

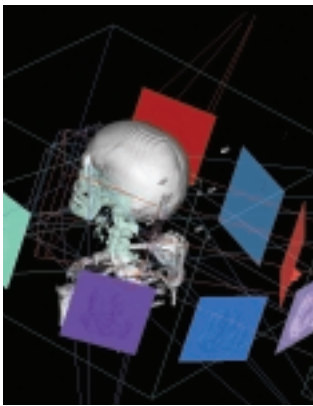


► *Investing in Today's Most Advanced
Radiation Oncology Therapies*

The Department of **Radiation Oncology**

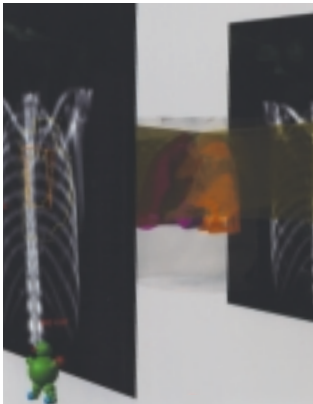
THE **CANCERCENTER**
AT HACKENSACK UNIVERSITY MEDICAL CENTER





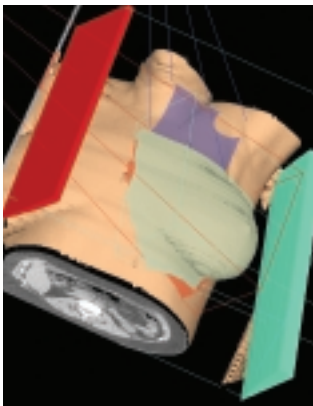
► An Experienced Staff that Delivers

Because of the precision needed to properly plan and deliver radiation therapy directly to the target, having a highly experienced team is essential for successful outcomes. The Department of Radiation Oncology is composed of a team of board-certified radiation oncologists, Ph.D.-educated medical physicists, certified medical dosimetrists, licensed radiation therapists, Magnet Award-winning, oncology-certified registered nurses and advanced practice nurses, medical social workers, dietitians, and specially trained support personnel who have many years of experience in treating and caring for patients undergoing radiation therapy.



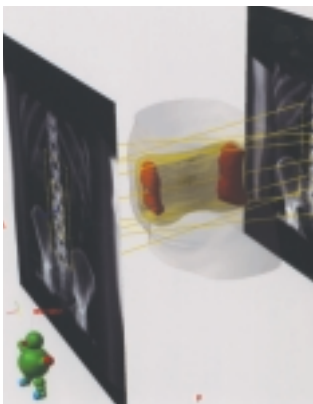
► State-of-the-Art Technology

The Radiation Oncology Department utilizes state-of-the-art technology and equipment to plan and deliver treatment and to monitor patients throughout the course of their disease. The department boasts three computer-controlled, state-of-the-art linear accelerators for delivering treatment, several three-dimensional treatment planning systems utilizing a CT simulator, numerous software technologies for planning and delivery, and medical imaging technology (CT scan, PET scan, and MRI) that enable the radiation oncologist to precisely separate the cancerous tumor from normal healthy tissue. Our linear accelerators and computer-controlled image guidance systems are fully integrated for a seamless radiation therapy process. The linear accelerators operate in multiple modes, delivering both photon and electron radiation at different energy levels, so the radiation oncologists can choose the most appropriate energy and depth of treatment for each individual case.



► Partners with NJ's Largest Cancer Center

The Department of Radiation Oncology, which is a department within The Cancer Center, works in collaboration with the physicians and staff at The Cancer Center at Hackensack University Medical Center, New Jersey's largest and most comprehensive centers. The Cancer Center provides cancer care within 14 specialized divisions, including breast oncology, gastrointestinal oncology, gynecologic oncology, head and neck oncology, leukemia, lymphoma, multiple myeloma, neuro-oncology, skin and cellular medicine, supportive care and pain management, thoracic oncology, blood and marrow transplantation, and urologic



oncology. Each of the divisions is directed by a physician with significant clinical and research expertise in the type of cancer. Each division features a team of experts – medical, research, nursing, and support staff – who are skilled in the specific type of cancer and are able to provide focused care. In addition, The Department of Radiation Oncology is an integral member of the treatment team at the medical center's Institute for Radiosurgery, which treats patients with benign and malignant brain tumors, and The Prostate Cancer Institute of New Jersey, which manages patients with prostate cancer.

► Innovating New Therapies

Because Hackensack University Medical Center is an academic, tertiary care, and research institution, our radiation oncology team is engaged in cutting-edge clinical trials that aim to achieve higher treatment success rates, improve delivery methods, reduce side effects from treatment, and improve patients' quality of life. Among the clinical trials currently taking place are: studies utilizing chemotherapy or vaccine therapy with concurrent radiation, studies assessing new HDR brachytherapy techniques, trials evaluating prostate cancer and gynecologic cancer patients' quality of life after external radiation and brachytherapy, and many studies for the Children's Oncology Group.

The radiation oncology team is also widely published in peer reviewed journals and other publications, and they regularly present their research results at international conferences.

► Support for Our Patients

The Cancer Center and The Department of Radiation Oncology is committed to providing patients with the resources they need to undergo and recover from treatment and to offering their families support and guidance. Support services offered by the department include: social work services, guided imagery, therapeutic touch, nutrition assessment and support, bimonthly orientation programs for patients and families, pastoral care, transportation for patients through the medical center's Guest Services program, and special workshops presented in collaboration with The American Cancer Society. A variety of support groups and psychosocial counseling services are available at The Cancer Center and can be reached by calling (201) 996-5827.

Radiation Oncology Treatment Options

The major goal of radiation therapy is to deliver an effective dose of radiation therapy to destroy tumor cells while minimizing damage to the normal surrounding organs. The Department of Radiation Oncology provides multiple ways to deliver radiation therapy:

- **three-dimensional conformal radiation therapy (3-D CRT)** delivers high radiation dose to tumors but safeguards healthy tissue
- **intensity modulated radiation therapy (IMRT)**, is a revolutionary new modality in which radiation beams are shaped by 120 computer-controlled collimator leaves ("fingers") that wrap the radiation dose around the tumor, thus sparing healthy tissue
- **stereotactic radiosurgery**, a minimally invasive method to treat benign and malignant intracranial brain tumors and arteriovenous malformations without harming neurologic function. Stereotactic radiosurgery allows highly contoured radiation dose distribution to be delivered to the lesion without damaging vital areas of the brain.
- **brachytherapy**, during which radioactive seeds are permanently implanted into a tumor (known as low-dose
- rate brachytherapy), or radioactive sources are temporarily placed through the catheters implanted in the tumor (called high-dose rate or HDR brachytherapy)
- **intravascular brachytherapy**, during which a radioactive wire is temporarily placed into a coronary vessel in order to keep them open and enable blood to flow through
- **The GliaSite System** for the treatment of recurrent malignant brain tumors involves delivering focused amounts of radiation directly into a tumor cavity through a balloon catheter
- **total body irradiation** for the treatment of patients with leukemia and lymphoma in preparation for bone marrow and stem cell transplantation



► To Refer a Patient

We take pride in providing the highest level of medical expertise possible while striving to make certain our patients are comfortable and educated about their treatment. The strength of our services and technology are matched by the compassion and expertise of our radiation oncology team.

For more information or to arrange for a consultation for a patient, please call (201) 996-2210.