

Radiation Oncology at-a-Glance

Your Guide to Advanced Radiation Services from Robert Wood Johnson University Hospital
732-253-3939 • www.rwjuh.edu

Cancer Type	RWJUH Advanced Radiation Options	Benefit to Your Patient
Breast cancer	Accelerated whole breast radiation	Cuts therapy course by almost 50%; provides excellent local disease control; may eliminate need for mastectomy.
	Accelerated partial breast radiation	Shortens therapy from 6 weeks to 1-5 days; localizes treatment area and limits associated side effects.
	MammoSite balloon catheter brachytherapy	Provides post-mastectomy treatment alternative to external beam radiation; speeds therapy from 6 weeks to 5 days.
	Interstitial brachytherapy	Offers targeted treatment that spares surrounding tissue, including lungs and heart; provides post-lumpectomy adjuvant treatment alternative to external beam radiation; allows treatment of previously irradiated patients.
	Combined chemotherapy/radiation (NCI-protocol) Re-irradiation for local recurrence (Department chief currently Principal Investigator of NCI-protocol)	Reduces relapse rate for patients at high risk for local failure. May eliminate need for mastectomy; allows treatment of previously irradiated patients.
Brain tumor	Stereotactic radiosurgery	No incision, no general anesthesia; faster recovery; speedy single-day or several non-daily dose therapy course; offers treatment options for brain metastases and multiple metastases.
	Combined chemo/biologic/radiation therapy	Sensitizes tumor and reduces tumor volume for more effective post-chemo radiation; biologics radiosensitive chemo-resistant tumors.
	Proton beam therapy (coming soon to RWJUH)	Quantum wave properties virtually eliminate dose to surrounding critical structures; offers options for base-of-skull and other neurological tumors outside cranial cavity; offers treatment options for inoperable brain masses 70% local tumor control for inoperable chordomas.
Pancreatic and gastrointestinal cancer	Combined chemo/radiation	Offers dramatically improved outcomes for unresectable pancreatic cancers compared with radiation alone; neoadjuvant therapy enhances tumor downstaging in colorectal cancers.
	Combined chemo and dose escalated IMRT (RWJUH protocol)	Provides treatment options for post-surgical pancreatic patients with poor prognostic features.
	Gated IGRT	Precisely targets shifting pancreatic and GI tumors.
Prostate cancer	Post-prostatectomy radiation (RWJUH protocol)	Offers post-surgical salvage treatment for locally advanced tumors.
	Low dose rate (LDR), high dose rate (HDR) and fractionated brachytherapy	HDR brachy provides complete dosage control; allows aggressive therapy and low residual radiation—brachy seeds removed immediately after treatment; speeds therapy course.

About the Radiation Oncology Program at Robert Wood Johnson University Hospital

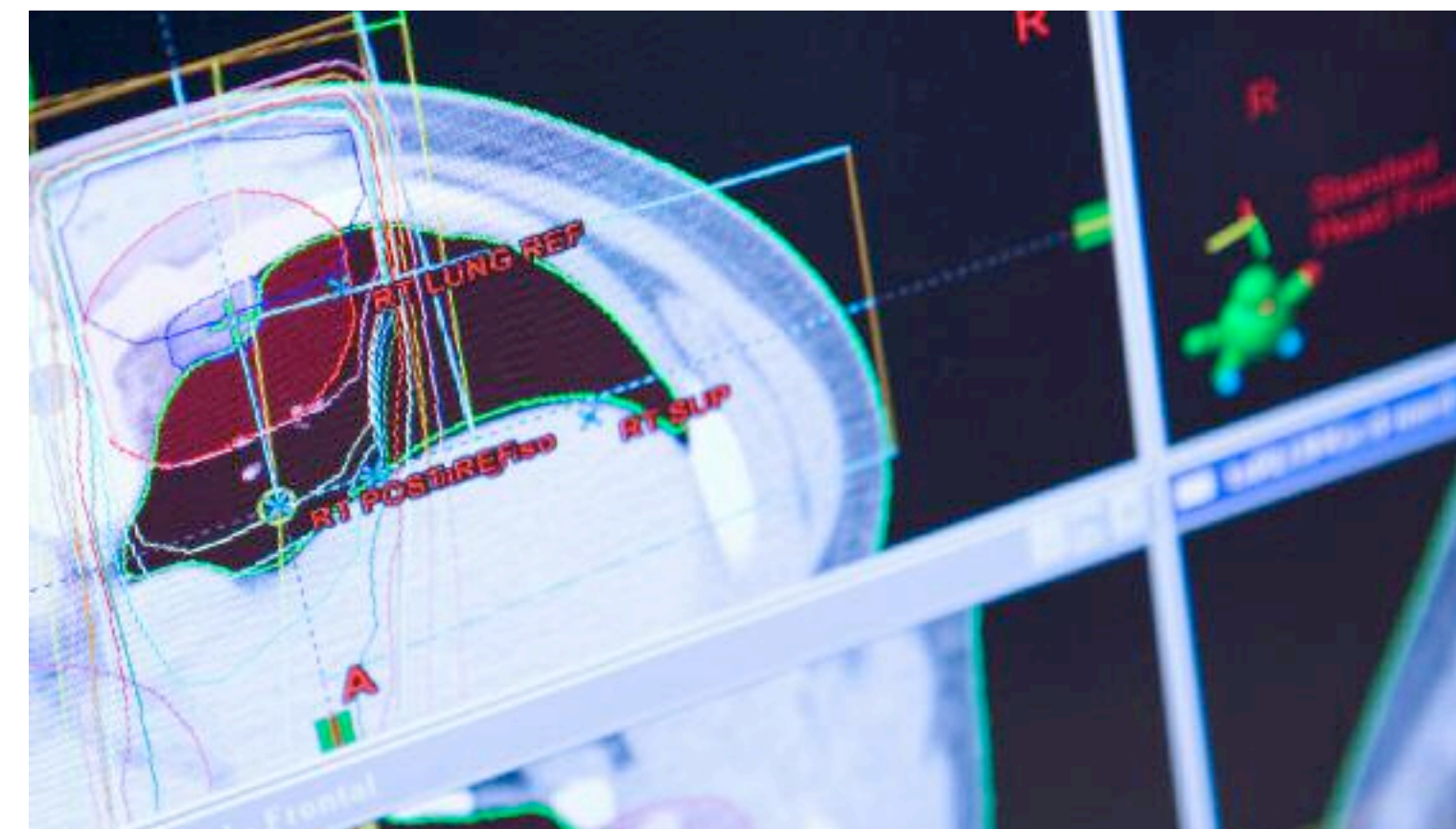


The Radiation Oncology Program at Robert Wood Johnson University Hospital provides your patients with the most advanced radiotherapy options in Central New Jersey. As an affiliate of The Cancer Institute of New Jersey, we are part of the only NCI-designated facility in the state. In addition to a wide range of therapies, your patient benefits from RWJUH's ongoing clinical, translational and basic science research.

To learn more about our acclaimed program, please call us at 732-253-3939 or visit our website, www.rwjuh.edu.

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Concerned you've run out of Radiation Therapy Options for Your Patient?



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Specialty referral should relieve your stress—not add to it.

Have questions about your patient's case?
Need fast consultation or referral?
Please contact us.

Complicated clinical care, coding hassles, staffing issues—managing a busy oncology practice in today's pressured healthcare environment has its headaches. So when patients need radiation therapy (RT), it's no wonder some oncologists opt for routine referral.

But when it's your patient:

- the mom with local recurrent breast cancer
- the toddler with neuroblastoma
- the father with non small-cell lung cancer who's not a candidate for surgery

YOU WANT MORE.

Are your patients getting the subspecialized radiation treatment they need?

Time was you had few radiation therapy options for your Central New Jersey patients with refractory disease.

With virtually no subspecialized radiation oncology services at hand, the best you could do was steer patients to general radiotherapy, or a six-week daily commute to Manhattan.

THAT WAS THEN.



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Head and Neck Cancer Program

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Lymphoma Program

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Pediatric Cancer Program

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Skin Cancer Program

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Sarcoma Oncology Program

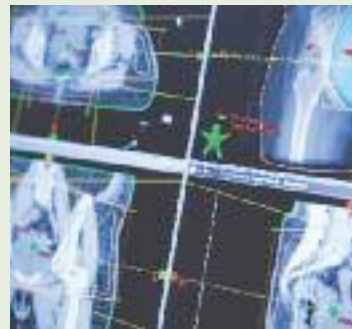
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Thoracic Cancer Program

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Cancer Type	RWJUH Advanced Radiation Options	Benefit to Your Patient
Prostate cancer (cont.)	IMRT/TomoTherapy and high dose rate Brachytherapy Combo vaccine/chemo/radiation therapy (RWJUH protocol) Proton beam therapy (coming soon to RWJUH)	Offers treatment options for aggressive tumors; speeds therapy course. Enhances immune response against tumor antigens. Quantum wave properties virtually eliminate ion scatter to surrounding critical tissues; allows aggressive, higher dose rate therapy to tumor.
Head and neck cancer	Brachytherapy Combined chemo/radiation therapy Proton beam therapy (coming soon to RWJUH)	Spares potential post-surgical disfigurement and dysfunction; provides salvage therapy for previously irradiated patients; reduces radiation to critical surrounding tissues. Sensitizes tumor cells for more effective radiotherapy; new protocols reduce combo therapy's associated toxicities; disrupts tumor DNA better than radiation alone. Quantum wave properties virtually eliminate ion scatter to surrounding critical tissues; allows aggressive, higher dose rate therapy to tumor.
Lymphoma	Electron beam total skin therapy	Provides whole-body treatment for rare subcutaneous lymphoma.
Lung cancer	Gated IGRT/TomoTherapy Hypofractionated stereotactic radiosurgery Endobronchial brachytherapy Combined chemo/radiation therapy (RWJUH protocol) Combined biological/radiation therapy (RWJUH protocol)	Offers more targeted therapy that differentiates tumor from surrounding tissue during respiration. Faster therapy course—3-5 days versus 6-7 weeks; offers treatment option for patients not eligible for traditional surgery; painless procedure requires no recovery time. Offers excellent palliative treatment for advanced inoperable lung cancer; provides relatively long-term symptom relief and improved quality of life. Allows non-surgical treatment of locally advanced non small-cell lung cancer. Lessens toxicities and boosts efficacy of concurrent chemoradiation.
Sarcoma	IMRT Brachytherapy	May eliminate need for amputation; allows treatment of margins inaccessible to surgery—typically larger with sarcoma; provides treatment option for chest and other areas that can't be treated with brachytherapy. Provides highly targeted high-dose radiation; shortens treatment course compared to traditional external beam therapy course.
Pediatric cancer	Combination chemo/radiation (Children's Hematology Oncology Group protocols) Proton beam therapy (coming soon to RWJUH)	Combined therapy sensitizes tumor cells for more effective radiotherapy; increases tumor DNA damage better than radiation alone. Quantum wave properties virtually eliminate dose to surrounding critical structures; greatly reduces expected incidence of radiation-associated secondary tumors later in life.

Your patient's radiation oncologist at RWJUH provides treatments available nowhere else in the area, including:



Innovative brachytherapy from the region's most experienced subspecialists. Our fellowship-trained experts sees more brachytherapy patients than any other radiation oncologists in Central New Jersey. Your patient's best outcome and quality of life are assured by:

- **Fast, accurate treatment in a dedicated brachytherapy suite** with onsite cone beam CT and a fluoroscopic simulator that eliminate imaging-to-treatment delays.
- **High dose rate brachytherapy (HDR)** that delivers fast, intense therapy and almost zero residual radiation - radioactive seeds are removed immediately after treatment.

Incision-free stereotactic radiosurgery for non-surgical treatment of brain, lung and other advanced complex tumors.

Unique clinical protocols. Cancer represents hundreds of diseases—and at RWJUH we address each individually with unique single - and combined-modality protocols that include:

- Dose escalated IMRT, TomoTherapy and brachytherapy
- Combined radiation, chemotherapy and/or biologics
- Combined radiation and vaccine therapies



Today you don't have to be concerned about limited radiation options for your patients. Because now the most advanced radiation oncology services are just minutes from your practice.

Innovative imaging and treatment planning. The widest selection of radiotherapy modalities. And a full staff of radiation subspecialists trained to make the most of this remarkable technology.

You'll find it all at the Radiation Oncology Program at Robert Wood Johnson University Hospital (RWJUH) in New Brunswick, New Jersey.



Affiliated with The Cancer Institute of New Jersey - the only National Cancer Institute (NCI)-designated facility in the state - Robert Wood Johnson University Hospital Radiation Oncology Program

- **Treats more patients with complex cancer** than any other RT program in Central New Jersey.
- **Offers disease-specific subspecialized treatment** you won't find elsewhere in the region.
- **Provides advanced technology and unique protocols** unavailable at other New Jersey RT programs.
- **Assures your patient of expert, non-territorial care** and multidisciplinary tumor board review.
- **Keeps you in the treatment loop** with fast responses, immediate consultation and prompt follow-up.

Customized radiation therapy as unique as your patient's DNA

You don't believe in cookie-cutter cancer care and neither do we. Your patient's age, tumor staging, histological and nuclear grade of primary tumor, genetics and other prognosticators all play a part in determining therapy tailored to your patient's individual needs.



Precise Treatment

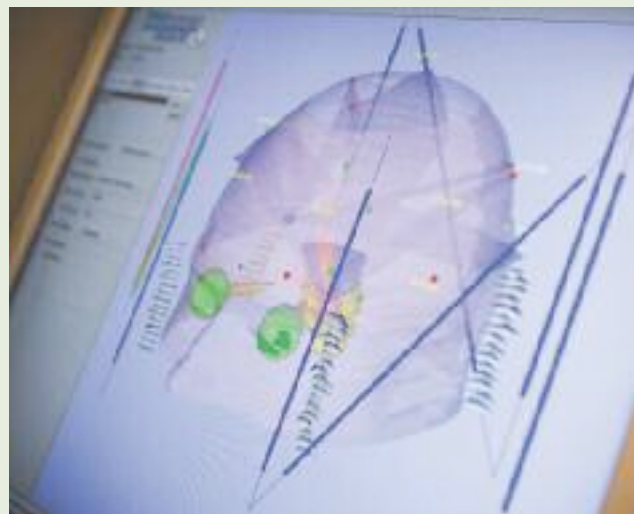
Today's 900-ton proton accelerator bears little resemblance to 1920's Orthovoltage equipment. But both machines share the same therapeutic goal:

- to focus radiation on tumors
- disrupt tumor cell DNA
- induce cell death
- spare surrounding tissue

Then as now, the ability to cure and enhance quality of life depends on precise radiation delivery.

At RWJUH, our ultra-accurate imaging systems, flexible treatment software and multi-angled accelerators provide unprecedented precision.

In the hands of our expert subspecialists these novel technologies offer your patient dramatically expanded treatment options.



At RWJUH, your patient's treatment is supported by a wide range of extraordinary radiation modalities, including:

3-D Conformal and Intensity Modulated Radiation Therapy (IMRT) that "shrink wraps" radiation tightly around your patient's tumor.

Image Guided Radiation Therapy (IGRT) to localize and lock-in treatment on tumors that don't sit still.

Gated Radiation that targets tumors with every move your patient makes - every breath she takes. Your patient's respiration may shift tumors up to 3cm. Gating lets our specialists "hit a moving target" with radiation delivered at respiration-rate intervals.

TomoTherapy: A new angle on complex tumor treatment. Next-generation TomoTherapy fuses CT and IMRT technology for same time imaging and treatment. Tomo's unique dual action - your patient slides through treatment while Tomo spirals therapy 360 degrees around your patient's entire body - delivers thousands of "beamlets" that pinpoint tumors and bypass critical structures.

Total skin electron beam therapy - exclusively at RWJUH. Controlled low-dose electron treatment - available nowhere else in the region - allows whole - body irradiation to treat rare subcutaneous lymphoma and other complex skin conditions.

Proton beam therapy that drops a depth-charge on cancer - with no exit-dose to healthy tissue. Quantum wave proton therapy delivers peaked charge to tumor then disperses ions with virtually no scatter to surrounding tissue. This next-generation therapy will soon be available to your patients - only at RWJUH where we're building the tri-state area's first proton accelerator.

