

Department of Radiation Oncology Newsletter



Fall 2025

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Message from the Chair



The academic year is well underway and our new post-graduate trainees and students have already integrated themselves into clinic. As always, one of the main focuses of the department is improving the patient experience no matter what challenges may lie in the way. That's why we're especially proud of our work on making sure that hearing impaired patients have access to cutting-edge treatment received national recognition.

It's always a bittersweet occasion when students and trainees graduate from their programs, but this year we are fortunate that many of them will be staying at Mount Sinai or in the New York area. We wish them all the best.

Finally, in the newsletter, we highlight some of our research that focuses on decreasing toxicity and improving outcomes for people facing a cancer diagnosis.

Kenneth Rosenzweig, MD
Professor and Chair, Department of Radiation Oncology

New and Noteworthy

An Awesome Accomplishment

Radiation Therapist Distinguished Author Award
In Honor of Harold Silverman

"High-Dose Gating Protocol for Deaf Patients in Radiation Oncology," by Alex Ashley, B.P.S., R.T.(R)(T), Mark Roytman, B.S., R.T.(T), Vishruta Dumane, Ph.D., DABR, Keith Edwards, A.A.S., R.T.(T), Karyn Goodman, M.D., and Samantha Skubish, M.S., R.T.(R)(T).
The article appeared in the fall 2024 issue of *Radiation Therapist*.

- **Alex Ashley, BPS, RT(R)(T)**, Quality Improvement Coordinator, Department of Radiation Oncology, and Vice President of the Radiation Therapy Association of New York
- **Mark Roytman, BS, RT(T)**, Lead Radiation Therapist
- **Vishruta Dumane, PhD, DABR**, medical physicist and Associate Professor of Radiation Oncology at the Icahn School of Medicine at Mount Sinai
- **Keith Edwards, AAS, RT(T)**, Assistant Chief Radiation Therapist
- **Karyn Goodman, MD**, Vice Chair for Research and Quality, Radiation Oncology
- **Samantha Skubish, MS, RT(R)(T)**, Chief Technical Director, Radiation Oncology, and Chair of the Radiation Therapy Association of New York State

On June 20, 2025, a multidisciplinary team from the Department of Radiation Oncology at Mount Sinai was honored with the 2024 Distinguished Author Award from the American Society of Radiologic Technologists.

(continued)

New and Noteworthy

An Awesome Accomplishment (continued)

Their article, “High-Dose Gating Protocol for Deaf Patients in Radiation Oncology,” published in the Fall 2024 issue of *Radiation Therapist*, was selected by the Editorial Review Board as the most outstanding peer-reviewed article of the year. This achievement highlights the Department of Radiation Oncology’s commitment to advancing equitable care and innovation in the field.

The award was presented at the 2025 ASRT Annual Governance and House of Delegates Meeting, at which Mr. Ashley accepted the recognition on behalf of the team.



In-Depth Conversation with Samantha Skubish



On March, 17, 2025, **Samantha Skubish, RT(R)(T)**, was the featured guest on ASRT’s *The RAD Position* podcast hosted by Melissa B. Pergola, EdD, RT(R)(M), FASRT, CAE, CEO and Executive Director, American Society of Radiologic Technologists (ASRT), and Ray Arambula, Chief Information Officer, ASRT. The podcast hosts discuss

issues pertaining to the medical imaging and radiation therapy profession with guests who include members of the ASRT Board of Directors, ASRT staff, medical imaging and radiation therapy experts, and others. In Episode 108 of *The Rad Position*, Ms. Skubish spoke about shaping the future of

patient care within the radiation therapy profession and the advanced practice radiation therapy role.



You can view the episode with Ms. Skubish at <https://www.asrt.org/promotions/the-rad-position-podcast/archive/episode-eight>

A Champion for Music Therapy



Congratulations to **Andrew Rossetti, PhD, LCAT, MT-BC**, Director of Oncology Music Therapy, Louis Armstrong Center for Music & Medicine, Mount Sinai Health System, on his appointment as President of the International Association for Music and Medicine (IAMM). The IAMM was formed in 2009 to encourage and support the use of music in medical contexts, including research into the benefits of music and its specialized applications in health care.

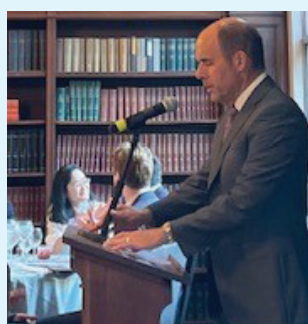
Dr. Rossetti, an internationally minded scholar with a strong commitment to helping grow the fields of music and medicine and music therapy, has helped implement programs in numerous countries in Europe, Asia, South America, and the United States. Devoted to the mission of IAMM, he has started programs in NICUs, acute in-patient psychiatric care, and oncology, and is a widely published researcher and developer of dedicated music therapy protocols in cancer and trauma. Dr. Rossetti has trained music therapists, interns, medical students, and others in music psychotherapy. He is also a professional musician whose guitar skills remain fluid in classical and jazz idioms.

Education Highlights

Congratulating Our 2025 Radiation Oncology Residency Graduates

On June 18, 2025, colleagues, mentors, friends, and family gathered at the New York Academy of Medicine to honor the achievements of the Class of 2025 residency graduates – **Daniel Dickstein, MD**, Radiation Oncology; **Kristin Hsieh, MD**, Radiation Oncology; and **Charlotte Read, MS**, Medical Physics. Their dedication, compassion, and unwavering pursuit of excellence have made a lasting impact on our department and the patients we serve.

All three graduates will continue their careers within Mount Sinai and our partner facilities: Dr. Dickstein has joined the Radiation Oncology faculty at Mount Sinai; Dr. Hsieh has joined our partner – the New York Proton Center; and Ms. Read is now a full-time medical physicist at Mount Sinai-Union Square. As they enter this new phase of their journey, they will continue to influence the field of radiation oncology with their clinical expertise and research acumen, which will benefit patients the world over.



Special thanks to Kenneth Rosenzweig, MD, Chair of Radiation Oncology, and Michael Buckstein, MD, PhD, Residency Program Director, for their exceptional leadership.



Education Highlights

Meet Our New Residents

Radiation Oncology

We are delighted to welcome our newest radiation oncology PGY-2 residents, **Shubhangi Shah, MD**, and **Anna Skakodub, MD**. Dr. Shah, a native of Toronto, Ontario, received her MD from the Virginia Commonwealth University School of Medicine. Dr. Skakodub hails from Lexington, Massachusetts, and received her MD from Columbia University College of Physicians and Surgeons.



Shubhangi Shah, MD



Anna Skakodub, MD

Clinical Medical Physics

This summer, we welcomed **Yuli Wang, PhD**, and **Zipai Wang, PhD**, to the Mount Sinai Radiation Oncology team as our newest Medical Physics residents. Prior to joining the Department of Radiation Oncology, Dr. Yuli Wang received her PhD in Biomedical Engineering from the Johns Hopkins University School of Medicine. Dr. Zipai Wang earned his PhD in Biomedical Engineering from Stony Brook University.



Yuli Wang, PhD



Zipai Wang, PhD

Mount Sinai Center for Radiation Sciences Education

Leading the Way

- **Danielle McDonagh, DHSc, MS, RT(T)**, has been promoted to Program Director, Radiation Therapy.
- **Victoria Olsen, MBA, CMD**, has been promoted to Program Director, Medical Dosimetry.
- **Matias Prando, BS, RT(T)**, a graduate of our program and a radiation therapist at Mount Sinai-Union Square, has joined the education team as Clinical Coordinator for Radiation Therapy Education and Research.
- **Vishruta Dumane, PhD, DABR**, formerly Program Director of Medical Dosimetry, continues to support our programs as a valued advisor and mentor.

Congratulating the Class of 2025 Graduates

In May 2025, we celebrated the graduation of our incredible Medical Dosimetry and Radiation Therapy graduates alongside their peers, mentors, clinical supervisors, departmental leaders, and the dedicated staff who guided

them every step of the way. The event marks the culmination of two years of rigorous training, growth, and unwavering dedication to patient care and excellence in the field.



Medical Dosimetry graduates



Radiation Therapy graduates

2025 Conference Presentations

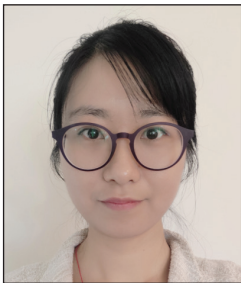
American Association of Physicists in Medicine (AAPM)



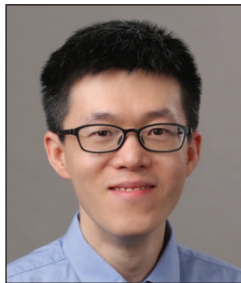
AAPM Science Council Session

Weakly Supervised Spatial Implicit Neural Representation Learning for 3D MRI-Ultrasound Deformable Image Registration in HDR Prostate Brachytherapy

Jing Wang, PhD, and Yang Lei, PhD



Jing Wang, PhD

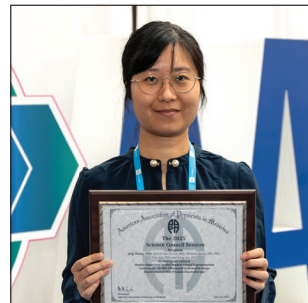


Yang Lei, PhD

We are honored that the study on HDR prostate brachytherapy co-authored by **Jing Wang, PhD**, and **Yang Lei, PhD**, was selected for presentation for the prestigious AAPM Science Council Session – Innovating Together: Breakthrough Science through Cross-Disciplinary Collaboration – at the 67th Annual Meeting & Exhibition of the American Association of Physicists in Medicine (AAPM). This remarkable achievement was a collaborative effort between the physics teams of Mount Sinai and the University of Nebraska.

The study introduces a novel weakly supervised spatial implicit neural representation (SINR)-based approach for 3D MRI-US deformable registration. By leveraging sparse surface supervision and spatial priors, it achieves accurate, robust, and computationally efficient registration, enhancing real-time image guidance in HDR prostate brachytherapy and improving treatment precision.

We are proud that this abstract was selected as one of the top 10 abstracts in the Science Council category, highlighting the cutting-edge work being done at the intersection of medical physics and imaging technology.



Dr. Wang accepts certificate of recognition on behalf of the team for their paper on HDR prostate brachytherapy presented at the 2025 AAPM Science Council Session.

AAPM Rocky Mountain Chapter Meeting

Treatment Planning in the Age of AI: Focus Where It Matters Most

Vishruta Dumane, PhD, DABR, and Victoria Olsen, MBA, CMD

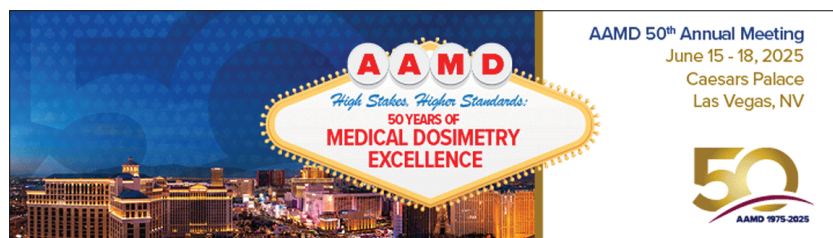
At the June 2025 AAPM Rocky Mountain Chapter Meeting, **Victoria Olsen, BS, MBA, CMD**, Program Director, Medical Dosimetry, and physicist **Vishruta Dumane, PhD, DABR**, delivered a presentation on how artificial intelligence is reshaping treatment planning and education in radiation oncology. The talk highlighted Mount Sinai's integration of AI-driven tools, such as RapidPlan, to improve plan quality, standardize dose constraints, and reduce variability –

all while enhancing student training and maintaining safety. Emphasizing a value-based planning approach, their work underscores how intelligent automation can empower clinical teams to focus more on patient care and less on manual processes.

You can view Dr. Dumane and Ms. Olsen's presentation at: <https://www.youtube.com/watch?v=QP22VpaiSh8&t=1456s>

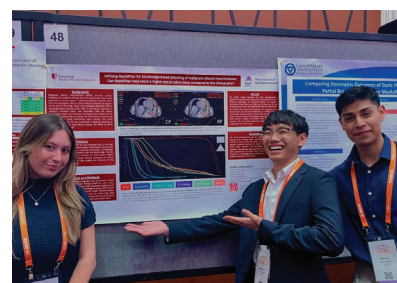
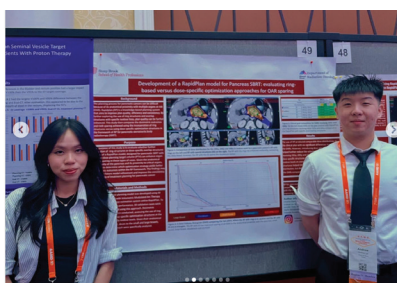
2025 Conference Presentations

American Association of Medical Dosimetrists (AAMD) 50th Annual Meeting



What Happens in Vegas...Publishes in Our Newsletter

This past June, medical dosimetry graduates from the Class of 2025 joined medical dosimetrists from around the country for the 50th Annual Meeting of the AAMD in Las Vegas, Nevada, where they presented their posters and shared their work with the dosimetry community.



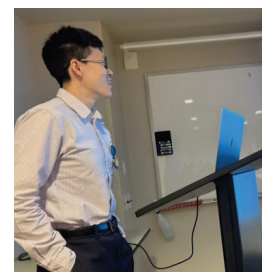
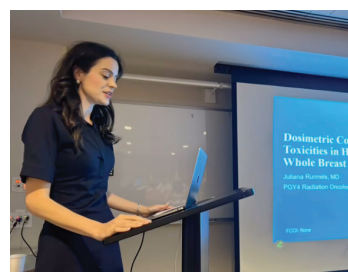
Research Review

Research Retreat: An Evening of Innovation

On April 23, 2025, the Department of Radiation Oncology held its annual Research Retreat – an inspiring evening dedicated to advancing care through science, collaboration, and shared vision. Physicians, physicists, educators, and radiation therapists gathered to share ongoing projects, spark new ideas, and celebrate the power of multidisciplinary research.



Dr. Kenneth Rosenzweig welcomes participants to the Research Retreat.



Featured Research



Vishruta Dumane,
PhD, DABR

Volumetric Modulated Arc Therapy (VMAT)

A newly published study by **Vishruta Dumane, PhD, DABR**, and **Kenneth Rosenzweig, MD**, along with colleagues at Mount Sinai delivered the largest and longest follow-up to date on the use of volumetric modulated arc therapy (VMAT) in patients with malignant pleural mesothelioma (MPM) following lung-sparing surgery.

This high precision technique demonstrated a strong safety profile with no grade 4 and 5 toxicities noted and only 8.6% of patients experiencing manageable grade 3

radiation pneumonitis. With over half of the patients followed for at least a year, these findings reinforce VMAT as a reliable, well-tolerated option that maintains treatment quality while minimizing long-term risk. Results of this study support VMAT's role in advancing safe and effective multimodality care for MPM.

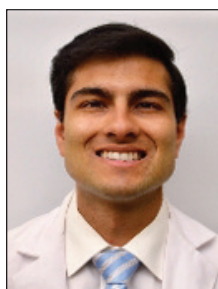
Reference

Dumane V, Runnels J, Flores R, Wolf A, Fu W, Mazumdar M, Marron T, Gomez J, Rosenzweig K. Long term side effects after volumetric modulated arc therapy to the pleura in patients with malignant pleural mesothelioma. *Lung Cancer*. 2025 Aug;206:108639. <https://doi.org/10.1016/j.lungcan.2025.108639>

Acute Toxicities for Hypofractionated Whole-Breast Irradiation

Dr. Dumane also completed a study on dosimetric correlates of acute toxicities for hypofractionated whole-breast irradiation (HF WBI). Conducted at Mount Sinai, her retrospective investigation evaluated the need to update ASTRO's 2018 dose homogeneity guidelines. This study is the largest retrospective study to date assessing acute toxicities in patients receiving HF WBI under the 2018 guidelines. Despite high compliance with these standards, nearly 30 percent of patients experienced moderate to severe pain during treatment.

The study found that more stringent dose constraints – specifically, keeping V105%(cc) under 50 cc and V105%(%) under 5% – significantly reduced toxicity. These findings suggest that current planning thresholds may be too permissive and highlight an opportunity to update guidelines in pursuit of improved quality and safety in breast cancer care. Dr. Dumane presented the results of the study at the September 2025 ASTRO meeting.



Kunal Sindhu, MD

New Radiation Oncologists Choose Big Cities Over Rural Areas

A recently published study led by radiation oncologist **Kunal Sindhu, MD**, reveals that most new radiation oncologists are choosing to work in large metropolitan areas rather than in rural communities, suggesting a trend that could make it harder for people living in less populated areas to get the cancer care they

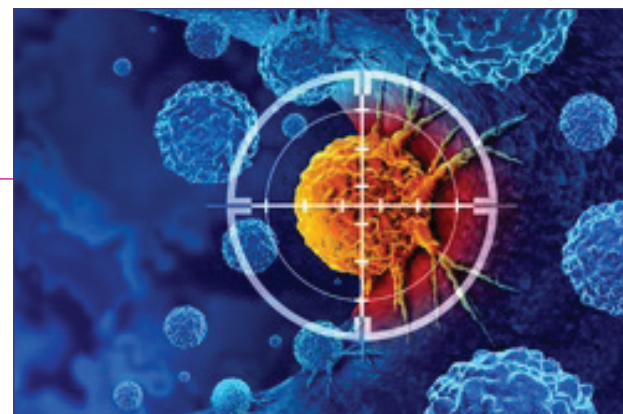
need. The research team analyzed job locations of recent residency graduates from 2015 to 2022, discovering that only 4.3% of new radiation oncologists accepted their first jobs in rural counties, and most of those were in areas close to cities. The researchers found that new doctors were more likely to work in counties that had higher populations, greater household income, more hospitals and healthcare services, and more primary care physicians per person. These results suggest that new doctors prefer to start their careers in communities that already have strong healthcare systems and resources.

Dr. Sindhu's team now plans to study all radiation oncologists working in rural areas – not just recent graduates – to learn more about who chooses to practice in these areas and why, with the goal of encouraging more doctors to do the same. Their goal is to provide information that will enable healthcare leaders find new ways to improve access to cancer treatment in underserved areas.

Reference

Yu C, Hsieh K, Cherry DR, Runnels J, Rowley JP, Sindhu KK. Examining Recent Employment Outcomes for Graduating Radiation Oncologists Across and Within the Metropolitan/Nonmetropolitan Continuum: 2015-2022. *International Journal of Radiation Oncology, Biology, Physics*. 2025 May 18:S0360-3016(25)00482-1. <https://doi.org/10.1016/j.ijrobp.2025.05.017>

Recent Publications



Aguado-Flor E, Reyes VM, Navarro V, Mollà M, et al; REQUITE consortium. Integrating genetic polymorphisms and clinical data to develop predictive models for skin toxicity in breast cancer radiation therapy. *Breast*. 2025 Aug;82:104506.

<https://doi.org/10.1016/j.breast.2025.104506>

Bruggeman AR, Robbins JR, Chang EM, Dharmarajan K. Palliative radiation oncology programs: improving value through high-quality and cost-effective care. *Ann Palliat Med*. 2025 May;14(3):247-254.

<https://doi.org/10.21037/apm-24-171>

Carney LM, Besculides M, Gorbenko K, Schnur JB, Munoz C, Lynch J, Feldman C, Montgomery GH, Gupta V, Green S, Ghiassi-Nejad Z, Goodman KA, Marshall DC. Breast and Pelvic Cancer Survivors' Preferences for Psychosexual Interventions to Address Sexual Health Concerns: A Qualitative Study. *Psycho-oncology*. 2025 Jun;34(6):e70200.

<https://doi.org/10.1002/pon.70200>

Dickstein, DR, Bates, AJ, Wheldon, CW et al. Treatment choice and sexual health outcomes in gay and bisexual men with prostate cancer. *Prostate Cancer Prostatic Dis*(2025).

<https://doi.org/10.1038/s41391-025-01007-1>

Gadsby A, Liu T, Samstein R, Zhang J, Lei Y, Rosenzweig KE, Chao M. Impact of Normal Lung Volume Choices on Radiation Pneumonitis Risk Prediction in Locally Non-small Cell Lung Cancer Radiation Therapy. *Adv Radiat Oncol*. 2025 Jul 3;10(8):101825.

<https://doi.org/10.1016/j.adro.2025.101825>

Lei Y, Chao M, Yang K, Gupta V, Yoshida EJ, Wang T, Yang X, Liu T. A novel network architecture for post-appligator placement CT auto-contouring in cervical cancer HDR brachytherapy. *Med Phys*. 2025 Jul;52(7):e17908.

<https://doi.org/10.1002/mp.17908>

Lei Y, Zhang J, Yang K, Wei S, Liu R, Fu Y, Lei Y, Lin H, Simone CB 2nd, Rosenzweig K, Liu T. Beam orientation optimization in IMRT using sparse mixed integer programming and non-convex fluence map optimization. *Phys Med Biol*. 2025 Jul 4;70(13).

<https://doi.org/10.1088/1361-6560/ade8ce>

Momin S, Luca K, Lei Y, Chang CW, Xie H, Kei T, Adams J, Davis T, Yang X, Jani A, Roper J, Zhang J. A novel inverse treatment planning training method for inexperienced treatment planners. *Phys Eng Sci Med*. 2025 Jun 23.

<https://doi.org/10.1007/s13246-025-01547-9>

Slavin S, Beckerdite J, McGuire AL, Morrison LO, Pigott M, Racsumberger CL, Rangel E, Stevens B, Tirado R, Thompson CD, Wright L. Strategies to Enhance GME Program Coordinator Job Satisfaction and Well-Being. *J Grad Med Educ*. 2025 Jun;17(3):408-411.

<https://doi.org/10.4300/JGME-D-25-00372.1>

Smith-Salzberg B, Hsieh K, Cherry D, Bloom JR, Yu C, Nehlsen AD, Salgado LR, Sindhu KK. The effects of radiation therapy on the brain: implications for management. *Chin Clin Oncol*. 2025 Jun;14(3):32.

<https://doi.org/10.21037/cco-24-125>

Yu C, Becher O, Gilheaney S, Morgenstern P, Ghatan S, Lazarev S. Challenging the Odds: Long-Term Survival in Pediatric Diffuse Midline Glioma with H3 K27M and BRAF V600 Co-Mutations Treated with Upfront Radiotherapy and Targeted Therapy. *Pediatr Blood Cancer*. 2025 Oct;72(10):e31929.

<https://doi.org/10.1002/pbc.31929>

Zhou S, Alerasool P, Kishi N, Tsao CK. Do Older Patients with Metastatic Hormone-Sensitive Prostate Cancer Benefit from Triplet or Doublet Therapy? A Network Meta-Analysis. *Clin Genitourin Cancer*. 2025 Aug;23(4):102380.

<https://doi.org/10.1016/j.clgc.2025.102380>

Spotlight on Staff

Accolades!



Eliana Kaminer, RN, OCN, Mount Sinai West, has achieved specialty certification as an Oncology Certified Nurse (OCN).



Elise Watson, Mount Sinai-Union Square Radiation Oncology, has been honored as part of the *We Are Mount Sinai* employee recognition program.

“Elise is the point person for the Single Brand Identity signage for Radiation Oncology at MSUS. Due to recent construction in her suite, many of the signs were displaced and this came up on a recent audit. In a team effort to reinstate correct signage, Elise was so efficient, organized and had great follow-through. We are so lucky to have her! Thank you, Elise!”

Astrid Lenis, Senior Director,
Department of Radiation Oncology

Fond Farewells

With warmest wishes to our retirees as they begin the next phase of their lives!



Dionne Gordon, Senior Billing Liaison
Mount Sinai-Union Square



Barbara Cummings-Bovell, RN
Mount Sinai Hospital



Annmarie Shelby, PCA
Mount Sinai Hospital

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