

Department of Radiation Oncology



Message From the Chair

As the new academic year begins, the Department of Radiation Oncology at the Mount Sinai Health System has once again achieved new milestones. The Department of Radiation Oncology is now training eleven resident physicians, two of them recipients of the prestigious Holman Research Pathway. This makes Mount Sinai one of the largest training programs in the United States and one of only a handful of programs nationwide with multiple dedicated research residents. We will be starting a physics residency program this year, and the Mount Sinai Center for Radiation Therapy Education has completed a successful first year. Our Department's research funding is at an all-time high with multiple investigators receiving competitive awards from the National Institutes of Health, societies, and industry.

And of course, the long-awaited New York Proton Center had its grand opening and will begin treating patients this summer. This center will be a beacon for patients with challenging clinical situations. Proton beam therapy is ideal for children with cancer who need radiation or any patient who requires a second course of radiation treatment. We are proud to be part of the first proton center to open in New York State and to provide our community with this cutting-edge technology.

I wish everyone a happy and safe summer.

Kenneth Rosenzweig, MD Professor and Chair Department of Radiation Oncology

New York Proton Center

The New York Proton Center, New York State's first proton therapy facility, opened its doors in East Harlem in June 2019. The Mount Sinai Health System has partnered with Montefiore Health System and Memorial Sloan Kettering Cancer Center to bring proton treatment to the New York metro region. Nearly a decade in the making, the Center will use proton beams to treat cancerous tumors. The facility houses four treatment rooms and includes a faculty of 23 proton therapy-trained radiation oncologists. ProHealth Proton Management will manage the site to ensure coordinated care with our consortium partners.



New York Proton Center Ribbon Cutting

Welcoming New Staff

Samuel Reed, PA-C, RT(T), is a physician assistant at Mount Sinai's Department of Radiation Oncology and will help coordinate the care of patients undergoing radiation treatment at the New York Proton Center. He is a recent graduate of Duke University's physician assistant program and previously worked at Memorial Sloan Kettering Cancer Center as a radiation therapist, where he also completed his radiation therapy education. Outside of work he enjoys playing the piano and saxophone while also working on various music production projects.



Samuel Reed, PA-C, RT(T)



Stanislav Lazarev, MD

Stanislav (Stas) Lazarev, MD is a radiation oncologist in the Department of Radiation Oncology at Mount Sinai. He treats a wide variety of cancers, specializing in pediatric, gastrointestinal, and gynecologic malignancies. He sees his patients at the New York Proton Center and at Mount Sinai hospitals. Dr. Lazarev graduated magna cum laude from the University of California, Berkeley with a Bachelor of Arts in Biochemistry and Molecular Biology, and he received his medical degree from the University Of Vermont College Of Medicine, where he also was inducted into the Alpha Omega Alpha National Honor Medical Society. He completed medicine internship at Highland Hospital in Oakland, California, and radiation oncology residency at the Icahn School of Medicine at Mount Sinai. He served as chief resident from 2018-2019.

Dr. Lazarev's research interests include identifying and developing radiotherapy de-intensification strategies that will help decrease radiation toxicities and reduce economic and psychosocial burden on patients without compromising their oncological outcomes. Dr. Lazarev was born and raised in southern Russia. He is fluent in English, Russian, Spanish, Portuguese, and proficient in French. He enjoys playing the piano, traveling abroad, and playing soccer.

Robert (Robbie) Samstein, MD, PhD, is a radiation oncologist in the Department of Radiation Oncology at Mount Sinai and a physician scientist with a laboratory in the Precision Immunology Institute at the Icahn School of Medicine. He treats a wide variety of cancers, specializing in thoracic malignancies. He graduated summa cum laude from Yale University and completed his combined training in the Weill Cornell/Rockefeller/Sloan Kettering/ Tri-Institutional MD-PhD Program. He completed his graduate work with Alexander Rudensky, PhD, studying the development and function of regulatory T cells. He completed his transitional year internship and residency in radiation oncology at Memorial Sloan Kettering Cancer Center in New York. During residency, he conducted laboratory research with Timothy Chan, MD, PhD, as part of the American Board of Radiology Holman Research Pathway.

Dr. Samstein's research interests are focused on understanding the interaction between the patient's immune system and cancer cells in the tumor, elucidating the role of the DNA damage repair and response pathway in altering the tumor's ability to be recognized and attacked by the immune system. His laboratory will work to identify new strategies to harness the immune anti-tumor response and expand the therapeutic window of traditional immunotherapies.



Robert Samstein, MD, PhD

In addition, we are pleased to welcome the following new team members to the Department of Radiation Oncology:

Ahmad Amoush - Physicist Alex Ashley – Staff Radiation Therapist Andrea Borsic – Senior Radiation Therapist Chris Castro - Financial Authorization Associate I Erwin Chavez - Nurse Helen Chen – Dosimetrist Tracey Holzman-Adler - Nurse Mehak Ijaz - Staff Radiation Therapist Brianna Jones - Resident Mariebeth Knott – Per Diem Radiation Therapist Eric Lehrer - Resident Isatou Marong - Nurse Jonathan Marinez – Financial Authorization Associate I Wendy Miano – Vice President, Oncology Nursing Nicole Milan – Administrative Associate II Victoria Olsen - Dosimetrist Yikmunn Ong - Staff Radiation Therapist Jared Rowley - Resident Patrycia Sek - Staff Radiation Therapist Meghan Shafer – Social Worker Nicole Silverio – Senior Radiation Therapist Ching-Ling Teng – Physicist Cynthia Tye – Dosimetrist Diana Yehya – Secretary Emma Zhou – Social Worker

Education Updates

Department of Radiation Oncology Establishes Clinical Medical Physics Residency Program

In January 2019, under the leadership of Kenneth Rosenzweig, MD, the Department Chair, and Yeh-Chi Lo, PhD, Director of Physics, the Clinical Medical Physics Residency Program at Mount Sinai was initiated. The physics residency is a two-year physics training program consisting of 12 clinical rotations. Junyi Xia, PhD, was appointed program director, and Yading Yuan, PhD, was appointed program coordinator. In March 2019, the Graduate Medical Education (GME) committee at the Icahn School of Medicine at Mount Sinai approved this new education program under which upcoming physics residents will be mentored by the Department's 15fifteen board certified medical physicists. In April 2019, the residency program applied for the Commission on Accreditation of Medical Physics Education Programs (CAMPEP) accreditation.

Thomas Wolken, MS, is the program's first physics resident. He received a Bachelor of Science from the University of Oregon and Master of Science in Medical Physics from Oregon Health and Science University. Previously, he was an adjunct faculty at Salt Lake Community College.

Congratulations to all!



Thomas Wolken, MS

Mount Sinai Center for Radiation Therapy Education

The Mount Sinai Center for Radiation Therapy Education at Stony Brook University is proud to announce the graduation and RT(T) credentialing of its first class of radiation therapy students. The Center is now at an exciting time of transition as the Class of 2020 transitions to treatment unit internships across the Mount Sinai Health System. We welcome our second class of Mount Sinai radiation therapy students to the Department.

In addition, Melanie Councell, BS, a radiation therapy student at the Mount Sinai Center for Radiation Therapy Education at Stony Brook University, received the 2019 Elekta Radiation Therapy Scholarship. The scholarship was established to support students in funding their radiation therapy education. American Society of Radiologic Technologists (ASRT) Foundation scholarships are provided thanks to individuals and corporations who understand the importance of highly skilled radiologic technologists and the power of education to create a brighter future.

From left: Sarah Wong, BS, Brianna Van Dyke, BS, Moses Asenso, BS, Melanie Councell, BS, Katherine Lynch, BS



ONS Annual Congress 2019

In April 2019, the Department of Radiation Oncology had a significant presence at the 2019 Oncology Nursing Society (ONS) Congress in Anaheim, California. The oral and poster presentations reflected the dedication, creativity, and drive of our nursing staff. We congratulate our team on their achievements:

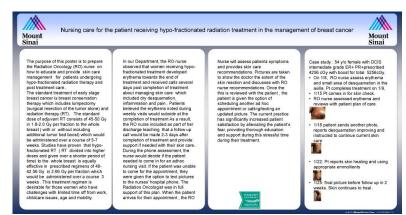
- Placement of Tandem and Ovoid Procedures in the Clinic Setting/Procedure Suite for High Risk Patients -Catherine Cadore, RN, MSN/NED, Viletha Clarke-Small, NP, FNP, MSN, and Ashley Bernstein, RN, BSN
- Beaming and Accelerating a New Frontier: Onboarding a Cohort of Advanced Practice Nurses in Radiation Oncology - Toby Bressler, PhD, RN, OCN, and Catherine Cadore, RN, MSN/NED
- Nursing Care for the Patient Receiving Hypo-Fractionated Radiation Treatment in the Management of Breast Cancer - Irene Braccia, RN, BSN, OCN
- Hey, Hey, Ho, Ho Certification is the way to go! Motivating Staff to Become Certified, a Pinning Ceremony for Oncology Certified Nurses - Toby Bressler, PhD, RN, OCN; Karen deVries, RN, OCN, CBCN; Diona Lumani MSN, RN, CMSRN, OCN; Catherine Cadore, RN, MSN/NED; Jonathan Rockfeld, MSN, ANP-BC, AOCNP
- Perception is the Reality: Improving the Patient Experience using a Service Recovery Model in an Ambulatory Setting - Diona Lumani, MSN, RN, CMSRN, OCN; Toby Bressler, PhD, RN, OCN; Karen deVries, RN, OCN, CBCN; Treasure Dooker, RN; Mark Liu, BS; Alaysia Williams
- Advance Review of Infusion Orders; How can it help? - Karen deVries, RN, OCN, CBCN; Diona Lumani MSN, RN, CMSRN, OCN; Toby Bressler, PhD, RN, OCN



Irene Braccia, RN, BSN, OCN



Valetha Small-Clark, NP, FNP, and Catherine Cadore, RN, MSN/NED



Irene Braccia, RN, BSN, OCN Poster Presentation

Debra Phillips, RN, Receives DAISY Award

Congratulations to Debra Phillips, RN, for receiving the 2019 DAISY Award at Mount Sinai Union Square. The DAISY Award was created in memory of J. Patrick Barnes as a way to honor skillful and compassionate nursing care. The Barnes Family established this recognition award program to "honor the superhuman work nurses do for patients and families every day."

Pain Management Workshop

Congratulations to Alison Snow, PhD, LCSW, OSW-C; Nancy Bourque, LCSW, OSW-C; Diane Serra, RN; and Yocheved Weinreb, RN. They were selected to participate in the inaugural May 2019 National Cancer Institute (NCI)-funded workshop, "Achieving Excellence in Biopsychosocial Cancer Pain Management Through a Comprehensive Quality Education Program." The program is in collaboration with Johns Hopkins Bloomberg School of Public Health and supportive oncology education programs of the City of Hope. The goal is to provide interdisciplinary health professionals with multimodal, evidence- and skills-based education in biopsychosocial cancer pain management at the individual, health care team, and practice levels, focusing on long-term survivorship, including those with advanced cancer.

Yun Seo, NP, Recognized for Nursing Excellence

In May 2019, Yun Jeong Seo, NP, was awarded the Mount Sinai West Nursing Excellence Award. Ms. Seo is the first nurse practitioner from Mount Sinai West to receive this recognition. Congratulations Yun!

Emerging Leaders Graduates

Emerging Leaders is a six-month professional development program for aspiring leaders across the Mount Sinai Health System who have strong leadership potential as well as a desire to learn and grow within the Health System. This program offers a pathway for professional growth by building key skills and sharpening leadership-related competencies through project-based, experiential learning.

Congratulations to our Emerging Leaders Graduates Charles Nam, BS, RT(T), Cynthia Vavasis, RT(T) and Elise Watson.

> Tara Hayes, MHA, RT(T) and Cynthia Vavasis, RT(T)

Astrid Lenis, MPA and Elise Watson









Debra Phillips, RN

Jalal Ahmed, MD, PhD, receives Young Investigator Award



Jalal Ahmed, MD, PhD

We congratulate Jalal Ahmed, MD, PhD, for receiving the American Society of Clinical Oncology (ASCO) Young Investigator Award. This award provides funding to promising investigators to encourage and promote quality research in clinical oncology. Dr. Ahmed's work entitled "Targeting the Tumor Microenvironment to Advance CAR T Cell Therapy for Lung Cancer" aims to determine how radiotherapy can be applied to modify the inflammatory state of the tumor microenvironment and augment killing of tumor by CAR T cells.

Dr. Ahmed's research is funded by the Lung Cancer Research Foundation and by the ASCO Conquer Cancer Foundation Young Investor Award.

Diane Serra Presents at Nursing Symposium in Ireland

In May 2019, Diane Serra, RN, presented "The Positive Impact of Guided Imagery (GI) Among Patients Receiving Radiation Therapy for Breast Cancer" at the Third International Integrative Nursing Symposium in Galway, Ireland. Guided imagery is an established intervention in integrative oncology. This study was initiated to evaluate the impact of guided imagery on patients undergoing radiation therapy for breast cancer. Overall, 86 percent of participants described the guided imagery sessions as helpful, and 100 percent said they would recommend the intervention to others.



Find the full article here:

https://www.researchgate.net/publication/233768393_Outcomes_of_Guided_I magery_GI_in_Patients_Receiving_Radiation_Therapy_for_Breast_Cancer

Diane Serra, RN

Manjeet Chadha, MD, Co-Authors Breast Cancer Publication



Manjeet Chadha, MD, MHA, FACR, FASTRO Manjeet Chadha, MD, MHA, FACR, FASTRO, co-authored the paper "The Evolving and Multidisciplinary Considerations in Nodal Radiation in Breast Cancer." This paper describes the role of regional nodal irradiation in the context of the de-escalation of axillary surgery, improved understanding of the molecular and pathologic features of breast cancer, and increasing use of neoadjuvant chemotherapy. The paper summarizes key clinical trials aimed at optimizing the management of regional lymph nodes in concert with the ultimate goal of assessing each patient's risk for recurrence and individualizing multidisciplinary management for improved clinical outcomes.

Find the full article here: https://www.ncbi.nlm.nih.gov/pubmed/? term=%3A30827453

Deborah Marshall, MD, MAS, Awarded Patty Brisben Foundation Grant

Congratulations to Deborah Marshall, MD, MAS, for receiving a Patty Brisben Foundation grant. The foundation serves to enhance women's sexual health and wellbeing through research and education. By focusing on the key areas that have a dramatic impact on a women's sexual health, the foundation is able to provide support and fund research where it is needed most, to help improve the lives of the highest number of women.

Dr. Marshall's work on the impact of Open Payments on financial interactions between individual oncology physicians and industry was presented as part of a discussion section on health services research at the American Society of Clinical Oncology (ASCO) annual meeting in June 2019. Dr. Marshall was also granted a 2019 ASCO Annual Meeting Merit Award by Conquer Cancer, the ASCO Foundation that recognizes innovative research advances made by early-career oncologists listed as first authors on abstracts selected for presentation at the ASCO Annual Meeting and provides support to further their research endeavors.



Deborah Marshall, MD, MAS



Richard Bakst, MD

Richard Bakst, MD, Opens Elderly Patient Head and Neck Trial

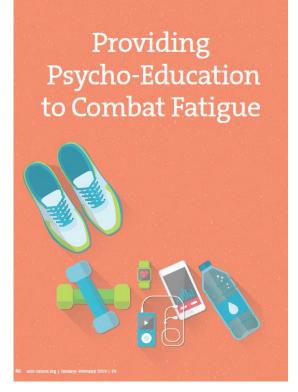
Richard Bakst, MD, has opened an investigator-initiated trial on a novel radiation therapy treatment regimen for elderly patients (>70 years old) with head and neck cancer, unfit for standard radiation therapy. Entitled "Definitive and Adjuvant Hypofractionated Radiotherapy in Elderly Patients with Head and Neck Squamous Cell Carcinoma (HNSCCC)," the trial is offered at all radiation oncology departments across the Mount Sinai Health System.

AACR Bayer Innovation and Discovery Grant

Congratulations to Dr. Bakst for receiving the American Association for Cancer Research (AACR) Bayer Innovation and Discovery Grant for his work entitled "Targeting Monocyte Recruitment and Macrophage Function for Perineural Invasion." This grant is awarded for one year and will help to fund new discoveries to inhibit nerve invasion by cancer.

Pilot Study on Providing Psycho-Education to Combat Fatigue Published in Oncology Issues

In January 2019, social workers Shannon Morton, MA, LMSW, and Alison Snow, PhD, LCSW, along with radiation oncologist Manjeet Chadha, MD, MHA, FACR, FASTRO, were published in Oncology Issues for their pilot study on providing psychoeducation to combat fatigue in radiation oncology patients. Cancer-related fatigue is one of the most common symptoms associated with radiation treatment can persist for months to years after the completion of and treatment. The study concluded the difference in post-treatment fatigue demonstrated that patients participating in exercise during radiation treatment reported lower average Brief Fatigue Inventory (BFI) scores than patients who were not participating in exercise during radiation treatment. The data also showed that patients who exercised during treatment had an increase in fatigue post-treatment, whereas people who did not exercise had a decrease in fatigue posttreatment. Although it seems counterintuitive to many patients, increasing physical activity may reduce fatigue.



Find the full article here: https://www.accc-cancer.org/docs/documents/oncologyissues/articles/jf19/jf19-providing-psycho-education-to-combat-fatigue.pdf?sfvrsn=1a47687c_2

Interviews with Drs. Chadha and Marshall at ASCO 2019

Older Women with Early Breast Cancer May Have a Choice of Radiation Therapy Alone

Manjeet Chadha, MD, MHA, FACR, FASTRO, discussed her research that older women with stage I breast cancer have a choice, and can receive breast radiation with omission of endocrine therapy. The findings of this study were presented at the 2019 ASCO Annual Meeting. Largely, the goal of cancer care among the elderly is to de-escalate therapy searching for a modality that is both an effective treatment and also associated with minimal toxicity. Age-adjusted trends note a relatively higher incidence of stage I breast cancer in women between the ages of 70-74 years.

Read the full interview here: https://medicalresearch.com/cancer__oncology/older-women-with-early-breast-cancer-may-have-a-choice-of-radiation-therapy-alone/49508/

Fewer Oncologists Have Financial Ties to Pharmaceutical Companies

Deborah C. Marshall, MD, discussed her research on how open payments have brought sweeping change to medicine by introducing transparency to physician relationships with industry at the 2019 ASCO Annual Meeting. She stated, "The study is important because we evaluate trends at the physician-level to explore the impact of Open Payments on how physicians interact with industry, which is difficult to measure." The most important finding is that oncology physician interactions with industry are decreasing; this is interpreted as being due to the effect of Open Payments.

Read the full interview here: https://medicalresearch.com/cancer__oncology/fewer-oncologists-have-financial-ties-to-pharmaceutical-companies/49513/

Yading Yuan, PhD, Awarded Varian Research Award



Yading Yuan, PhD

Congratulations to Yading Yuan, PhD, for receiving the Varian Grant Review Committee Award for Artificial Intelligence in Radiation Therapy. Dr. Yuan's work, entitled "Improving, Implementing and Validating a 3D Deep-Learning Based Framework for Automated Treatment Planning," is the continuation of his previous work with Amber Tseng, MS, and Yeh-Chi Lo, PhD, supported by the Mount Sinai 4D Pilot Grant. Joining with Richard Stock, MD, Michael Buckstein, MD, PhD, Amber Tseng, MS, and Yeh-Chi Lo, PhD, the team aims to further improve their fully automated treatment planning system powered by the most advanced artificial intelligence, and validate it on prostate and liver planning. Dr. Yuan's work greatly improves treatment planning quality with a much shorter planning time (12 seconds artificial intelligence vs. 30 minute planner) for a prostate plan. With Varian's collaboration, Dr. Yuan's work may play an important role in integrating automated-planning with AI and Eclipse.



NIH NATIONAL CANCER INSTITUTE

Grant Awarded for Sensitive Practice Guidelines

Congratulations to a diverse team of health care professionals across the Mount Sinai Health System on their National Cancer Institute awarded grant: "Training Cancer Care Providers to Implement Sensitive Practice Guidelines when Treating Adult Survivors of Sexual Violence: A Blended Learning Approach." This dynamic team includes Mount Sinai team members Sheryl Green, MBBCh, Julie Schnur, PhD, Clodagh Starrs, Bsc, RT(T), James Force, MA, Guy Montgomery, PhD, and Lynda Rath, BFA.

The grant will help to develop and implement the first Sensitive Practice Training (SPT) Program focused on cancer care. The goal of the SPT program is to teach a diverse, multidisciplinary group of cancer care providers to work skillfully and sensitively with sexual violence survivors.

Barry Rosenstein, MD, PhD, Coordinates Radiogenomics Consortium



Barry Rosenstein, MD, PhD

In June 2019, the 12th annual Radiogenomics Consortium was held in Rochester, New York. Barry Rosenstein, MD, PhD, serves as one of the coordinating committee members and founders of the group. The scientific hypothesis underlying the development of the consortium is that a cancer patient's likelihood of developing toxicity to radiation therapy is influenced by common genetic variations. Consortium members undertake collaborative projects to identify single nucleotide polymorphisms associated with adverse effects following radiotherapy; share data and samples; perform meta-analyses; and work together to submit research grant applications.

The objectives of the Radiogenomics Consortium, which was established in 2009, are to expand the knowledge of the genetic basis for differences in radiosensitivity and to develop assays to help predict the susceptibility of cancer patients for the development of adverse effects resulting from radiotherapy.

Cancer Support Services

Members of the Cancer Supportive Services Team are available to help patients manage the physical symptoms, emotional concerns, and spiritual issues they may experience during treatment.

Mount Sinai social workers, dieticians, chaplains, peer-support specialists, pain and palliative experts, music therapists, integrative therapists, artists in residence, and psychiatrists form a dedicated group of clinicians specialized in supportive care. Cancer Supportive Services brochures are available across our departments. In addition, updates and information can be found on Instagram searching the handle @mshscancersupportiveservices.

Monthly Wellness Program

In January 2019, the Department of Radiation Oncology at The Mount Sinai Hospital launched a monthly wellness program. Each month, patients and caregivers are invited to join a workshop geared toward improving wellness during and post radiation treatment. During the past several months, the social work team has hosted chair yoga, watercolors, jewelry making and nutrition Q & A workshops. In addition, a legal fellow from A Better Balance joined us for a discussion about cancer and rights in the workplace.

The group also hosts a monthly prostate cancer support group providing an opportunity for patients to meet one another and share experiences in a supportive environment.

We look forward to continuing to expand our wellness programming. Many thanks to Mount Sinai providers, The Creative Center, and A Better Balance for partnering with us to make these programs available.



Ahuva Morris, LCSW (right), and patients during a watercolor and jewelry workshop

Pet Therapy Program at the Department of Radiation Oncology



Mount Sinai Volunteer, Zoe

Have you visited with one of our therapy dogs recently? Volunteers like Zoe can be seen regularly visiting our department for patients and staff. "You can hear the excitement in the air when a dog is around. There is research to show that having animal-assisted visits is helpful to patients going through cancer, in terms of lowering blood pressure, reducing anxiety, decreasing depression, and overall helping patients feel less isolated," said Alison Snow, PhD, head of cancer support services for Mount Sinai Downtown.

Find the most recent press about this program and our four legged friends here: https://www.businessinsider.com/facility-dog-program-at-mount-sinai-hospital-2018-10

Departmental Updates

Construction Underway at The Blavatnik Family - Chelsea Medical Center

Construction is underway at The Blavatnik Family – Chelsea Medical Center. The project includes the replacement of a linear accelerator with a new TrueBeam and a new CT simulator, plus an overall refresh, including updating the dressing room and other improvements for an exceptional patient experience. Our Department will share the space with the Department of Radiology for the installation f a new MRI.



The Blavatnik Family Chelsea Medical Center

HDR Brachytherapy Reinstated at Mount Sinai West



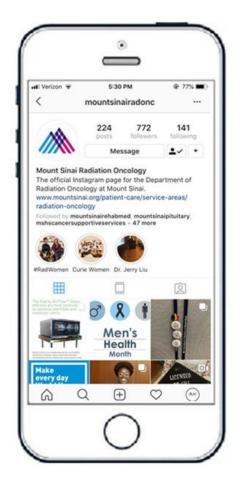
After 20 years, Mount Sinai West has reinstated its highdose rate (HDR) brachytherapy treatment program. Brachytherapy is a form of radiotherapy where a sealed radiation source is placed inside or next to the area requiring treatment. Brachytherapy will be administered at Mount Sinai West using vaginal cylinders for endometrial cancer, tandem and ovoids for cervical cancer, and for HDR prostate treatment.

Congratulations to all members involved!

From left: Andrea Borsic, BS, RT(T), Nicole Silverio, AS, RT(T), Audrey Saitta, MD, Kathleen Hines, MBA, BSN, RN, and Vishruta Dumane, PhD

Recognizing "Rad" Women

March was Women's History Month, the celebratory initiative that works to amplify women's voices to honor the past, inform the present, and inspire the future. The Department of Radiation Oncology celebrated Women's History Month by highlighting many of the "rad" women across our Department on our Instagram page. You can read about our rad women and gain updates about the department, educational, and patient programs by following us on Instagram searching the handles @MountSinaiRadOnc and @MountSinaiRTTedu.





Interested in joining our social media committee?

Take a picture we should post?

Please contact Samantha Skubish (samantha.skubish@mountsinai.org)

Thank you!