, Department of Radiation Oncology, Moffitt Cancer Center.

He is also Deputy Physician in Chief at Moffitt. In this role, he is part of the Physician in Chief Executive Committee and provides clinical leadership in various institutional activities such as strategic planning, payer strategies and faculty recruitment. He received his MD degree from the S.U.N.Y. Downstate Medical Center College of Medicine. He completed a Radiation Oncology Residency at Yale University School of Medicine, Yale-New Haven Hospital; he also served as Chief Resident. Following my residency, he joined the faculty at Memorial Sloan-Kettering Cancer Center in New York. While at Memorial, he assumed increasing responsibilities over his 11-year tenure and was the Chief of the Brachytherapy Service in the Department of Radiation Oncology as well as the Institutional Program Leader of the multidisciplinary Head and Neck Cancer Disease Management Team. He was also appointed to the faculty of Cornell University School of Medicine; Assistant Professor (1987-1991); and Associate Professor (1991-1997). I joined the Continuum Health Partners (Beth Israel Medical Center, St. Luke's and Roosevelt Hospitals and NY Eye and Ear Infirmary) in 1997. At Continuum, he served as Chairman and Gerald J. Friedman Endowed Chair of Radiation Oncology and Physician-in-Chief of Continuum Cancer Centers of New York. He was also appointed as Professor of Radiation Oncology and Otorhinolaryngology-Head and Neck Surgery at the Albert Einstein College of Medicine. He has served as Chairman of the Board and President of ASTRO, the leading radiation oncology professional society in the country, as well as President of the American Brachytherapy Society and President of the International Society of Intraoperative Radiation Therapy. His research is focused on head and neck cancer, skin cancer and sarcoma. He has been instrumental in developing multidisciplinary treatment strategies that focus on organ and function preservation and quality of life outcomes. This has also included using brachytherapy and intraoperative radiation therapy to deal with complex clinical situations including re-treatment and second malignancies. He is the senior editor of the textbook Head and Neck Cancer: A Multidisciplinary Approach, now in its fourth edition. He is a co-editor of Intraoperative Irradiation: Techniques and Results, now in its second edition. He the recipient of numerous awards including the Alpha Omega Alpha Honor Medical Society, Clarence Dennis Society Prize, the Henschke Award for Brachytherapy, the Physician of Excellence Award from the American Cancer Society and the Boyer Prize for Biomedical Research at Memorial Sloan Kettering Cancer Center. In 2017, he was awarded the ASTRO Gold Medal, the highest professional achievement in radiation oncology.

Department Vice-Chair:

Peter Johnstone, MD is a Member of the faculty and Vice-Chair, Department of Radiation Oncology, Moffitt Cancer Center.

Dr. Johnstone received his MD degree from the Uniformed Services University of Health Sciences, Bethesda, MD. He completed a Transitional Internship at National Naval Medical Center and a Radiation Oncology Residency at the National Cancer Institute. Dr. Johnstone served in the United States Navy, retiring in 2003. He then served as Professor of Radiation Oncology and Hematology/Oncology at Emory University School of Medicine from 2003-2007. He was Director of the Survivorship Program at the Emory Winship Cancer Institute during this period. Dr. Johnstone was appointed as Chair and William A. Mitchell Professor of Radiation Oncology at Indiana University School of Medicine in 2007. He was also assigned as President and Chief Executive Officer of the IU Health Proton Therapy Center, and Director of the Indiana University cyclotron. He assumed responsibilities as Clinical Director and Vice Chair at Moffitt in 2014. Dr. Johnstone has clinical interest in pediatric, and genitourinary malignancies and sarcomas. His recent clinical trials have involved acupuncture as symptom control in cancer patients, and his recent publications have dealt with the use of proton radiotherapy in children. He is a Fellow of the American
College of Radiology and serves on the ACR Board of Chancellors. In 2007 he was President of the Society for Integrative Oncology, and in 2011 was President of the American Radium Society.

Program Director:

**Thomas Dilling, MD, MS**, is an Associate Member of the faculty and Residency Program Director, Department of Radiation Oncology, Moffitt Cancer Center.

Dr. Dilling studied art history and Italian at the University of Pennsylvania. He subsequently received his MD degree from Penn as well. He did his internship at Pennsylvania Hospital in Philadelphia, the nation's oldest hospital. He returned to Penn for his residency in radiation oncology. Following this, he did a year-long fellowship in radiation biology, studying hypoxia with a novel imaging technique. During this time, he also received a master's degree in Information Technology from Penn’s Graduate School of Engineering.

Board certified by the American Board of Radiology, Dr. Dilling is active in several institutional as well as national committees through ASTRO and the RTOG. He is also the Program Director for the radiation oncology residency program at Moffitt. He is a member of the NCCN panels for non-small cell lung cancer, thymoma, and mesothelioma.

Dr. Dilling specializes in the treatment of thoracic malignancies. He has particular research interests include stereotactic radiotherapy of the lung, as well as “4D” imaging modalities (CT and PET/CT), to account for tumor motion.

Residency Coordinator:

**Angie Courtney** is the Radiation Oncology Residency Coordinator. Angie helps to develop and provide organizational support for the residency program. Angie’s office is located in the Moffitt Graduate Medical Education Office (GME). The mission of the GME Office is to improve the quality of healthcare at the Cancer Center by ensuring and improving the educational experiences for physicians in training.

As the Residency Coordinator, Angie helps manage all aspects of the Residency Program and ensures compliance, day-to-day operations and effective administration of the program. She maintains all resident academic files, correspondence and evaluations. Residents may contact Angie to schedule an appointment to review the contents of the employment file. Angie also coordinates the medical student elective rotations in conjunction with the University Of South Florida College Of Medicine Registrar. Angie serves as the liaison to the USF GME Office and attends monthly Education Coordinator meetings. Angie also administers the recruitment and interview process for residency applicants.

Orientation

All residents are required to attend a mandatory one-day University of South Florida orientation during the first week of July. The orientation addresses institutional orientation, assigning computer codes, parking passes, badges, lab coats and pagers. Residents also complete all JAHVA paperwork during this time and are required to attend computer based training before a rotation at the VA. Residents may not begin their rotation without attending the orientation. Residents are also required to attend a mandatory one-half day administrative departmental orientation at Moffitt Cancer Center.

Following the institution-wide orientations, residents spend an additional two weeks of training undergoing intensive departmental orientation. The comprehensive training includes clinic operations, mid-level issues, patient care, clinic staffing and flow, documentation and departmental expectations, physics, dosimetry, pathology, radiology, radiation therapy, radiation safety, research and compliance, Moffitt and USF libraries, resource information, and computer training.

Licensing

All residents must have either an active license to practice medicine in the State of Florida or be continually registered as an unlicensed physician-in-training with the State of Florida Board of Medicine.

Compensation and Benefits
Radiation Oncology residents are employed through the University of South Florida College of Medicine. To view the compensation and benefits package, the Housestaff Manual and Sample Contract please visit:  [http://health.usf.edu/medicine/gme/index.htm](http://health.usf.edu/medicine/gme/index.htm).

**Housestaff Manuals**

Residents receive the USF GME Housestaff Manual, the Moffitt Cancer Center Departmental Manual, and the VA Departmental Manual. Residents are responsible for reviewing all manuals and adhering to all policies and procedures as set forth in the manuals. **Residents should adhere to the University of South Florida housestaff manual regarding employment issues such as work hours, insurance, vacation, moonlighting, disciplinary actions, grievance policies, etc.** The Moffitt Cancer Center and VA housestaff manual should be used as a resource in navigating their programs, systems, ancillary services, etc.

**Annual Leave:**

According to the policy of the USF GME, PGY2 through PGY-5 residents are entitled to fifteen (15) days of annual leave. Vacation time must be approved by both the Program Director and the attending faculty member on the service the resident will be absent a minimum of thirty (30) days in advance of the planned leave. Residents are required to complete a Leave Request Form which can be obtained from the Residency Coordinator. Residents are not permitted to take the entire fifteen (15) days vacation at once. Residents are encouraged to take five (5) days per leave incidence scheduled throughout three (3) different rotations and will not be granted greater than two (2) weeks vacation during any single rotation as not to detract from the educational experience on that rotation. All vacation requests will be considered however coverage must be accommodated at all times. As such, all residents will not be granted simultaneous leave at times such as Holidays. However, all requests will be considered.

Residents who start a training year late or leave a training year early will not graduate that year unless all mandatory educational requirements are met, including the required number of weeks spent on clinical rotations. Residents will be required to use vacation time to make up missed clinical rotations (i.e. if a resident arrives late he or she forfeits the appropriate amount of vacation in order to stay in the hospital and make up clinical rotations). Residents who leave a training year early will not graduate that year unless all rotation requirements established by the ACGME and the ABR have been met. According to the ABR, residents may not exceed four (4) calendar weeks of leave per year. This includes vacation, sick days, personal or family leave, and medical leave. Please refer to American Board of Radiology (ABR) requirements at [http://www.theabr.org/NRC_Final_Reg_RO.htm](http://www.theabr.org/NRC_Final_Reg_RO.htm).

Residents will not be granted annual leave during the first two weeks of the new academic year. Vacation must be used in the year it is accrued and may not be carried over to the next academic year. The only exception to the policy is for planned Parental Leave of Absence which must be approved by the Program Director in advance. In this instance, the resident may carry over a maximum of five (5) days for no longer than one (1) year. Residents will not receive payment for unused vacation days upon termination or completion of the training program. Please refer to the University of South Florida College of Medicine Housestaff Manual at [http://health.usf.edu/medicine/gme/index.htm](http://health.usf.edu/medicine/gme/index.htm).

**Sick Leave:**

Residents are entitled to up to 10 days of sick leave per year as per the USF GME Housestaff Manual. One day is donated to the sick pool, leaving a total of 9 useable sick days.

**Parental:**

Each resident is allowed up to twelve (12) weeks of uncompensated parental leave. Residents must apply for parental leave in advance and obtain approval from the Program Director and the USF GME. Residents may use sick or vacation leave as continued compensation during parental leave. No other compensation is available for parental leave. If both parents are USF residents, a combined total of 12 weeks of parental leave is allowed as prescribed by the FMLA. Absences from the program in excess of that allowed by the RRC and ABR and must be made up in order to fulfill the requirements for completion set forth by the ACGME.
**Holidays:**

Residents are entitled to holiday the following recognized holidays. Residents rotating at the VA are expected to work at Moffitt Cancer Center on any VA recognized holidays that are not recognized by Moffitt Cancer Center. Residents are not charged vacation days for the following recognized holidays. The Moffitt holidays are granted in addition to the resident's annual leave. The VA holidays of President’s Day, Columbus Day, and Veterans Day are not recognized by Moffitt.

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**Business/Professional Leave/Conference Travel:**

According to the USF GME Housestaff Manual, residents are entitled to paid business or professional travel “as approved by the Program Director and the GME Office.” The following policy has been approved:

Residents are provided a maximum of 10 days for conferences and other educational workshops as approved by the Program Director. Travel allowance will be approved on a case-by-case basis to national scientific meetings if the resident abstract or paper is accepted for presentation and/or upon approval of the Program Director. Residents have support from Moffitt Cancer Center and the USF GME Office in the form of funding which varies by year. Priority will be given to oral presentations for the USF GME funding. Residents may apply for travel grants or receive funding from his or her mentor(s).

Residents must seek written pre-approval from the Program Director prior to submitting any abstracts using the Abstract Submission and Leave Request Form. The form should be accompanied by a copy of the abstract and meeting information (title of meeting, dates, location). The same form will be used if approved by the Program Director and if abstract is accepted. A second leave form will not be necessary. Residents should submit the request to the Residency Coordinator. The Residency Coordinator will get attending faculty and Program Director signatures once file is checked for compliance. Forms must be signed by the Program Director no less than thirty (30) days prior to planned business travel. Again, a copy of abstract, abstract acceptance, funding support or grant, and meeting information must accompany all leave forms.

**Note** – Interview days for our graduating residents are not considered business or professional leave and must be used as vacation days.

**Note:** According to the ABR, Radiation Oncology Residents must complete a minimum of 36 months of clinical rotations. Business travel, vacation and sick time must be deducted from the mandatory 36 months of clinical experience. As such, excessive resident business travel will not be approved in an endeavor to meet the requirements of the ABR. If an individual resident is not compliant, s/he will not be eligible to sit for the radiation oncology board exams until such time is made up (possibly by extending the residency).

**Work Environment**
Attire (Professional)
Appropriate standards of attire are required for all physicians, healthcare professionals, residents, and medical students. This standard of dress is intended to encourage patients’ confidence in their physicians and to help patients and families recognize physicians, residents and students as members of the healthcare team.

While in contact with patients, all physicians (residents and attendings), medical students and other healthcare professionals with clinical privileges shall wear a white coat, along with shirt and tie for men and properly coordinated attire for women. A suit coat may be substituted for a white coat. Approved attire within the hospitals shall not include shorts, cutoffs, jeans, or similar casual clothing. Footwear shall be clean and appropriate to the occasion. Men shall wear socks. Not thongs, flip-flops or heavy boots shall be permitted.

Scrubs will be provided as appropriate for specific patient care areas. Staff in these areas shall, upon leaving the area for short periods of time, wear designated protective cover garments or white lab coats. Persons entering a sterile area shall don a new set of clean scrubs. Disposable accessories (masks and shoe covers) must be properly discarded upon leaving areas at any time and replaced upon re-entry. Hospital scrub clothing shall not be removed from the facility. Personnel outside the hospital with scrub clothing shall be subject to corrective discipline.

House officers are required to wear white lab coats with identification badges at all times while on duty. Two lab coats are provided to each House officer at the beginning of each residency year. Residents will be responsible for paying for additional coats and or replacement USF ID name badges.

Resident Duty Hours

According to the ACGME, duty hours are defined as all clinical and academic activities related to the program for both inpatient and outpatient care, administrative duties as they relate to patient care, the transfer of patient care, time in-house on call activities, and scheduled activities such as conferences. Duty hours do not include reading and preparation time spent away from the duty site. Also according to the ACGME, duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities. Residents must be provided with one (1) day in seven (7) free from all educational and clinical responsibilities averaged over a four-week period. A 10-hour time period must be provided between all daily duty period and after in-house call.

The Radiation Oncology Residents do not take in-house call; however do take at-home call. According to the ACGME, at-home call is not subject to the every third night, or 24+6 limitation. However at-home call must not be so frequent as to preclude rest and reasonable personal time for each resident. Residents who take at-home call must be provided with one in seven days free from educational and clinical responsibilities, averaged over a four-week period. When residents are called into the hospital from home, the hours residents spend in-house must be counted towards the 80-hour work week limit.

The Radiation Oncology Residency Program schedules at-home call equitably for all residents. Residents are scheduled for at-home call based upon the number of current residents. Currently, there are six (6) residents. Subsequently; each resident is scheduled for at-home call in one-week increments every six (6) weeks. Please refer to the ‘Resident Call Section’ of this manual.

Duty Beyond Scheduled Hours

According the ACGME training requirements for Radiation Oncology; a corresponding measure should be taken if a resident remains on duty beyond scheduled hours although the situation rarely applies for residents in our radiation oncology program. If it does occur, the resident should immediately discontinue her/her service work and transfer the care to the on-call attending. All reports for transition of care should be completed and submitted to the program within 24 hours. The program director should review it carefully and take an immediate action to prevent the situation from happening again.

Minimum Time off
Intermediate-level residents should have 10 hours free of duty, and must have eight hours between scheduled duty periods. They must have at least 14 hours free of duty after 24 hours of in-house duty.
Residents in the final years of education must be prepared to enter the unsupervised practice of medicine and care for patients over irregular or extended periods. PGY5 residents are considered to be in the final years of education. This preparation must occur within the context of the 80-hour, maximum duty period length, and one-day off-in-seven standards. While it is desirable that residents in their final years of education have eight hours free of duty between scheduled duty periods, there may be circumstances when these residents must stay on duty to care for their patients or return to the hospital with fewer than eight hours free of duty.

Circumstances of return-to-hospital activities with fewer than eight hours away from the hospital by residents in their final years of education will be monitored by the program director and follow the procedure for Duty Beyond Scheduled Hours.

**Moonlighting**

According to the USF GME Housestaff Manual, residents may not accept outside employment or engage in other outside activities that may interfere with performance of clinical responsibilities. A limited number of moonlighting opportunities may be available with the knowledge and pre-approval of the Program Director. A leave of absence may not be granted for moonlighting or locum tenens work. Accordingly, residents are not permitted to moonlight or do locum tenens during an approved leave of absence unless pre-approved by the Program Director and the USF GME Associate Dean for Graduate Medical Education. First year residents will not be granted approval for moonlighting. Residents must request moonlighting privileges in writing and meet with the Program Director for approval. The Program Director will bring the matter to the next scheduled Resident Education Committee Meeting for final approval prior to commencing with moonlighting activities.

**Probation, Suspension, Non-Renewal and Dismissal**

According to the USF GME Housestaff Manual, residents who do not consistently maintain satisfactory performance as a post-graduate trainee or who do not maintain satisfactory performance in meeting professional standards in patient care may be placed on probation, suspended, non-renewed, or dismissed from the program. The program follows the USF GME’s five-step policy for grievance and appeal (USF COM GME Education Policy and Procedure Manual No: GME-218) for all resident behaviors, including professionalism. Step 1 is counseling with the Program Director, Step 2 is a written warning by the Program Director with a copy to the USF GME Associate Dean for Graduate Medical Education, Step 3 is probation, Step 4 is notice of intent not to renew, repeat a year, or continued probation, and Step 5 is termination/revision of decision after appeal.

Should a resident be placed on probation, a notice will be sent to the USF GME and become a part of the resident’s permanent file. Residents will not be non-renewed or dismissed from the residency program without prior probationary status except in the case of egregious performance requiring non-renewal or dismissal without probation. Following the provision of reliable information that a resident's clinical judgment or clinical skill is deficient or impaired, residents may be immediately suspended from patient care. Residents who are given notice of probation, suspension, non-renewal or dismissal may exercise their right to appeal by application to the USF GME Director of Graduate Medical Education, who serves as the ombudsman. Residents will always be assured of protection of their right to due process.

The Program Director has oversight of all trainees at all sites. Should the site director or other faculty member develop a concern about a resident while at that site, they should contact the Program Director immediately who will take action according to USF COM GME Education Policy and Procedure Manual No: GME-218.

Faculty and other staff are also expected to advise the Program Director if they have concerns about resident performance or professional behavior. Communications between faculty or staff and the Program Director are conducted in a confidential manner to foster reporting inappropriate behavior. Additionally, patients have access to the Patient Relations Office of the training site, wherein their identity is protected when reporting adverse resident behavior. Patients may also contact the Program Director. Immediately following a report of inappropriate or unprofessional behavior, the Program Director meets with the resident to present the complaints and allows the resident to respond. Resident remediation is discussed with the Resident Education Committee, which includes the department chair and other faculty, and final action is determined. A written plan for improvement outlining the area of concern and specifying
timelines and goals is reviewed with the resident and monitored by the Program Director. Remedial actions are placed in the residents internal employment file.

**Computer Access**

Residents are provided with computer access and access codes and log-ins for all required software. Residents receive computer training in the initial institutional orientation for the Moffitt Cancer Center and the James A. Haley Veterans Administration Hospital. Residents then receive one-on-one or small-group computer training for additional departmental systems. Training resources and training personnel are readily available to assist with ongoing training needs.

**Lab Coats**

Incoming residents will receive two lab coats and have the option of receiving two new ones at the beginning of each year thereafter. If residents choose to launder lab coats at Moffitt Cancer Center, please give to one of the Radiation Oncology Management Assistants.

**Pagers**

Residents are assigned Moffitt pagers. If lost or broken, there will be a $50 pager fee. Please address any pager issues with the Residency Coordinator. Please see Radiation Oncology Management Assistants for batteries.

**Office Supplies**

Please retrieve office supplies from the inventory in the back administrative hallway.

**Clinic Structure (Policies, Resident Supervision and Scope of Practice)**

**Clinic Structure:**

No fewer than 36 months of the four-year program are spent in the core clinical curriculum in Radiation Oncology. During each three-month clinical rotation at each of the training institutions, residents are supervised and instructed on a one-on-one basis by a faculty member who is responsible for both resident teaching and evaluation of resident performance. Residents are provided with a rotation schedule prior to the commencement of that academic year. Rotation schedules are adhered to as strictly as possible, however are subject to change when necessary.

In order to achieve intensified knowledge in a specialty of interest, residents may select elective rotation(s) in the PGY-4 and PGY-5 residency years. Electives are 1-3 months in duration and conducted in disciplines such as pathology, molecular biology, and research. Advanced clinical rotations in stereotactic body radiotherapy, brachytherapy, or advanced clinic rotations in various disease sites are also possibilities. Electives will be considered on a case-by-case basis and approved by the Program Director. Residents may spend up to 3 months of elective time at other radiation oncology programs (foreign or domestic). ACGME regulations disallow additional time away.

Residents participate in all aspects of Radiation Oncology in all disease-sites, and in pediatric radiation oncology. Residents receive training in the clinical treatment planning of benign and malignant disease, treatment delivery, multi-disciplinary approach to patient care, supportive care, medical physics, dosimetry, brachytherapy, simulation, port film evaluation, radiation safety, and radiobiology. In addition to residents receiving cumulative experience in adult medical oncology, pathology and radiology through exposure to multidisciplinary treatment conferences, weekly radiology case conferences, and combined modality treatment protocols, residents complete a dedicated month of Dosimetry/Treatment Planning.

Residents’ initial training focuses on clinical evaluation, history and physical, staging, and patient management. Individual mentoring from attending radiation oncologists is achieved during the clinical rotations, didactic curriculum, clinical rounds, tumor boards and clinical presentations. Patient consultations are evaluated by the resident and presented to the attending staff physician. The resident and attending physician discuss the evaluation and treatment recommendations. Following the
consultation, the resident is responsible for, under faculty supervision, directing the treatment of the patient, including treatment planning, and on-treatment visits. Staging and treatment recommendations are discussed between attending physicians and residents for each patient including simulation, planning CT, verification, or brachytherapy. Indications and treatment techniques are discussed between the attending and resident physician. In addition, patient cases are discussed at weekly chart review meetings.

On-Call residents are responsible for accepting referral consultations when called in by the medicine and surgical services. This process increases the interactions between the services at the resident level, and teaches or provides learning experience in the consultation and referral process. This also applies when radiation oncology residents are assigned to obtain a consultation or referral evaluation with another service on a patient whom they are responsible for following or during radiotherapy treatment.

Residents benefit from interactions with other residents/fellows from programs such as Otolaryngology, Pathology, Medical Oncology, Surgical Oncology, and Radiology. Radiation Oncology resident physicians interact daily with residents/fellows and attending physicians from other departments and services in the day-to-day practice of clinical patient care.

Resident Supervision:

Supervision of residents is required in all services of the hospital. Supervision begins with the housestaff’s initial contact with the attending physician and the patient and continues through all contact the house staff has with the patient. Supervision is complete when all documentation of the hospital stay or clinic visit is collected for the permanent medical record. Some supervision can be via communication by phone or even at a later time (phone calls or an unexpected OTV). As residents evaluate patients independent of the attending faculty, all patient encounters must be related to the attending. All aspects of treatment planning and implementation must be supervised and approved in writing with the responsible faculty. The faculty must document his or her presence for all areas of supervised work.

In order to ensure patient safety and quality patient care while providing the opportunity for maximizing the educational experience of the resident in the ambulatory setting, it is expected that an appropriately privileged attending faculty member will be available for supervision during clinic hours. Patients followed in more than one clinic will have identifiable faculty for each clinic. Attending faculty members are responsible for ensuring the coordination of care that is provided to patients.

The attending physician is responsible for the daily management of patients. All emergencies are jointly evaluated by the resident and the attending staff on call and for the first emergency treatment given outside the regular working hours, both the resident and staff on call must be present. Scheduled weekend treatments should be attended by both the staff and resident if the resident is in his/her first 6 months of training. Residents on call must contact the attending immediately upon being called to the hospital for directive. Residents are given greater clinical responsibilities as they progress in their training.

Consults – In-Patient:

Requests for in-patient consults are received by the scheduling staff. The resident is notified of the consultation and he/she is responsible for seeing all consults and obtaining the appropriate clinical information, imaging and pathologic studies. The patient is then presented to the appropriate faculty physician who will see the patient together with the resident within 24 hours of departmental notification. A decision regarding patient management is made and the billing forms are completed. All notes placed in the patient chart are to be date and time stamped. Once the patient has been seen, a complete history and physical must be dictated within 24 hours.

Consults – Out-Patient:

Patients are scheduled to be seen in the out-patient clinic area at designated times. A daily schedule for patient consultations, simulations, setup of new patients, and patients under treatment is maintained and available for each staff physician and resident. The out-patient consultation is seen first by the resident and then jointly with the faculty member. A complete history and physical is dictated at that time. The resident should ensure that all relevant clinical records, radiology exams and pathology reports are available at the time of consultation whenever possible. Outside pathology slides for each patient accepted for treatment in the Department of Radiation Oncology must be reviewed at Moffitt. Outside
radiology exams to be reviewed at the Moffitt Cancer Center must be submitted to Radiology for consultation with the appropriate reports and forms. Release forms for pathology slides, reports, medical records, x-rays, scans, etc. should be obtained from the patient when appropriate.

All patients who are new to the out-patient clinic should be seen by, or discussed with, the attending faculty at that initial visit. The staff practitioner must document this in the chart or as an addendum to the resident note.

**History and Physical Examination:**

History and physicals are dictated on all patients seen in consultation. The residents should obtain a complete history and perform a complete physical examination before the faculty sees the patient. Residents are provided with appropriate codes for performing dictations in the hospital's telephone-based transcription system. All signs and symptoms pertinent to the patient’s problem must be noted. Dimensions of palpable nodes or masses must be described and recorded accurately. Pertinent negative findings should also be recorded. At the completion of the history and physical examination, the patient should be staged by the appropriate staging classification for the primary disease site for ALL patients. The disease type, stage and date of diagnosis should be recorded on all history and physicals. At the completion of the history and physical, a summary of the salient points of the patient’s history and disease status, as well as recommendations and plans for treatment, should be described. Each dictation must also be signed by the responsible staff physician.

**Treatment Planning:**

Scheduling of New Patients – All appointments (simulations, setups, CT scans for planning purposes only) for new patients beginning treatment must be scheduled appropriately. A simulation order must be completed in its entirety when submitted.

For in-patients at Moffitt, the resident should inform the therapists of the patient’s location so they may arrange for in-house transport. The resident should ensure that any scheduled appointments do not conflict with the attending faculty’s schedule so that the faculty or a covering physician is present as required for all procedures.

Appointments for simulation on the fluoroscopic simulator and CT simulator for treatment planning are arranged through the scheduler, with input as necessary from one of the chief therapists. All appointments for setups, special procedures (such as TBI, general anesthesia cases, stereotactic radiosurgery/radiotherapy) and out-patient HDR brachytherapy procedures) are arranged with the chief therapists as well as appropriate physics and nursing staff. New setup times are assigned each afternoon. Patients generally begin treatment on the following day unless a specific physician order requesting an alternate start date is placed in IMPAC.

**Initiation of Treatment:**

Simulation is the process by which the various treatment field outlines and orientations are determined. Either a modified diagnostic x-ray unit with fluoroscopy or a CT simulator or PET-CT scanner is employed. Simulation of new patients is performed by the resident, radiation therapist, and faculty physician. Completed simulation films or DRRs must be checked and approved both by the faculty physician and the resident prior to the start of treatment on the treatment machine. For treatment plans to be developed by dosimetry or physics, the resident must delineate the target volume using the patient CT images and/or simulator films. The target volume should include the primary/regional disease, as well as appropriate margins, and should be labeled with the appropriate ICRU-defined label. The target volume, as well as the critical structures where a specified dose can be tolerated, should be indicated on simulation images. A dose objectives worksheet must be completed prior to treatment planning, and may be filled out by the resident but must be approved by the attending physician and then reviewed with the dosimetrist prior to any treatment planning procedures.

The dose prescription must be entered into Mosaic and then electronically approved by the attending physician prior to start of treatment. Staging information must also be entered for every patient. Similarly, a dose objectives worksheet must be completed for every patient’s dosimetry chart, with relevant dose constraints.
Residents have privileges in Mosaiq and can approve patient diagnoses and enter radiation prescriptions. However, it is up to each faculty member if he or she wants the residents to perform this function and if so, at what point in the rotation. It is the responsibility of the resident to confirm with each faculty beginning of each new rotation what the faculty expectations are with regard to radiation prescriptions. It is the responsibility of the faculty member to review any data entered by the resident for accuracy.

Faculty approval of the target volume must be obtained by the resident. The dosimetrists will then generate an appropriate treatment plan, as instructed by the resident and faculty. The dosimetrists will present this plan to the resident for approval. The resident is responsible for the review of the plan with the faculty physician. The attending physician is responsible of signing the plan. At the time of the initial setup of the treatment plan (“pre-ports”), both the resident and faculty physician must be available to review the films. If setups are performed by the “doctor of the day”, the resident is responsible for viewing the setup, either with that faculty or within 24 hours of the setup. The resident should perform any clinical setups with faculty supervision. Weekly port films are obtained, reviewed, and signed by both physicians.

Consents:

Consent for treatment is required for all patients prior to simulation. No patient will be treated without a completed and signed consent. The consent may be obtained by the resident with faculty supervision or attending faculty either at the time of consultation or prior to simulation, and must be signed by the attending physician. A resident signature alone is not sufficient to document informed consent. The time necessary to obtain consent should be scheduled so that the simulation is not delayed. The signed consent should be given to the chief therapist or the simulator therapist. A new consent is required for every new treatment site or re-treatment.

Patient Examinations – Examination of Patients Under Treatment:

All patients under treatment are examined on a weekly basis in the treatment area both by the resident and faculty physician. If a patient is being treated more than once per day, these exams should be performed every five treatments. Patients who are having problems during treatment are examined as often as necessary. A nurse should be present for all biopsy procedures, pelvic and breast examinations and wherever else indicated. Radiology and laboratory studies are requested through the nurse. Once the patient has been checked in at the radiation reception desk, the medical assistant obtains weight and vital signs and current medication list and places the patient in an examining room. The nurse then obtains recent laboratory reports or test results. The resident is then notified that the patient is ready. At the time of the examination, the radiation dose should and physical findings should be recorded; as well as any side effects or problems encountered. If a change in the treatment plan (i.e. cone-down, electron beam appointment, change in blocks, re-simulation or target plan) is indicated, this should be scheduled as soon as possible. Advance planning is required in order to keep the patient on schedule.

When a patient is suspended from treatment, the nurse and technician should be notified and a note placed in Mosaiq by the physician. The date at which treatment is to resume should be indicated by a written note in Mosaiq.

Telephones and computers are available in the clinic and in the resident’s office. Phone calls related to private patient health information should not be done in public areas of the clinic such as the hallways, but in the designated physician workroom or the residents’ office. In-house consults may be seen in the clinic area provided that this is scheduled with the nurse. At the completion of treatment, the patient is examined and a follow-up appointment is scheduled through the nurse for a time determined by the physician.

Chart Completion:

At the completion of treatment, a treatment summary is dictated by the resident with details concerning both external beam and intracavity or interstitial therapy. This will include a brief history of the patient, the region treated, the dates of treatment, the daily dose and number of fractions for each treatment region or course, any problems encountered during treatment, and arrangements for follow-up care.

Follow-up Clinic:
At the completion of treatment or discharge from the hospital, patients are given follow-up appointments. Each attending physician is assigned a specific day to see follow-up patients. Patients are examined both by the attending physician and the resident and follow-up notes are written at the time the patient is seen.

Return out-patients should be seen by and discussed with the attending faculty at such a frequency as to ensure that the course of treatment is effective and appropriate. The medical record should reflect the degree of involvement of the attending faculty.

**Scope of Practice**

This document pertains to resident rotations at the Moffitt Cancer Center and the James A. Haley Veterans Administration Hospital. This program is part of the resident training program in Radiation Oncology at the University of South Florida. All ACGME and JCAHO guidelines pertaining to graduate medical education apply to this rotation.

In keeping with ACGME and JCAHO guidelines, the faculty and program director are responsible for providing residents with direct experience in progressive responsibility for patient management. All patient care at Moffitt Cancer Center provided by residents will be provided under direct or indirect faculty supervision. Supervision must be documented in the medical record in accordance with Radiation Oncology Residency Program at the University of South Florida compliance guidelines. Activities performed without direct supervision require access to the supervisory physician for communication and physical access within 30 minutes. Activities performed with direct supervision require presence of the supervisory physician. Residents are authorized to perform any activity assigned while under direct supervision. Final interpretation of all diagnostic and therapeutic studies requires direct supervision. Residents at each postgraduate year of training, while not limited to the following activities, are specifically allowed to do these without direct supervision. This document may be modified by the program director based on additions to the training program.

**WITHOUT DIRECT SUPERVISION**

**PGY 2**

Residents Shall:

1. Perform patient interviews, provide patient education, perform history and physicals, order labs and order radiology tests.

2. Review port films and may make suggested changes to daily port films for on-treatment patients. For the faculty member on a resident’s assigned service, residents should evaluate port films of each patient scheduled for clinic both in the morning and again in the afternoon. Residents should either approve or reject all port films.

3. Assist in treatment planning.

4. Enter diagnoses and radiation treatment prescriptions into the department’s electronic medical record.

5. Sign out with the incoming resident when rotating services. Residents should review on-treatment patients, providing information pertinent to a successful change in resident physician coverage. Residents should always switch services on Mondays and sign out with one another no later than the Friday prior.

6. Residents are expected to demonstrate more autonomy and independent thinking when progressing to the PGY 3 training year.

**WITH DIRECT SUPERVISION**

**PGY 2**

Residents Shall:
1. The resident may not order or prescribe radiation treatment without the approval and signature of the attending faculty member.

2. All port films must be approved and signed off by the attending faculty member. No clinical changes can be based upon the resident’s review of the port films. All port films must be approved and signed off on by the attending faculty member within 24 to 48 hours. Approval of all port films and the parameters they represent are the responsibility of the treating physician.

3. All treatment plans must be approved and signed off by the attending faculty member. Treatment prescriptions entered are not valid until countersigned by the attending.

4. All voice/telephone orders are meant to be used only in urgent situations, not routinely. The nurses have been instructed not to take verbal orders unless it is urgent. Residents should only give verbal orders in emergent situations. A written order must follow as expeditiously as possible, and within no longer than 24 hours. In the case of ALL written orders, they must be signed, dated and timed before they can be processed or scanned in. If they are not properly filled out, they will be sent back to the responsible attending faculty member to be completed before they can be scanned in.

**WITHOUT DIRECT SUPERVISION**

PGY 3
Residents Shall:

1. The resident may perform patient interviews, provide patient education, perform history and physicals, order labs and order radiology tests.

2. The resident is responsible for reviewing port films and may make suggested changes to daily port films for on-treatment patients. For the faculty member on a resident’s assigned service, residents should evaluate port films of each patient scheduled for clinic both in the morning and again in the afternoon. Residents should either approve or reject all port films.

3. Assisting in treatment planning.

4. Residents may enter radiation treatment prescriptions into the department’s electronic medical record.

5. When changing rotations/services, residents are responsible to sign out with the incoming resident. Residents should review on-treatment patients, providing information pertinent to a successful change in resident physician coverage. Residents should always switch services on Mondays and sign out with one another no later than the Friday prior.

6. Residents are expected to demonstrate more autonomy and independent thinking when progressing to the PGY 4 training year.

**WITH DIRECT SUPERVISION**

PGY 3
Residents Shall:

1. The resident may not order or prescribe radiation treatment without the approval and signature of the attending faculty member.

2. All port films must be approved and signed off by the attending faculty member. No clinical changes can be based upon the resident’s review of the port films. All port films must be approved and signed off on by the attending faculty member within 24 to 48 hours. Approval of all port films and the parameters they represent are the responsibility of the treating physician.

3. All treatment plans must be approved and signed off by the attending faculty member. Treatment prescriptions entered are not valid until countersigned by the attending.
4. All voice/telephone orders are meant to be used only in urgent situations, not routinely. The nurses have been instructed not to take verbal orders unless it is urgent. Residents should only give verbal orders in emergent situations. A written order must follow as expeditiously as possible, and within no longer than 24 hours. In the case of ALL written orders, they must be signed, dated and timed before they can be processed or scanned in. If they are not properly filled out, they will be sent back to the responsible attending faculty member to be completed before they can be scanned in.

**WITHOUT DIRECT SUPERVISION**

PGY 4
Residents Shall:

1. The resident may perform patient interviews, provide patient education, perform history and physicals, order labs and order radiology tests.

2. The resident is responsible for reviewing port films and may make suggested changes to daily port films for on-treatment patients. For the faculty member on a resident’s assigned service, residents should evaluate port films of each patient scheduled for clinic both in the morning and again in the afternoon. Residents should either approve or reject all port films.

3. Assisting in treatment planning.

4. Residents may enter radiation treatment prescriptions into the department’s electronic medical record.

5. When changing rotations/services, residents are responsible to sign out with the incoming resident. Residents should review on-treatment patients, providing information pertinent to a successful change in resident physician coverage. Residents should always switch services on Mondays and sign out with one another no later than the Friday prior.

6. Residents are expected to demonstrate more autonomy and independent thinking when progressing to the PGY 5 training year.

**WITH DIRECT SUPERVISION**

PGY 4
Residents Shall:

1. The resident may not order or prescribe radiation treatment without the approval and signature of the attending faculty member.

2. All port films must be approved and signed off by the attending faculty member. No clinical changes can be based upon the resident’s review of the port films. All port films must be approved and signed off on by the attending faculty member within 24 to 48 hours. Approval of all port films and the parameters they represent are the responsibility of the treating physician.

3. All treatment plans must be approved and signed off by the attending faculty member. Treatment prescriptions entered are not valid until countersigned by the attending.

4. Residents do not receive their own prescription pads and should inquire as to the use of the attending’s pre-printed pads (resident complete prescription, attending signs). Residents may not write for controlled substances.

5. All voice/telephone orders are meant to be used only in urgent situations, not routinely. The nurses have been instructed not to take verbal orders unless it is urgent. Residents should only give verbal orders in emergent situations. A written order must follow as expeditiously as possible, and within no longer than 24 hours. In the case of ALL written orders, they must be
signed, dated and timed before they can be processed or scanned in. If they are not properly filled out, they will be sent back to the responsible attending faculty member to be completed before they can be scanned in.

WITHOUT DIRECT SUPERVISION

PGY 5
Residents Shall:

1. The resident may perform patient interviews, provide patient education, perform history and physicals, order labs and order radiology tests.

2. The resident is responsible for reviewing port films and may make suggested changes to daily port films for on-treatment patients. For the faculty member on a resident’s assigned service, residents should evaluate port films of each patient scheduled for clinic both in the morning and again in the afternoon. Residents should either approve or reject all port films.

3. Assisting in treatment planning.

4. Residents may enter radiation treatment prescriptions into the department’s electronic medical record.

5. When changing rotations/services, residents are responsible to sign out with the incoming resident. Residents should review on-treatment patients, providing information pertinent to a successful change in resident physician coverage. Residents should always switch services on Mondays and sign out with one another no later than the Friday prior.

WITH DIRECT SUPERVISION

PGY 5
Residents Shall:

1. The resident may not order or prescribe radiation treatment without the approval and signature of the attending faculty member.

2. All port films must be approved and signed off by the attending faculty member. No clinical changes can be based upon the resident’s review of the port films. All port films must be approved and signed off on by the attending faculty member within 24 to 48 hours. Approval of all port films and the parameters they represent are the responsibility of the treating physician.

3. All treatment plans must be approved and signed off by the attending faculty member. Treatment prescriptions entered are not valid until countersigned by the attending.

4. All voice/telephone orders are meant to be used only in urgent situations, not routinely. The nurses have been instructed not to take verbal orders unless it is urgent. Residents should only give verbal orders in emergent situations. A written order must follow as expeditiously as possible, and within no longer than 24 hours. In the case of ALL written orders, they must be signed, dated and timed before they can be processed or scanned in. If they are not properly filled out, they will be sent back to the responsible attending faculty member to be completed before they can be scanned in.

7. Residents must receive a summative report from the Program Director declaring them ready for independent practice.

Performance Miscellaneous:

Operating Room: Residents are permitted to observe operating room cases at the Moffitt Cancer Center as deemed appropriate and advantageous to the training experience.
**Walk-Ins:** The Department of Radiation Oncology triages a relatively high volume of patients (telephone and walk-ins) that require immediate medical evaluation and potential referral to the DRC. The nursing staff triages telephone calls and walk-in patients. Residents should make themselves available STAT if required by an attending faculty member or nurse to assist in the care of triage, evaluation and referral of the DRC patient.

**Prescriptions:** When residents arrive to a new service, they should inquire with the attending faculty member(s) as to his or her preference for residents writing prescriptions. Residents may enter treatment prescriptions into MOSIAQ however they are not valid until approved by the attending. Residents receive a Moffitt Cancer Center DEA number. Prescriptions for controlled substances are only valid if filled at the Moffitt Pharmacy.

**Telephone and Verbal Orders:** As of April 24, 2008, the Moffitt Cancer Center introduced a new policy with regard to telephone and verbal orders. As per Federal Regulation and Moffitt Medical Staff Rules and Regulations, all telephone and verbal orders must be authenticated (reviewed and co-signed) within 24 hours by the person giving the order or another practitioner who is responsible for the care of the patient.

In keeping with the aforementioned Moffitt Cancer Center Policy, the Department of Radiation Oncology Residency Program must adhere to the following instructions:

All voice/telephone orders are meant to be used only in urgent situations, not routinely. The nurses have been instructed not to take verbal orders unless it is urgent. Residents should only give verbal orders in emergent situations. A written order must follow as expeditiously as possible, and within no longer than 24 hours. In the case of ALL written orders, they must be signed, dated and timed before they can be processed or scanned in. If they are not properly filled out, they will be sent back to the responsible attending faculty member to be completed before they can be scanned in.

**Port Films:**

Portal films (port films) are radiographic image of the patient in treatment position. Pre-ports are portal images taken prior to the patient’s start of treatment of any new field. Port films are (typically) x-ray films that ensure that the radiation beams are aimed at the correct location of the on-treatment patient. The pre-port films are compared against the treatment plan films (DRRs). Once treatment has begun, repeat port films are taken at scheduled intervals (usually every fifth treatment) for continued quality assurance (to check if the radiation beams are being aimed at the correct location). Repeat port films can be obtained more frequently than every fifth treatment at the discretion of the attending faculty member. Should the faculty member require more frequent repeat port films, he or she will make a note in the treatment chart. Many patients receive daily CT scans which need to be reviewed prior to the delivery of the next day’s treatment. Port films are reviewed and signed off on in IMPAC by residents and attending faculty members.

For the faculty members on a resident’s assigned service, residents should evaluate port films of each patient scheduled for clinic both in the morning and again in the afternoon. Residents should either approve or reject all port films. However, no clinical changes can be based upon the resident’s review of the port films. All port films must be approved and signed off on by the attending faculty member within 24 hours. Approval of all port films and the parameters they represent are the responsibility of the treating physician.

**HIPAA Compliance Issues:**

The Moffitt Cancer Center is committed to protecting the privacy of its patients and shall strictly govern the use, disclosure and maintenance of any patient information or the Center’s proprietary information not available to the general public from unauthorized access. This policy establishes guidance for maintaining confidentiality and adheres to all HIPAA Compliance rules and regulations.

According to the Moffitt Cancer Center Confidentiality Policy, Policy Number ADM-C017, effective October 20, 2007, residents must adhere to all policies as delineated in the aforementioned policy. Patient information is confidential and should be accessed only by staff in the performance of their job duties for use in treatment, payment or healthcare operations. Residents should refrain from discussing...
confidential information in public areas (e.g. elevators, hallways, and the cafeteria). As per the policy, residents must adhere to all HIPAA guidelines and in particular and in keeping with this policy:

- Residents may not, under any circumstance, conduct open discussions, chart dictations or other confidential patient information in clinic hallways or other areas wherein conversation can be overhead by patients, family members, or caregivers.
- Residents are provided with private, secure office space where chart dictations, patient telephone calls and the like should be conducted if no private area is available in clinics.
- Residents must place any patient information in a locked or secure area in resident offices prior to leaving the building for the day.
- Residents must de-identify any patient data utilized in resident conferences. For additional security purposes, residents must remove copies of all patient data from conference rooms at the close of education series.

Resident Call:

Beeper call is from home in one week intervals. While on call, the residents are on “first call”, and the attending on call for that week is listed as the “second call” in the call escalation. The on-call resident is responsible for seeing patients requiring emergent radiotherapy and also to manage any other patient calls which occur after hours. The schedule is provided to the Moffitt Cancer Center operators and placed on the departmental calendar. The resident on-call schedule is prepared by the Chief Resident and approved by the Program Director. Changes to the on call schedule should be provided to the Residency Coordinator as soon as possible. Changes to the call schedule must be pre-approved by the Program Director and, except for emergencies, must be requested at least one month in advance. Residents are responsible for finding alternative coverage when they wish to switch call weeks. All changes in resident call assignments should be for the entire week of call. Changes that occur on nights and weekends due to an emergency must be provided directly to the hospital operators and copied to the Chief Resident, Residency Coordinator and Program Director.

Night and Weekend Call:

Residents can take call from home nightly provided they live no more than one hour from the hospital. The resident will be contacted via pager, and have this pager on their person at all times while on call. Emergency consults, such as spinal cord compression, superior vena cava syndrome, symptomatic brain metastases, or severe bleeding must be evaluated by the on call resident immediately following the request for consultation. The on call attending will also evaluate the patient. The on call resident is responsible for treating emergency patients. A consult sheet and history and physical must be completed on all emergency in-patient consults.

The resident may not simulate, prescribe treatment or administer treatment in a new patient without the direct physical supervision of the attending physician.

Call Policies: Weekday coverage is from Monday 4:00 PM to Friday 7:00 AM. Weekend coverage is from Friday 4:00 PM to Monday 7:00 AM. For Monday Holidays that follow a resident’s weekend coverage, the coverage will extend to 7:00 AM Tuesday.

Escalation: The resident on call will be first call. Residents will then escalate to the attending faculty on-call. Prior to commencing the call week, the resident should speak briefly with the faculty member regarding the faculty member’s exact expectations of the resident while on call.

In-Patient Issues/Admissions:

Admissions are scheduled through the admissions office. It is the responsibility of the service resident to follow admissions and notify the resident on call of potential admissions or problems. All residents should notify the resident on call of any patients who should be checked for any reason during the weekend or weekday evening.

Patient Flow
Radiation oncology patients new to the Moffitt Cancer Center are booked through the New Patient Appointment Center. Patients may not be seen for initial consultation until all records (pathology reports and glass slides, radiology reports and films, all medical records, including previous radiation therapy records) have been received. The department strives to have all records, films, pathology, etc. however, oftentimes patients arrive without all necessary records which impedes the clinic flow. As such, nurses and residents work to look ahead at the clinic schedules to ascertain if all pertinent patient information is available for the new patient consultation. The Moffitt Cancer Center New Patient Appointment Center schedules all new patients and advises patients which records to provide ahead of the consultation and which records to bring in person to the appointment.

Patients are booked with the appropriate radiation oncologist based upon their disease site. New patients are welcome as self referrals and do not require a physician-to-physician referral. Internal or existing Moffitt Cancer Center patients referred for a radiation oncology consultation are booked through the Radiation Oncology Clinic staff or the site specific clinic schedulers. Simulations may not commence until patients have signed an informed consent in the presence of the physician. On treatment patients must be seen no less than once per week (or every 5 treatments) by the attending physician. On treatment patients may be assessed intermittently by a nurse for patient education and symptom management. At the completion of treatment, patients will be scheduled for a follow-up appointment with the attending physician. When warranted, scans should be obtained prior to the follow-up appointment or when getting reestablished with other treating physicians (medical oncologists, surgeons, etc.).

**Nursing**

The Radiation Oncology nursing team is involved in every aspect of patient care. Nurses are staffed in the out-patient clinic and support the treatment areas as needed. Nurses utilize assessment and planning skills in working with the physicians and patients to provide customized care. Nurses assist with special procedures, monitor patients, assist with symptom management, provide education and counseling to patients with regard to radiation side effects and supportive care, coordinate the flow of patients, and coordinate services with adjunctive services and other clinics.

The attending faculty members, residents and nurses work as a team. Clinical responsibilities vary depending upon the preference of the attending faculty member the residents are assigned to. For example, some faculty members prefer that the resident gather pertinent patient data prior to the start of clinic (i.e. PowerChart records, port films, labs, radiology reports, films). Residents are responsible for reviewing pertinent records for each clinic patient prior to the visit. Residents must be prepared to provide a comprehensive overview of new, established, on-treatment, and emergent patient alike.

Residents conduct patient clinical examination/evaluation and history and physical prior to the attending faculty member entering the patient room. Some faculty members prefer for nursing staff to be present with the resident for each new patient consultation to allow for coordination and continuity of care. The Radiation Oncology nursing team is an integral part of direct patient care and as such, it is important that the nurses are familiar with all patients after the resident has left that service. Other faculty members prefer for the nurses and residents to function separately during patient encounters then share patient reports as a team with the attending faculty member, resident and nurse. Faculty members, residents and nurses work as a multidisciplinary team within the clinic setting as well as at weekly tumor boards and weekly chart reviews.

For continuity in patient care, unsolicited patient phone calls should be directed to call the primary nurse of the treating attending faculty member and not the resident. Should the resident still be on the service, the primary nurse will determine if the resident can handle the patient call or if the call should be triaged to the attending faculty. This does not apply to situations wherein a patient is returning a resident’s call.

Residents are responsible for discussing clinic flow and resident/nurse relationships with the faculty member and nurse prior to the start of a new rotation. Residents are to be mindful that he or she must adhere to varying clinic flow styles as they move from rotation to rotation.

**Peer Review**

Resident attendance at Peer Review Conference for the current service is mandatory. Residents are expected to present all cases on the Peer Review list weekly for the current service. Residents should be
prepared to discuss management of all cases, regardless of resident participation/presence for patient simulation. Unless residents are out of the department, they are expected to be present for the entirety of the Peer Review Conferences.

**Direct Referral Center (DRC)**

The DRC accommodates patients with high priority/emergent care. The DRC, located on the first floor of the main hospital, admits patients currently under the care of a Moffitt attending physician who has admitting privileges. Radiation Oncology physicians do not have admitting privileges. Patients should be referred to the DRC by their Moffitt Cancer Center medical provider. Patients who present without referrals are not within the scope of the DRC. Non-referred patients are triaged for safety and counseled to contact their medical provider for appropriate follow-up. The DRC provides initial diagnosis and management of acute changes in the status of Moffitt patients, and expedites appropriate inpatient or outpatient disposition upon stabilization.

The Department of Radiation Oncology triages a relatively high volume of patients (telephone and walk-ins) that require immediate medical evaluation and potential referral to the DRC. The nursing staff triages telephone calls and walk-in patients. Residents should make themselves available immediately if required by an attending faculty member or nurse to assist in the care of triage, evaluation, and referral of the DRC patient. While the DRC strives to meet the needs of all referred patients, in order to assure appropriate resource availability for its intended patient population, the DRC physician and/or midlevel staff member may decline referrals of patients whose clinical circumstances are not consistent with the DRC’s mission and scope, who’s needs may be reasonably deferred to routine clinic care, or who’s care may be equally or better provided through other resources.

Patients are discharged from the DRC when treatment goals are met or when the patient is transferred to an inpatient unit or other facility. The order to discharge the patient must be written by the physician or midlevel provider responsible for the patient’s care in the DRC. The registered nurse shall provide discharge instructions to the patient and/or family member in accordance with treatment goals.

When calling in a referral to the DRC please make sure to have the following information available: patient’s name, medical record number (or date of birth if calling from home), cancer diagnosis, Moffitt physician, and current problem requiring evaluation.

**ACGME Requirements**

**Educational Goals and Objectives:**

The educational goals and objectives of the residency program contains overall goals for the program based upon treatment modalities, curriculum goals by PGY level, prerequisites based upon PGY level, objectives for satisfactory completion of each PGY year (basic, clinical and academic), and the ACGME core-competency based goals (patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism and systems-based practice). The learning goals and objectives are also based upon goals by disease site or specialty to include breast, central nervous system, brachytherapy, gastrointestinal, genitourinary, gynecologic cancers, head and neck and cutaneous cancers, lymphomas and leukemias, radiology, pathology, pediatrics, sarcoma, thoracic, benign disease, bone marrow transplant, and total skin electron irradiation. Residents receive curriculum in physics and radiobiology. The learning goals and objectives include the delineation of resident responsibilities for patient care, progressive responsibility for patient management, and supervision of residents over the continuum of the program. The learning goals and objectives are also designed to advance resident’s knowledge of the basic principles of research.

**Patient Care Requirements:**

The ACGME requires that residents have adequate numbers and an adequate variety of patients to successfully complete radiation oncology residency training. At least 600 patients must receive external beam irradiation yearly in the parent institution or a participating site. The number of patients treated with external beam irradiation by each resident must be no fewer than 150 per year (determined by the number of patients simulated), or a minimum of 450 during the clinical radiation oncology rotations. A resident should not treat more than 250 patients with external beam irradiation in any one year, or a total
of 750 throughout his/residency. Only cases for which the resident has primary responsibility may be counted.

The ACGME requires that residents perform no fewer than five (5) interstitial implants and fifteen (15) intracavitary implants. For intracavitary implants, separate applications of an implant in a given patient may be counted separately. However, interstitial fractions of an interstitial implant may only be counted once. In addition, residents must participate in the treatment, planning, and administration of no fewer than six (6) procedures using radioimmunotherapy, other targeted therapeutic radioimmunotherapy, other targeted therapeutic radiopharmaceuticals, or unsealed radioactive sources. The ACGME requires that residents treat at least 12 pediatric patients of whom at least nine (9) have solid tumors. Lastly, the ACGME mandates that residents complete at least 10 cases of stereotactic radiosurgery of the brain and at least 5 cases of stereotactic body radiation therapy of the liver, lung, spine, or other extracranial sites.

Case Logs:

It is mandatory that all residents routinely log cases into the ACGME Resident Case Log System. All CPT/ICD 9 codes in the AMA CPT Code book are available in the ACGME Resident Case Log System. The ACGME Radiation Oncology Residency Review Committee defines the categories of procedures and encounters for which residents must collect and log all case data. Any CPT codes that the RRC does not currently track can be located in an area on the website called “Unassigned CPT Codes.” Residents are responsible for learning how they should be choosing the CPT/ICD9 codes that most closely fit the procedures or encounters. In doing so, some procedures or encounters may fall into the unassigned category.

Residents are expected to log into the system frequently and accurately record cases. Residents are encouraged to enter cases weekly and are required to enter cases at least monthly. The Program Director frequently reviews resident case logs online. As such, it is important to provide the Program Director with up to date case logs. Case logs become part of the resident’s permanent record.

For all institutions except for the James A. Haley Veterans Administration Hospital, residents should use patient medical record number to log cases. For James A. Haley Veterans Administration Hospital, residents should use the last four digits of patient’s social security number when logging.

Technical Staff

The technical staff of the Moffitt Cancer Center in the treatment area consists of an Operations Manager and two Chief Therapists. In addition, approximately 32 radiation therapists are on staff to deliver daily treatment. All staff therapists are registry certified in radiation oncology. The therapists are responsible for the delivery of the prescribed daily treatment, acquiring weekly portal images, emergency treatments on nights and weekends, simulations and out-patient HDR brachytherapy procedures as well as other special procedures in the clinical setting.

Treatment Modalities

Residents receive training in all aspects of Radiation Oncology technology, including but not limited to the following:

- Three Dimensional Computerized Radiation Therapy (3D CRT)
- Intensity Modulated Radiation Therapy (IMRT)
- Volume Modulated Arc Therapy (VMAT)
- Image Guided Radiation Therapy (IGRT)
- Tomotherapy
- Stereotactic Radiotherapy (SRT) and Stereotactic Radiosurgery (SRS)
- Intracavitary Brachytherapy - High Dose Rate (HDR) and Low Dose Rate (LDR)
- Intersititial Brachytherapy - High Dose Rate (HDR) and Low Dose Rate (LDR)

Technical Training

Residents benefit from technical training with a wide array of equipment within the training institutions. The Moffitt Cancer Center Department of Radiation Oncology equipment consists of three Varian
Trilogies, three Varian TrueBeams, two Tomotherapy units, one Novalis radiosurgery unit (to be replaced with a Viewray MRI Linac in 2018), 2 Tomotherapy units, one Fluoroscopic Simulator, three 4D CT Simulators, one 4D PET CT, and one 3T MRI unit. The James A. Haley Veterans Administration Hospital equipment consists of three Megavoltage Units, CT Simulator, and one CyberKnife.

Training for Use of Unsealed Byproduct Material

The American Board of Radiology (ABR) requires that resident training and experience and the materials on which the ABR examines match the United States Nuclear Regulatory Commission (NRC) regulations. The Radiation Oncology Residency Training Program adheres to the training guidelines set forth by the NRC. The NRC requires that specialty boards shall require all candidates for certification to successfully complete residency training in a radiation therapy or nuclear medicine training program or a program-related medical specialty. The training must include 700 hours of training and experience in the classroom and in laboratory training.

The training includes radiation physics and instrumentation, radiation protection, mathematics pertaining to the use and measurement of radioactivity, chemistry of byproduct materials for medical use, and radiation biology and work experience under the supervision of an authorized user who meets state requirements. The NRC regulations pertain to training and experience in the therapeutic administration of unsealed byproduct materials as well as the use of manual brachytherapy sources and remote afterloader units, teletherapy units and gamma stereotactic radiosurgery unit. The Radiation Oncology Residency Program provides training as mandated by the NRC and the ABR and adheres to all training requirements, including required number of experiences.

Radiation Safety

In accordance with good practices and the recommendation of the NRC, a mandatory high dose rate after-loader safety training seminar is held at least annually. The seminar is geared toward radiation safety procedures specific to HDR and is aimed at reminding a general audience of the procedures. Residents are required to successfully complete training annually.

After successful completion of the training module, print the certificate and provide a copy to Robert Sanders, Radiation Safety Officer. He maintains the certificates and records of annual training for all member of the Radiation Oncology team. Upon receipt of the completion certificate, Bob will order your radiation safety badge. Badges usually arrive in 7 to 10 days.

Physics

Residents receive ongoing training and day-to-day involvement in radiation physics. A member of the physics training team must acknowledge completion of orientation in writing prior to the resident beginning his or her first clinical rotation. Residents undergo the Physics Lecture Series annually from September through March. Residents must successfully complete the series in order to graduate to the next PGY level.

The Physics Program is supported by strong physics faculty and staff whose focus is the support of an excellent quality assurance program for the accurate calculation and delivery of radiation dose and brachytherapy sources. Members of the physics and dosimetry section actively participate in the teaching of the residents, offering a broad experience in clinical radiotherapy physics and special areas of radiotherapy and treatment planning expertise.

The objective of the physics rotation is to provide the residents with an understanding of the physics concepts related to radiation oncology treatments. Radiation Oncology is based on the physical properties of the radiations used. The radiation oncologist must understand the physics concepts to properly understand the treatment parameters. The ASTRO guidelines for resident instruction (Eric Klein et al), which sets very high standards for the instruction of radiation oncology residents, has been adopted.

The following is covered in training the radiation oncology residents:

1. Radiation Safety (linear accelerators, brachytherapy)
2. Quality Assurance (linear accelerators, brachytherapy, charting/information management)
3. Simulation
4. Dosimetry/Planning (external beam, brachytherapy)

Clinical topics include:
1. Simulation
2. Dosimetry Planning – conventional
3. Dosimetry Planning – IMRT/IGRT/tomotherapy
4. HDR/LDR Brachytherapy
5. Stereotactic radiosurgery/radiotherapy for CNS and body parts
6. Therapeutic Nuclear Medicine

Dosimetry

Residents receive dosimetry training via day-to-day involvement in treatment planning. In addition, all residents completed a dedicated one month rotation in Dosimetry/Treatment Planning. Topics covered through residency include:

1. Prescribed Dose
2. Contouring
3. Treatment Planning
4. Specific Plan Review / Dose/fractionation schemes for various tumor sites
5. Brachytherapy
6. Policies

Radiation Biology

The Department of Radiation Biology provides lab space and mentoring for residents to address basic and translational research projects. Emphasis is placed on delineating the fundamental processes that regulate radiosensitivity and the development of molecularly targeted radiosensitizers. Equipment and facilities are available for molecular, cellular and animal studies. In addition, there is access to microscopy, microarray gene expression and proteomic technology. Residents complete an annual Radiobiology Lecture Series from April through June every other year. Residents must successfully complete the series in order to graduate to the next PGY level.

In-Service Exams

The Committee on Residency Training of the American College of Radiology (ACR) requires that all radiation oncology residents take the in-training examination annually. The ACR conducts the exam annually in March. The test is comprised of the following test sections: biology, physics, statistics and clinical radiation oncology.

Billing

The Residency Program includes training regarding billing education for the residents. The training focuses on billing requirements and guidelines for resident interactions with patients as well as billing guidelines following graduation. In both cases, residents are taught the importance and appropriateness of coding, compliance, bundling and documentation. Billing, coding and compliance rules and guidelines change. Therefore, proper understanding of the billing process, along with the importance of ethical and accurate code charging are provided. Resources that provide future guidance to current billing, bundling and compliance issues, are provided and discussed so that residents are able to keep current throughout his or her career.

Resident Evaluation

Each resident is evaluated at least twice yearly by the Program Director. This evaluation assesses the knowledge, skills, and professional growth demonstrated by the resident, professional attitudes, the resident's professional demeanor and rapport with patients, colleagues, supervisors and others. Resident evaluations represent the collective input of the program faculty. The decision to promote a resident to the next level is made based on cumulative formative evaluations, in conjunction with the department's Clinical Competency Committee. A record of each evaluation is maintained in the resident’s file and is accessible by the resident for review.
Resident performance is monitored during the course of the training program to ensure residents receive adequate training. Formal evaluation completed by training faculty and staff are conducted following each formal rotation and become part of the resident’s permanent file. Residents evaluate the training faculty and the rotation experience following each formal rotation which also becomes part of the resident’s permanent file. Residents evaluate the program annually. Residents meet with the Program Director semi-annually to review both resident and program performance. Evaluations are based on the ACGME core competencies and the ACGME guidelines for resident monitoring and evaluation.

The assessment tools, approved by the ACGME, are designed to produce a fair and accurate assessment of resident’s knowledge and competence in the six core competencies: patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice. Residents are evaluated based upon progressive performance improvement appropriate to education level. Assessments are also designed to provide regular and timely performance feedback of the program overall, including the Program Director, training faculty, didactic training or grand rounds, physics training, radiation biology training, elective rotations, and annual program evaluation.

**Resident Evaluation Post-Rotation:**

Faculty members are required to complete resident evaluations following the completion of the resident’s rotation. The assessment includes a global rating including the six core competencies, direct observation of simulation treatment process and preparation and direct observation of brachytherapy.

**Faculty Rotation Post-Rotation:**

Residents are required to complete faculty evaluations following the completion of a rotation. When evaluating faculty, residents are guaranteed confidentiality. At no time will faculty members be provided with the identity of the resident evaluator. Faculty members are provided with rating scores and comments void of the resident’s identity. These evaluations are summated at sent to the individual faculty members every several years so as to maintain resident anonymity. The residents assess faculty based upon clinical skill, professionalism, integrity, reliability, judgment, motivation, interpersonal skills, teaching ability, clarity of learning expectations, how the faculty member provides direction and feedback and the overall performance and knowledge obtained.

**Global or “360” Resident Evaluation:**

The residency program employs the inclusion of non-faculty evaluation in order to achieve a global assessment of residents from staff such as clinic staff, physicists, dosimetrists, administrative staff, and patients and families. Those individuals are provided with a confidential evaluation form to assess resident clinical, communication, interpersonal and professionalism skills following the completion of the resident’s rotation.

**Residency Program Evaluation:**

Residents and faculty members complete an annual Program Evaluation constructively analyzing the various components of the training program.

**Resident Summative Evaluation:**

Upon completion of the residency training program, the Program Director provides a final evaluation for each resident. The evaluation includes a review of the resident’s performance and verifies that the resident demonstrated sufficient competence to enter practice without direct supervision. The final evaluation is accessible for review by the resident and maintained by the institution as a permanent part of the residents file. Release of graduate certificates is contingent upon completion of the Summative Evaluation.

**Annual Program Evaluation and Improvement:**

The program documents evaluation of the curriculum annually. The Program Evaluation Committee meets in accordance with ACGME Core Requirements. This committee reviews the program’s goals and objectives and the effectiveness with which they were achieved. The committee reviews the utilization of
the resources available to the program, the contribution of each institution participating in the program, the financial and administrative support of the program, the volume and variety of patients available to the program for educational purposes, the performance of members of the teaching staff, and the quality of resident supervision.

Assessment Tools:

The following assessment tools may be used:
- Evaluation of Resident by Faculty
- Evaluation of Faculty by Resident
- Semi-annual Evaluations
- Rotation Evaluations
- Annual Program Evaluation by Faculty
- Annual Program Evaluation by Resident
- Modified “360” Evaluation Form
- Didactic Course Evaluation Form

Education/Multidisciplinary Conferences

Residents are provided with significant opportunity to enhance the training experience through a multitude of educational conferences. Training faculty is committed to promoting the spirit of inquiry and scholarship for residents. Residents participate in multidisciplinary tumor conferences with case presentations and discussion of treatment options. Faculty members from each of the respective disciplines are present at each of the conferences. Residents have considerable responsibility for the presentations of patient histories and laboratory results with interpretation of the diagnostic findings. Residents also gain knowledge, experience, and interaction in journal clubs, chart reviews, grand rounds, symposiums, guest lecture series, scientific meetings, and other educational programs. Additional didactic training focuses on, but is not limited to, radiation biology, cancer biology, radiation physics, radiation safety, brachytherapy, medical statistics, population sciences, and diversity.

Mandatory attendance includes weekly tumor boards for the service the residents are assigned to, three-times weekly resident theme based education series, annual physics training, annual radiobiology training, and medical biostatistics every two years. Residents are also required to attend weekly peer review conference. Residents are expected to stay the entirety of the peer review conference and present all the cases on the peer review list weekly for the service on which the resident is rotating, regardless of whether the resident was present for the simulation. Residents should be prepared to answer questions about patient management. Residents on elective or specialty rotations at the Moffitt Cancer Center should still attend. Residents at the VA should attend only if there are no conflicting activities at the VA during the peer review conference time.

Residents are encouraged to attend non-service tumor boards as schedules permit. Residents are also required to attend the weekly peer review meetings and participate in the residents educational series, held three times weekly. The educational series is theme based beginning with a didactic lecture once per week followed by case conference and journal club once per week.

Books and Education Materials

Residents are provided with books and other education materials pertinent to a successful training experience. Residents are provided with the following textbooks and other educational materials at the commencement of the PGY-2 training year:

Books (Hardcover and CD Rom When Available):

2. The Physics & Technology of Radiation Therapy - Patrick McDermott (Author), Colin Orton (Author)
3. Radiobiology for the Radiologist by Eric J. Hall and Amato J. Giaccia - Sixth Edition
4. Radiation Oncology: A Question-Based Review -Boris Hristov, Steven H. Lin, John P. Christodouleas
5. RAPHEX Exams

**Extra Books for Community Residents Library:**


**Individual Education Materials:**

Residents are provided with an annual education fund of $250 per resident. All purchases must be pre-approved by the Program Director. Once pre-approval received, please document via email to the Residency Coordinator with the approved item(s) approved for purchase. The Residency Coordinator will purchase the item(s). Residents must not purchase the item(s) directly with the expectation of being reimbursed.

**Scholarly Activities**

The goal of the Radiation Oncology Residency Program is to advance residents’ knowledge of the basic principles of research, including how research is conducted, evaluated, explained to patients, and applied to patient care. In order to foster scholarly activities, training faculty provide mentoring and technical support for residents involved in research activities. Residents are required to complete an investigative project(s) during their training program under the direction of faculty members. Residents may select biological laboratory research, clinical research, medical physics research, or the retrospective analysis of data from treated patients. The results of such projects shall be submitted suitable for publication in peer-reviewed scholarly journals or presentation at scientific meetings. Adequate educational resources are provided in order to facilitate resident involvement in scholarly activities.

The Moffitt Cancer Center’s Office of Graduate Medical Education, under the direction of Dr. G. Douglas Letson, supports all medical educational activities that occur at Moffitt Cancer Center. The residents participate in this group’s novel monthly multidisciplinary conference presenting fresh aspects of clinical and research issues related to different cancer types or modalities with participation from nearly all medical specialties represented at the Moffitt Cancer Center. Residents are eligible to receive one-on-one scholarly activities and regulatory support from the GME Research Project Coordinator. Residents are required to participate annually in the Moffitt Scientific Symposium.

A reading list of pertinent literature is maintained in the resident’s drive. Papers are submitted by training faculty and organized in the resident’s drive by disease site. Residents are required to read all of the articles marked “mandatory” by the end of the rotation and are encouraged to read the articles marked “suggested.”

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Research at the Moffitt Cancer Center

The Moffitt Cancer Center focuses on the development of early stage translational research aimed at the rapid translation of scientific discoveries to benefit patient care. Moffitt Cancer Center has five scientific programs, all with a translational focus, 14 shared resources, and a research infrastructure that supports innovative, translational research and enhances interactions among basic scientists, population-based scientists and clinical investigators. Research programs include Molecular Oncology & Drug Discovery, Immunology, Experimental Therapeutics, Risk Assessment, Detection & Intervention, and Health Outcomes & Behavior. Shared resources include Flow Cytometry, Molecular Biology, Microarray, Proteomics, High Throughput Screening & Chemistry, Mouse Models, Analytic Microscopy, Tissue, Cell Therapies, Survey Methods, Informatics, Biostatistics, Clinical Research Support Services and the Clinical Trials Laboratory Core.

The Protocol Review & Monitoring System includes two Scientific Review Committees and a separate Protocol Monitoring Committee. Protocol specific support for a large-volume early phase clinical trial portfolio is also requested. Ongoing programs in research and outcome analysis are strongly supported by the Moffitt Cancer Center and the Department of Radiation Oncology. Clinical, basic science, translational and behavior outcomes research are an integral part of the Department of Radiation Oncology. As such, the Department of Radiation Oncology maintains a central research office. All regulatory, research, nursing, and data management functions are coordinated within the Department. Regulatory staff acts as a liaison between the investigator and the IRB, coordinating all aspects of the research approval process which includes assisting in the writing of clinical trials and Informed Consents, the IRB application and approval process, and yearly reviews for each trial. The research nursing staff supports the investigator in screening and enrolling patients to clinical trials, provides data management support, staff education and training, coordinates and implements protocol-related orders for study patients and prepares medical charts for audits.

Library Facilities

The University of South Florida College of Medicine Shimberg Library and the Moffitt Cancer Center are fully supported medical libraries with journals, texts, and references. The Shimberg Library has an extensive password protected electronic “virtual library” which is accessible at all times and at all clinical sites by residents. The library has full time research librarians to assist with using the databases, the electronic materials, and the search engines. Residents will be encouraged to use Ovid or Pub Med for literature searches. Program department computers are networked with high-speed Internet access. Research office personnel will be available to facilitate if necessary, but most residents have used such systems throughout their previous training.

Computers are available to residents. In addition to items available freely on the internet, the University of South Florida and the Moffitt Cancer Center provide full-text subscription access to many medical journals for University personnel and students. Literature searches and information retrieval is supported remotely over World-Wide-Web resources from any departmental workstation. These include searches through:

- ISI Web Knowledge
- PubMed
- NLM Databases & Electronic Resources
- Books@Ovid
- CINAHL (Cumulative Index of Nursing and Allied Health)
- Webbiographies
- EBMR (Evidence Based Medicine Reviews)

Social Services

Psychosocial & Palliative Care Programs:

Clinical Services:

Psychosocial & Palliative Care Services include: palliative care, psychiatric evaluation and treatment, psychological testing, psychotherapy, individual and family counseling, support groups, expressive arts and integrative medicine services such as acupuncture, massage, yoga, relaxation training and guided
imagery, nutritional counseling and pharmaceutical counseling. Research and clinical training is offered to pre and postdoctoral students in social work, pharmacology, psychology, psychiatry and neurology.

Psychosocial and Palliative Care at the Moffitt Cancer Center is a multidisciplinary team of professionals with expertise in clinical social work, hospital chaplaincy, clinical psychology, psychiatry, pharmacy, and palliative care medicine who provide clinical services designed to address the emotional, social, spiritual and physical needs of patients, families and caregivers.

In the Department of Radiation Oncology, approximately 80% of patients are referred internally from one of Moffitt Cancer Center’s disease-based clinical programs. Subsequently, this population of patients is more likely to have received psychosocial and palliative care assistance prior to becoming a patient in Radiation Oncology. However, there are a number of psychosocial and palliative care issues that arise as a direct result of radiation therapy treatment. As such, services are offered to the radiation therapy patient population by a team assigned by the Psychosocial and Palliative Care Department. Team members are scheduled at various times during clinic hours to assist with patient needs, also focusing on the high volume of walk-in patients who present with psychosocial needs.

Approximately 20% of the patient population is referred directly from the New Patient Appointment Center, having not previously been a patient in one of the clinical programs at the Moffitt Cancer Center. This population of patients will require careful evaluation in order to identify those patients requiring a referral for psychosocial services.

Psychiatric and Psychological Services
(813) 745-4630

Psychiatrists and clinical psychologists are available to provide psychiatric assessment, treatment and psychotherapy.

Palliative Care Services - The Palliative Care team provides comprehensive palliative care from the time of diagnosis throughout the course of the illness. The team consists of psychiatrists, pharmacists, palliative care physicians, psychologists, and social workers that can provide pain and symptom management.

Social Work
(813) 745-8407

Oncology social workers assess the psychosocial situations of patients and their families in order to provide counseling, offer resource information, coordinate safe and timely discharge plans and collaborate with the team. Clinical social workers provide professional counseling and support for individuals and families in coping with illness at all stages of diagnosis and treatment. They also assist with practical issues, such as transportation, lodging, financial concerns and other practical problems.

The Department of Radiation Oncology has on staff social workers to assist with patient needs. Megan Polin, MSW Intern, is available in the Radiation Oncology Clinic on Wednesdays from 9:30 to 4:00 PM. Megan’s ext. is 5671 and pager – 201-1443. Mary Catherine James, MSW Intern, is available in the Radiation Oncology Clinic on Thursdays from 9:30 AM to 4:00 PM. Mary Catherine’s ext. is 5496 and pager – 201-1444.

Case Management
(813)745-8407

Case managers are professional nurses who have added training in coordination of healthcare, collaboration of insurance benefits, fiscal analysis and monitoring who assist patients in obtaining high quality care without a resultant financial burden to the patient or the organization. RN case managers assist the team with care coordination focusing on the delivery of an efficient, cost effective transition of care. While the Department of Radiation Oncology does not currently have assigned case managers, patient assistance can be obtained by contacting the Psychosocial and Palliative Care Department.

Nutrition
(813) 745-2389
Patient nutrition support services are available at the Moffitt Cancer Center. The Department of Radiation Oncology has a part-time dietician, Elizabeth Nelson.

**Patient Education Program**  
*(813) 745-4710*

The program provides credible cancer information to patients and families about the many aspects of the cancer continuum from prevention to palliation. The Patient Education Resource Center, located on the second floor of the Moffitt Clinic building, is staffed by patient education specialists and provides assistance in finding credible sources of cancer information.

**Patient Resource Center**  
*(813) 745-6285*

Assistance is available in obtaining prior authorization for drugs, applying to Pharmaceutical Assistance Programs, and determining if patients are eligible for help with other expenses such as lodging.

**Lodging**  
*(813) 745-8407*

If the distance between home and Moffitt Cancer Center makes travel for treatment and follow-up medical appointments prohibitive, a lodging coordinator is available to assist patients and families with arrangements for local lodging. There are hotels nearby that offer a reduced rate for Moffitt patients and families. In addition, the American Cancer Society Hope Lodge is located directly adjacent to the Moffitt Cancer. For further information, please contact a Social Worker.

**Arts in Medicine Program**  
*(813) 745-8407*

The Arts In Medicine Program at Moffitt Cancer Center is designed to promote the vital role of the creative arts in influencing well-being and healing for cancer patients, family members, caregivers and hospital staff. Visual and musician artists-in-residence offer a broad spectrum of individual and group expressive arts opportunities at patients’ bedsides and in clinic waiting areas. These include painting, drawing, poetry reading and writing, journaling, music sessions, expressive movement, dance, fabric art and many others. Periodic workshops and performance series are scheduled within the Center.

**Discharge Planning**  
*813-745-8407*

Hospitalization for cancer treatment may require follow-up care at home or in a rehabilitation setting for optimal recovery. Some forms of treatment can be given at home to reduce the number or length of hospital admissions. A clinical social worker and case manager work together to ensure that plans for care throughout the continuum of treatment are coordinated with the medical team, insurance company, preferred providers and patient/caregiver.

**Community Resource Information and Referral**  
*(813) 745-8407*

There are several private and public agencies that provide information, financial assistance and support for individuals with cancer and their families. Social workers are knowledgeable about these resources and can make referrals as appropriate for patients and families. Two of the community resources that offer assistance to patients with all forms of cancer are listed below:

*American Cancer Society*  
*(800) 227-9954*

The American Cancer Society patient service programs cover a wide range of needs for cancer patients, family and friends including connecting patients with other survivors and providing lodging during treatment.

*CancerCare*
CancerCare provides the highest quality professional support services – including counseling, education, financial assistance and practical help – free to people with cancer, their loved ones, and bereaved family members across the country.

Support Groups

Living with cancer poses many challenges for patients and families. Professionally-led support groups can provide a safe and affirming environment in which to learn alternative methods of coping, obtain information about cancer and its treatment, gain problem-solving skills, practice communication and alleviate feelings of isolation. Several support groups are offered at Moffitt Cancer Center as follows:

**Breast Cancer Support Group** - A support group for women with breast cancer. Meets every Tuesday from 10:30 AM to 12 noon.

**Cancer Support Group** - This support group is open to patients with any cancer diagnosis, family members, friends and caregivers. Meets every Thursday, 11:00 AM – 12 noon.

**Family & Friends Support Group** - A support group for family members, friends, and caregivers whose lives have been affected by a loved one’s cancer. Meets every Thursday from 11:00 AM to 12 noon.

**Lung Cancer Support Group** - A support group for individuals with lung cancer, family members, caregivers and friends. Meets every Monday from 11:00 AM to 12 noon.

**Brain Tumor Support Group** - A support group for individuals with malignant brain tumors, family members, friends and caregivers. Meets the first Tuesday of every month from 5:30 to 6:30 PM.

**Man-To-Man Prostate Cancer Support Group** - An American Cancer Society program that provides education and support to men with prostate cancer and their spouses/partners. Meets the fourth Thursday of every month at alternating hospitals within Hillsborough County.

**Laryngectomy Support Group** - A support group for laryngectomy patients and their spouses/partners. Meets the second Friday of every month, 2:00pm – 4:00pm.

**Families First Program (Children of Cancer Patients and their Parents)** - Families First helps parents and their children as they adjust to the changes that occur within the family when a parent has cancer. Information, preparation and support enable families to cope successfully in the face of a serious illness. Components of the program include: A video entitled “Talking About Your Cancer: A Parent’s Guide To Helping Children Cope”

**Smoking Cessation Programs**

The connection between cigarette smoking and certain cancers has been long established. The Psychosocial & Palliative Care Program offers structured interventions to enable our patients and the general public to discontinue this dependency effectively. Individualized counseling is available for our patients in active treatment who need help with quitting smoking. Please call the Psychosocial & Palliative Care Clinic at (813) 745-4630 for further information.

**Other Patient Support Services**

**Patient Disability Office** – For assistance with commercial disability forms and FMLA forms contact the Patient Disability Specialist at (813) 745-2356.

**Patient Relations Department** – The Patient Relations Department assists patients and/or family members when there is a concern or complaint about care received at the Cancer Center. Staff can be reached at (813) 745-8475.

**Language Assistance** – Interpreters are available upon request through the International Relations Program and may be reached at (813) 745-3571.
Rehabilitative Services - The Rehabilitative Services Department offers inpatient and outpatient services including Physical Therapy, Occupational Therapy and Speech Therapy. Specialized treatment is provided on a one-on-one basis and begins through a referral from a physician. For more information call (813) 745-8449.

Physical Therapy and Occupational Therapy - services are designed to restore and maximize functional independence, relieve pain and promote quality of life. Specialized programs include evaluation and treatment for lymphedema, neurological disorders, orthopedic conditions, balance and movement disorders, pain, fatigue and generalized weakness. Patient and family education is always an important part of every treatment plan.

Speech Pathology - services include evaluation and treatment of speech, voice and swallowing disorders related to head and neck cancer; speech, language and swallowing disorders related to neurological involvement; organic and functional voice disorders, and audiological screenings.

Integrative Medicine Program

The Integrative Medicine Program integrates safe and effective complementary therapies with conventional treatments to improve quality of life for patients during and after cancer treatment.

Acupuncture – Research indicates that acupuncture can be helpful to many patients in managing pain, nausea and other symptoms and side effects of treatment.

Gentle Yoga Classes – Yoga can reduce stress and increase strength, flexibility and balance.

Relaxation Training and Guided Imagery Sessions - These sessions for patients and family members are offered to enable participants to learn successful tools for managing distress and anxiety effectively.

Nutritional Services – Counseling for patients, families, and the public on complementary nutrition therapies and dietary supplements on how to integrate these therapies into their medical care plans.

Pharmaceutical Counseling - Advise outpatients, families and the public regarding the safety and efficacy of dietary supplements, herbs, biologics and their potential to interact with cancer and non-cancer related therapies.

Massage – Inpatients can schedule appointments to receive relaxation massage in their hospital rooms. Outpatients as well as family members and caregivers can schedule appointments to receive massage therapy in the Integrative Medicine Clinic in the Moffitt Research Center.

Outpatients and families can register for classes or schedule appointments for the services above by calling (813) 745-4630.