Message From the Chair

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

The year 2021 has been a transformative time for our Department. Four of our full-time faculty recently received prestigious grants making Mount Sinai into one of the best funded research departments in the country. Two new faculty members at Mount Sinai, who also completed their residency training here, were among only 13 recipients nationwide of the NIH Director’s Early Independence Award (DP5). Jalal Ahmed Khan, MD, PhD, will be investigating CAR-T cell therapy for solid tumors, and Deborah Marshall, MD, MAS, will study radiation-induced sexual toxicity in women. They join Robert Samstein, MD, PhD, who is a 2019 recipient of a DP5 Early Independence Award for his work on tumor immunogenicity. We were also delighted to learn that one of our senior faculty members, Kavita Dharmarajan, MD, MSc, is one of only 10 recipients nationwide and the first radiation oncologist ever to receive a Paul B. Beeson Emerging Leaders Career Development Award in Aging (K76) from the National Institute on Aging for her work on improving outcomes for older adults undergoing palliative radiation. Additionally, a member of our Physics faculty, Yading Yuan, PhD, was awarded an R21 grant from the National Institute of Biomedical Imaging and Bioengineering to investigate automated image segmentation.

The NIH Director’s Early Independence Award supports outstanding early career scientists to move rapidly into independent research positions and is available to all fields of study, not just cancer. As a field, radiation oncology has been well represented with several departments having an awardee.

| Radiation Oncology Departments with DP5 Early Independence Awardees: |
|-----------------------------|--------------|
| Institution                  | Number of Awardees |
| Mount Sinai Department of Radiation Oncology | 3             |
| Memorial Sloan Kettering Cancer Center | 1             |
| Ohio State University        | 1             |
| Washington University in St. Louis | 1             |
| University of Wisconsin Madison | 1             |

Faculty Updates

Sheryl Green, MBBCh, Promoted to Professor

Congratulations to Sheryl Green, MBBCh, on her promotion to Professor at the Icahn School of Medicine at Mount Sinai. Dr. Green received her medical degree from the University of Witwatersrand Medical School in Johannesburg, South Africa. She came to the Department of Radiation Oncology at Mount Sinai in 1995 as a resident and joined the faculty in 1998. Dr. Green is an outstanding clinical investigator with a well-established national reputation, especially in technology development and quality of care. She has established new programs and advanced novel technologies such as prone breast treatment, deep inspiration breath hold technique, intraoperative radiation therapy, stereotactic radiosurgery, and intracoronary brachytherapy; her research has led to new standards of care for these treatments. Dr. Green is a national leader in improving the quality of life of women undergoing breast cancer treatment. Additionally, she is a skilled educator and has won numerous teaching awards. We congratulate her on this accomplishment.

Continued
Mount Sinai faculty members Jalal Ahmed Khan, MD, PhD, and Deborah Marshall, MD, MAS, were among the 13 recipients nationwide of the NIH Director's Early Independence Award (DP5). They join Robert Samstein, MD, PhD, who is a 2019 recipient of a DP5 Early Independence Award for his work on tumor immunogenicity. Drs. Marshall and Jalal Ahmed each received an Early Independence Award worth $2 million given out over five years. The NIH Early Independence Award, established in 2011, provides an opportunity for exceptional junior scientists to skip traditional postdoctoral training and move immediately into independent research positions. The NIH Director’s Early Independence Award supports outstanding early-career scientists to move rapidly into independent research positions and is available to all fields of study, not just cancer.

Dr. Ahmed Khan’s study seeks to advance the cancer therapy known as chimeric antigen receptor (CAR) T cell therapy for solid tumors by manipulating CAR T cell interactions with the immune tumor microenvironment. CAR T cell therapy involves the transfer of hundreds of millions of tumor-specific T cells into a patient, some of which travel to the tumor site where they interact with target as well as nontarget cells that make up the tumor microenvironment. The lab will use tumor models to understand the parameters driving the activity and fate of CAR T cells, and design novel CAR T cell therapies that capitalize on the immunobiology of solid tumors to form durable anti-tumor responses.

Dr. Marshall’s study seeks to define novel predictors of female sexual dysfunction and to identify quantitative imaging and microbiome-based biomarker indices associated with damage to specific sexual organs from radiation oncology treatments. Results of the study will rapidly provide transformative data and inform innovative, personalized interventions to preserve female sexual function or mitigate the effects of radiation in this understudied population.

Eric Lehrer, MD, MS, was awarded the Early Career Oncologist Award from the American Radium Society. Founded in 1916, the American Radium Society is the oldest society devoted to the study and treatment of cancer. The mission of the Society is to promote the multi-disciplinary and collegial study of all aspects of cancer. The Society will encourage liaison and professional development among the various medical and surgical specialists, and allied scientists concerned with cancer.
Kavita Dharmarajan, MD, MSc Receives Paul B. Beeson Emerging Leaders Career Development Award in Aging (K76)

Kavita Dharmarajan, MD, MSc, Associate Professor at the Icahn School of Medicine, is the first radiation oncologist to receive the Paul B. Beeson Emerging Leaders Career Development Award in Aging in its 26-year history. The Beeson award, a capstone program of the National Institutes of Health, is a collaboration of the National Institute on Aging, the American Federation of Aging Research, and the John A. Hartford Foundation to develop a cadre of talented scientists who will take on active leadership roles in aging and geriatrics to improve health care outcomes for older adults. Only 7 to 10 Beeson Scholars are named each year nationwide.

“Dr. Dharmarajan’s innovative work, which focuses on improving outcomes among older adults with advanced cancer will be transformative, and the model could be easily integrated into our clinical cancer programs here revolutionizing how we care for these patients,” said R. Sean Morrison, M.D., Chair of Geriatrics and Palliative Medicine at Mount Sinai and Dr. Dharmarajan’s mentor for the project. “Mount Sinai, Radiation Oncology, Geriatrics and Palliative Medicine, and all of Dr. Dharmarajan’s mentors are thrilled that she has been recognized with this highly competitive and prestigious award.” Kenneth Rosenzweig, MD, Chair of Radiation Oncology at Mount Sinai said, “Dr. Dharmarajan’s research focuses on some of the most challenging situations we encounter in radiation oncology and will hopefully provide a practical roadmap to help our patients.”

The five-year, $1.2 million K76 award will support Dr. Dharmarajan’s career development as a leader in aging and cancer as it relates to radiation oncology and will help her conduct an in-depth prospective examination of the impact of radiation therapy among a population of older adults with advanced cancer.

Yading Yuan, PhD, Awarded NIH R21 Grant

Yading Yuan, PhD, has been awarded an NIH R21 grant for his research project entitled, “A fully decentralized federated learning framework for automated image segmentation in cancer radiotherapy.” The R21 grant mechanism is an incredible accomplishment, intended to encourage exploratory/developmental research by providing support for the early and conceptual stages of project development. In collaboration with Richard Bakst, MD, Michael Buckstein, MD, PhD, and Rendi Sheu, PhD, Dr. Yuan’s project aims to develop a fully decentralized federated learning framework, which allows researchers to train a powerful artificial intelligence (AI) model by aggregating information from different institutions without sharing patient data, to meet the urgent needs for automated organ segmentation in cancer radiotherapy. The success of this project will enable the development of accurate, consistent, and efficient segmentation models trained with massive patient data from different institutions, and will expedite the adoption of AI-driven image segmentation in radiation oncology clinical practice. More importantly, the proposed framework will provide a flexible and robust solution to the primary barrier of applying AI techniques to the medical domain where machine learning on multi-institutional data sharing is impeded by patient privacy concerns. In addition, it is expected to have a catalytic impact on precision medicine by generalizing it to broader applications within medicine where a model needs to learn across multi-institutional data without sacrificing patient privacy.

Research Retreats

In April 2021, the Department of Radiation Oncology gathered for a Spring Research Retreat. The event was hosted by Karyn Goodman, MD, MS, Professor and Vice Chair for Research and Quality in the Department of Radiation Oncology at the Icahn School of Medicine, and Associate Director for Clinical Research at The Tisch Cancer Institute. Dr. Goodman is responsible for developing the infrastructure and resources to support cancer clinical trials across the Mount Sinai Health System.

With support from Lynda Rath, BFA, the retreat focused on clinical trials across the system. The next Mount Sinai Radiation Oncology research retreat will take place December 2, 2021 and will focus on the “Nuts and Bolts of Clinical Trials.”
Maria Dimopoulos, MBA, RT(T), has been appointed by the American Society of Radiologic Technologists (ASRT) to serve on the Research and Grants Advisory Committee. This committee includes experienced professionals from the radiologic sciences whose primary responsibility is to evaluate grants against established criteria and make recommendations for funding to the Board of Trustees. Committee members also provide guidance for improving grant processes and strengthening the overall body of radiologic science research.

We are proud to share protocols opened at the Mount Sinai Department of Radiation Oncology

<table>
<thead>
<tr>
<th>PI/Sponsor</th>
<th>Clinical Trial</th>
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<tbody>
<tr>
<td>PI: Richard Bakst, RTOG 1008</td>
<td>A Randomized Phase II/III Study of Adjuvant Concurrent Radiation and Chemotherapy versus Radiation Alone in Resected High-Risk Malignant Salivary Gland Tumors</td>
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<tr>
<td>PI: Richard Bakst, ISMMS</td>
<td>The role of the microbiome in mediating oral cancer development and treatment related toxicity</td>
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<tr>
<td>PI: Richard Bakst, ISMMS NCT04284540</td>
<td>Hypofractionation - Definitive and Adjuvant Hypofractionated Radiotherapy in Elderly Patients with Head and Neck Squamous Cell Carcinoma (HNSCC)</td>
</tr>
<tr>
<td>PI: Michael Buckstein, Sheba Israel/ISMMS GCO: 19-1075</td>
<td>Celiac Plexus Radio-Surgery for Pain Management in Advanced Cancer Patients: a Phase II Trial</td>
</tr>
<tr>
<td>PI: Jorge Gomez, NRG-LU006</td>
<td>Phase III Randomized Trial of Pleurectomy/Decortication Plus Chemotherapy with or Without Adjuvant Hemithoracic Intensity-Modulated Pleural Radiation Therapy (IMPRINT) For Malignant Pleural Mesothelioma (MPM)</td>
</tr>
<tr>
<td>PI: Karyn Goodman, EDDOP 10366</td>
<td>A Phase 1/2 Study of M3814 (pembrolizumab) in Combination with Hypofractionated Radiotherapy for the Treatment of Locally Advanced Pancreatic Adenocarcinoma</td>
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<tr>
<td>PI: Sheryl Green, CCTG MA 39</td>
<td>Tailor RT: A Randomized Trial of Regional Radiotherapy in Biomarker Low Risk Node Positive Breast Cancer</td>
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<tr>
<td>PI: Sheryl Green, Isabelle Germano A071801</td>
<td>Phase III Trial of Post-Surgical Single Fraction Stereotactic Radiosurgery (SRS) Compared with Fractionated SRS (FSRS) for Resected Metastatic Brain Disease</td>
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<tr>
<td>PI: Debbie Marshall, STAR</td>
<td>Novel Functional Anatomic and Biomarker Indices of Radiation-Induced Sexual Toxicities in a Multi-Center Cohort</td>
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<tr>
<td>PI: Robert Samstein SWOG 1914</td>
<td>A Randomized Phase III Trial of Induction/Consolidation Atezolizumab (NSC #783608) + SBRT versus SBRT Alone in High Risk, Early-Stage NSCLC</td>
</tr>
<tr>
<td>PI: Robert Samstein, NRG-LU007</td>
<td>Randomized Phase II/III Trial of Consolidation Radiation + Immunotherapy for ES-SCLC: RAPTOR Trial</td>
</tr>
<tr>
<td>PI: Richard Stock, SpaceOAR</td>
<td>A Non-Randomized Phase II Study of the Reduction of Rectal Dose with the Use of Rectal Spacer Hydrogel in the Management of Intermediate Risk Prostate Cancer Treated with Combined Modality Radiation Therapy</td>
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Celebrating Our Diversity

Equity + Inclusion Committee
In an effort to continue the conversation to dismantle racism in society and in the workplace, and in order to foster a community of equity and inclusion, in October 2020 the Department of Radiation Oncology at the Icahn School of Medicine founded an Equity and Inclusion Committee. Led by a diverse group of team members across the Health System, the Equity and Inclusion Committee includes radiation oncology staff committed to supporting an environment free from bias and ensure all feel welcome, safe, valued, and heard. An initial goal of the group defined a True North statement: “Yes you belong, we are one!” Now, the group meets monthly as a space for open discussion, to foster relationships, and support an equitable work and patient care environment.

In June 2021, to celebrate LGBTQ PRIDE month and to educate our team on best practices, Danielle McDonagh, MS, RT(T), Clinical Coordinator for Radiation Therapy Education and Research, presented Patient Care Principles for Transgender Patients in Radiation Oncology.

The Department of Radiation Oncology at Mount Sinai is committed to fostering a strong sense of community based on diversity and inclusion. Our Department is composed of a team of employees who speak more than 21 languages and are from more than 18 countries. In an effort to celebrate our diversity, a key strength in our Department, we will highlight various cultures and staff in future newsletters. We look forward to experiencing our colleagues in new ways, learning from each other and growing as a department.

Cultural Highlight With Amber Tseng, MS

Please share a few sentences about your culture

I was born in Taipei, Taiwan. Taiwan is a country located in East Asia. It shares maritime border with China, Japan, and Philippines. Taiwan is a small island about one-third the size of New York State, but it has 4.2 million more people. While Taiwan may be described as a predominantly Han Chinese society, with more than 95 percent of the population claiming Han ancestry and Mandarin as official language, its heritage is much more complex. The successive waves of Chinese immigrants that began arriving in the 17th century belonged to a variety of subgroups with mutually unintelligible languages and different customs.

What are some traditions, celebrations, or rituals your family participates in?

The Lunar New Year, also known as the Spring Festival, is celebrated from the first to the fifth day of the first month of the lunar calendar. Taiwanese people refer to this festival as “passing the year,” which means shooing out the old and welcoming the new; it is considered the most important holiday of the year. There are a number of related customs and traditions that go along with the festival. Normally, on the 23rd or 24th day of the last month of the lunar calendar, people sacrifice to the Hearth God and send him off on his annual journey to Heaven; this signals the start of the New Year holidays. On the New Year’s Eve, families complete their spring cleaning, signifying
the sweeping away of the misfortunes of the previous year. After the spring cleaning, a New Year’s cake is made (the cake is a symbol of “reaching new heights”). The second to last day of the last month of the lunar calendar is when families stick up spring couplets and New Year’s prints on their doors and windows to bring good luck. On the last day of the last month, families gather together for a New Year’s Eve dinner, called the “Gathering around the stove.” Adults then give the younger members of the family, particularly children, red envelopes with cash inside. This monetary gift is thought to bring peace and good fortune to the recipients. Then there is the “Keeping of the Year,” which is seeing the old year out and the New Year in by staying up on New Year’s Eve. This starts after the family has finished eating the New Year’s Eve dinner. Once the clock strikes midnight, people set off firecrackers to welcome the arrival of the New Year.

Taiwan is a country where food plays an important part of our culture, and most gourmet food can be found on the streets. With its legendary night markets and festivals, round-the-clock breakfast shops, recipes honed for generations, and celebrity-status food vendors, there’s always something steaming, sizzling, or stewing on Taiwan's streets to tempt passersby. The diversity of Taiwanese cuisine is a testimony to the country’s rich cultural history. Aboriginals, Chinese, Hakka, Europeans, Japanese, and Southeast Asians have all left their mark, and each of these influences will be represented in Taiwanese foods.
Staff Updates

Alison Alekperova – Nurse
Michelle Arguello - Radiation Therapist
George “Spencer” Arnould - Dosimetry Program Director
Sylvia Barton – Per Diem Radiation Therapist
Samantha Cariello - Radiation Therapist
Vanessa Castellon - Nurse
Eunjung Choi - Nurse
Thomas Chum - Dosimetrist
Ana Cleverley – Medical Office Assistant
Shannon Corrigan – Radiation Therapist
Olga Echavarria – Medical Assistant
Maria Dimopoulos – Associate Director*
Kennedi Dorset - Radiation Therapist
Latifa Jones - Administrative Manager
Danielle McDonagh – Clinical Coordinator, Radiation Therapy Education and Research*
Oliver Menken - Clinical Research Assistant
Boyoung Park - Nurse
Mashika Patterson - Executive Assistant
Stephanie Pimentel – Medical Assistant
Vicky Qu - Dosimetrist
Jose Rodriguez – Secretary
Kenneth Snapp – Senior Radiation Therapist*
Clifford Temple – Assistant Chief Radiation Oncology*
Kayla Ulloa - Radiation Therapist
Carol White – Practice Supervisor*

*We congratulate our team members on their recent promotions

Staff Milestones

We congratulate our team for celebrating milestone employment at the Mount Sinai Health System:

Suliat Adelekan - 10 years
Elnara Ilgiyayeva - 10 years
Jane Mei - 10 years
Rodney Michel - 10 years
Jillian Rosario - 10 years
Kimberly Smith - 10 years
Rochelle Roberts - 15 years
Robert Fabrizio - 15 years

Education Updates

Welcoming Radiation Oncology Residents

Daniel Dickstein, MD, is originally from Westfield, New Jersey, and attended Bowdoin College where he completed his undergraduate studies in mathematics and biochemistry. He earned his medical degree at the Icahn School of Medicine, where he completed a year of clinical research with Richard Bakst, MD, developing an investigator-initiated trial on hypofractionation for elderly patients with head and neck cancer. Before returning to Mount Sinai for residency, Daniel completed his internship at Greenwich Hospital, where he also continued his Mount Sinai research, opening another clinical trial investigating the relationship between the oral microbiome and head and neck cancers. Both trials are presently open and enrolling patients, and Dr. Dickstein hopes to follow them through to the end, which should coincide with his PGY5 completion.

Kristin Hsieh, MD, grew up in Taiwan and later lived in Massachusetts. She received her bachelor degree in Biological Sciences at Cornell University. She subsequently attended Columbia University Vagelos College of Physicians and Surgeons. She discovered her interest in radiation oncology through CNS research, conducting NIH-funded research on the temporal distribution of brain metastasis and later research in glioblastoma, breast, prostate, and pediatric cancer. After completing her internship at Greenwich Hospital, she returned to New York to join Mount Sinai’s Radiation Oncology program.
Education Updates (Continued)

Welcoming Medical Physics Resident

In January 2019, the Clinical Medical Physics Residency Program at Mount Sinai was established. Under the leadership of program director, Junyi Xia, PhD, and program coordinator, Yading Yuan, PhD, the physics residency is a two-year physics training program consisting of 12 clinical rotations, mentored by the Department’s 15 board certified medical physicists. The program welcomes its third medical physics resident.

Tyler Afonzetti, MMP, earned his Bachelor’s in Nuclear Engineering from North Carolina State University before attending the University of Pennsylvania to get a master’s degree in Medical Physics. Growing up in the small town of Stormville, New York, Tyler is happy to be back in his home state as part of the Mount Sinai Radiation Oncology Team.

Center for Radiation Sciences Education - Center Expands to Offer Dosimetry Education

We are pleased to announce that the Department of Radiation Oncology at Mount Sinai, in collaboration with Stony Brook University’s School of Health Technology and Management, has expanded the Center for Radiation Sciences Education to offer both radiation therapy and medical dosimetry education. Under the leadership of Maria Dimopoulos, MBA, RT(T), Associate Director for the Center, Samantha Skubish, MS, RT(R)(T), and Yeh-Chi Lo, PhD, students will earn a bachelor’s degree in health science through a university-based curriculum while obtaining clinical coursework and education from Mount Sinai’s clinical experts. George “Spencer” Arnould joins the Mount Sinai team as the Dosimetry Program Director in December 2021, and will oversee the curriculum and clinical operations of the medical dosimetry program.

Given the success of the radiation therapy program and leveraging the strengths of both institutions, this expansion will provide the highest-level education to transform clinical care and generate a skilled group of dosimetrists to meet the need of our industry and growing departments within the only accredited program in the state.

Radiation Therapy Program Achieves JRCERT Accreditation

In September 2021, The Mount Center for Radiation Sciences Education at Stony Brook University achieved the highest award from the Joint Review Committee on Education in Radiologic Technology (JRCERT) for initial radiation therapy accreditation. The JRCERT promotes excellence in education and elevates the quality and safety of patient care through the accreditation of educational programs in radiography, radiation therapy, magnetic resonance, and medical dosimetry. Mount Sinai’s Department of Radiation Oncology and Stony Brook University’s School of Health Technology and Management partner to provide collaborative radiation therapy education across both campuses. Through this partnership, students gain academic and clinical experiences with guidance from Mount Sinai Radiation Oncology’s dedicated and multi-disciplinary team of educators, radiation therapists, and preceptors.

Under the leadership of Maria Dimopoulos, MBA, RT(T), Associate Director for the Mount Sinai Center for Radiation Sciences Education; Samantha Skubish, MS, RT(R)(T), Chief Technical Director, Department of Radiation Oncology; Kenneth Rosenzweig, MD, Professor and Chair, Department of Radiation Oncology; Kimberly Smith, MPH, Vice Chair, Department of Radiation Oncology; and our partners at Stony Brook University, the Center thanks our extraordinary Radiation Oncology team for all they do prepare the next generation of radiation therapists.

Graduation and Welcoming the Class of 2022

The Mount Sinai Center for Radiation Sciences Education at Stony Brook University is proud to announce the graduation and RT(T) credentialing of its third class of radiation therapy students. Under the leadership of Maria Dimopoulos, MBA, RT(T), Associate Director, the Center welcomes its fourth cohort of radiation therapy students to the Mount Sinai Radiation Oncology:

- **Anya Burke, BS** – Recipient of the ASRT Elekta Radiation Therapy Scholarship
- **Rubí Landestoy, BS**
- **Matías Prando, BS**
- **Vikas Shah, BS** – Recipient of the ASRT Royce Osborn Minority Student Scholarship
- **Mengna Wu, BS**
- **Maliha Yeasmin, BS** – Recipient of the ASRT Royce Osborn Minority Student Scholarship
Professional Development and Achievements

Karyn Goodman, MD, MS, Inducted as Fellow to ASTRO and ASCO

Karyn Goodman, MD, MS, Professor and Vice Chair for Research and Quality in the Department of Radiation Oncology at the Icahn School of Medicine, and Associate Director for Clinical Research at The Tisch Cancer Institute, has been inducted as a fellow to both the American Society for Radiation Oncologists (ASTRO) and the American Society of Clinical Oncology (ASCO). Fellow distinction recognizes members for their extraordinary volunteer service, dedication, commitment, and contributions to the field of radiation oncology. We congratulate Dr. Goodman on this esteemed dual milestone.

Karyn Goodman, MD, MS

The Blavatnik Family — Chelsea Medical Center at Mount Sinai Team recognized in Messages of Hope and Support

“...The Radiation Therapy Team at Chelsea was recently part of a rapid response situation involving a distressed patient who was locked in the restroom and in need of emergency care. The Therapy Team responded within a moment’s notice to provide much needed support. Rania Mohamed immediately acted, calling for help and rallying the rest of the team, including, Tuan Tran, Yanira Rivera, and our NCT technician. Lydia Pope also provided valuable support. Rania and the entire team demonstrated a commitment to patient safety and compassion that is our standard. Their quick thinking, decisive actions, and resolute attention to the well-being of the patient, serves as an example to all. We offer our sincere gratitude to Rania Mohamed, Tuan Tran, Yanira Rivera and Lydia Pope for their continued support and excellence!”

– Denise Kraemer, RT(T)
Assistant Chief Radiation Therapist
Mount Sinai Downtown Chelsea
Department of Radiation Oncology

Carlos Rodriguez-Russo, MD, Joins ASTRO Association of Residents in Radiation Oncology, Equity and Inclusion Subcommittee

The ASTRO Association of Residents in Radiation Oncology (ARRO) was founded to improve the quality of education for resident physicians in radiation oncology and advocate on behalf of residents. Carlos Rodriguez-Russo, MD, has been appointed to serve on the ARRO the ARRO Equity and Inclusion Subcommittee. The subcommittee hosts monthly meetings to facilitate discussion and networking through a variety of formats, including in depth discussions of topics with experts and a mentorship program. As our subcommittee develops, we hope to engage with other groups with strong interests in diversity, equity, and inclusion to host other events and provide an environment for collaboration. This group aims to:

• Foster a supportive environment for trainees across the country comprised of under-represented groups in medicine (UIM) and their allies

• Systematically assess and report trends in workforce diversity toward the goal of generating impactful and sustainable solutions

• Initiate and foster ongoing dialogue on issues of diversity, equity, inclusion, and social justice within radiation oncology
Professional Development and Achievements  (Continued)

Emma (Mi) Zhou, MSW, LCSW, Recipient of the 40 Under 40 in Cancer Award for 2021

Emma (Mi) Zhou, MSW, LCSW, Oncology Social Work Supervisor, was a recipient of the 40 Under 40 in Cancer Award for 2021. The 40 Under 40 in Cancer is an awards initiative to identify and recognize the contributions being made across the field of cancer by rising stars and emerging leaders under the age of 40. Ms. Zhou facilitates a monthly support group for Chinese-speaking cancer patients.

Junyi Xia, PhD, Inducted as Senior Member of the National Academy of Investigators

In November 2021, Junyi Xia, PhD, was inducted as a senior member to the National Academy of Investigators (NAI). The NAI is an international member organization founded in 2010 to recognize and encourage inventors with patents issued from the U.S. Patent and Trademark Office; enhance the visibility of academic technology and innovation; encourage the disclosure of intellectual property; educate and mentor innovative students; and translate the inventions of its members to benefit society. NAI Senior Members are active faculty, scientists, and administrators with success in patents, licensing, and commercialization and have produced technologies that have brought or aspire to bring, real impact on the welfare of society. They are rising stars who foster a spirit of innovation within their communities and institutions while educating and mentoring the next generation of inventors. Senior Membership is exclusively available to inventors affiliated with an NAI member institution.

Mount Sinai Radiation Oncology Social Media

Interested in joining our social media committee? Take a picture we should post? Contact Samantha Skubish at samantha.skubish@moutnsinai.org

Follow us on Instagram searching the handles @MountSinaiRadOnc and @MountSinaiRTRedu

To learn more about the radiation oncology simulation and treatment process, view our educational video playlist on YouTube by searching Mount Sinai Radiation Oncology

Follow our Mount Sinai Radiation Oncology Residents on Twitter searching the handle @MSROResidents
Mount Sinai Radiation Oncology Conference Presence

American Society for Radiation Oncologists (ASTRO) Annual Conference

Oral Presentations

Richard Bakst, MD – Enhancing Efficacy and Reducing Toxicity for Patients with Hematologic Malignancies

Manjeet Chadha, MD – Effectiveness of Traditional Acupuncture in Reducing the Severity of Hot Flashes Reported by Breast Cancer Patients

Kavita Dharmarajan, MD, MSc – Challenging Cases: Advanced Head and Neck Cancer/Skin Cancer

Karyn Goodman, MD, MS – Practical Radiation Oncology: Gastrointestinal Cancer Session

Karyn Goodman, MD, MS – Promoting Women and Underrepresented Minorities as Essential Leaders of Research

Kimberly Smith, MHA – Panelist, Elekta Software Portfolio Empowers Customers to Transform Operational Efficiency and Clinical Outcomes

Poster Presentations

Ahmad Amoush, PhD – Matched Linacs Workload Optimization Based on MLC Usage

Julie Bloom, MD – The Impact of the COVID-19 Pandemic on a Single Institution’s Head and Neck Radiation Therapy Population in New York City

Brianna Jones, MD – Clinical Characteristics and Mortality in Patients with Cancer and COVID 19 From the Epicenter in New York City

Eric Lehrer, MD, MS - Concurrent vs. Sequential Stereotactic Radiosurgery and Immune Checkpoint Inhibition in Melanoma Brain Metastases: An International Cooperative Group Study

Luke Maillie, BS – Definitive Reirradiation of Intracranial Neoplasms with Intensity-Modulated Proton Therapy: Early Outcomes and Toxicities

Deborah Marshall, MD, MAS – Genitourinary Cancer, Hematologic Malignancies, Sarcoma and Cutaneous Tumors, Radiation and Cancer Biology, Breast Cancer

Anthony Nehlsen, MD – Characterization and Prediction of Signal Changes in Normal Liver Parenchyma on Gadoxetic Acid Enhanced MRI after Liver Directed Radiation Therapy

Shoshana Rosenzweig, BA – Phantosmia Among Pediatric, Adolescent and Young Adult Patients Receiving Proton Beam Therapy

Jared Rowley, MD – The Rise of Open Access Journals in Radiation Oncology: Are We Paying for Impact?

Kunal Sindhu, MD - The Effects of Pencil Beam Scanning Proton Radiation Therapy on a Left Ventricular Assist Device: Implications for Patient Safety

Andrew Smith, MD – Quantifying Risk of Ipsilateral Arm Lymphedema Causing Functional Impairment in Breast Cancer Patients: Results from a Perspective, Multi-Centre International Study of Treatment Toxicity
Mount Sinai Radiation Oncology Conference Presence (Continued)

American Society for Radiologic Technologists (ASRT) Annual Radiation Therapy Conference

Oral Presentations

Maria Dimopoulos, MBA, RT(T) – Preparing Preceptors: Clinical Coaching Strategies for Radiation Therapists

Kevin Minassian, BS, RT(T) & Cindy Vavasis, AAS, RT(T) – Improving Respiratory Gating Workflow Within a Multidisciplinary Team

Samantha Skubish, MS, RT(R)(T) & Clodagh Starrs, PgC, RT(T) – New Opportunities and Pathways for Advanced Practice Radiation Therapy Roles

New York State Society of Radiation Sciences Annual Conference

Maria Dimopoulos, MBA, RT(T) – Casting Leaders: Using Bolman and Deal to Enhance Your Leadership Style

Virtual Anal Cancer Patient Conference

Camille Almada, NP, hosted a Virtual Anal Cancer Patient Care Conference.

Karyn Goodman, MD, MS - An Overview of Anal Cancer and Chemoradiation Treatment and Side Effects

Rebecca Guterman, RDN, CDN – Anal Cancer and Nutrition

Cancer Care Connect – Education Workshop

Kenneth Rosenzweig, MD - Advancements in the Treatment of Lung Cancer

Scientific Network

Deborah Marshall, MD, MAS – Radiotherapy Impacts on Sexual Function

Lung Cancer Research Foundation – Scientific Symposium

Jalal Ahmed Khan, MD – Novel Approaches to Treat Lung Cancer

Construction Updates

The Blavatnik Family - Chelsea Medical Center at Mount Sinai

The Blavatnik Family - Chelsea Medical Center at Mount Sinai received its new CT Simulator in November 2021 and plans for a go-live with the new technology in December. The new CT Simulator is a Siemens Go.Sim with additional safety features, the latest technology for respiratory motion management, and superior image quality. It will also reduce the time of our simulations in this location for a better, more efficient patient experience.

Mount Sinai West

Mount Sinai West received its new linear accelerator in November 2021 and is set to go-live shortly after the New Year. The Varian TrueBeam equipment will expand our technology platform in the Mount Sinai West department offering the latest technology and expeditious treatments. The Department is also set to receive a new CT Simulator shortly after the New Year, enhancing the full complement of cutting-edge technology at Mount Sinai West.

System Wide

All Mount Sinai Radiation Oncology departments have received an upgrade to VisionRT Advance. AlignRT Advance is the market-leading Surface Guided Radiation Therapy (SGRT) system for tracking a patient’s position before and during radiation therapy, to help ensure a streamlined workflow for accurate treatment delivery.
Departmental Updates
The Blavatnik Family — Chelsea Medical Center at Mount Sinai

The Blavatnik Family — Chelsea Medical Center at Mount Sinai team treated its first patient with stereotactic brain radiosurgery (SRS) in June 2021. Vishal Gupta, MD, Associate Professor, Department of Radiation Oncology at the Icahn School of Medicine, said of the roll out of this advanced treatment technique, “This was a great team effort, and it was a relatively seamless day as each staff member was so well prepared. Physics did a wonderful job commissioning the machine, generating a safe and effective plan, and doing QA. The radiation therapists ran multiple dry runs for sim and treatment to ensure the process went smoothly, and to make sure the patient was as comfortable as possible. Special thanks to the uptown team for guiding us. Our neurosurgeon was also very pleased with the process and would like to build the SRS program here at Chelsea.”

Additionally, the Department is utilizing two HDR brachytherapy applicators for the treatment of endometrial cancers: (1) A multichannel cylinder contains a cylinder obturator with 6 to 8 channels to treat vaginal cuff tumors. The dose distributions can be optimized based on the patient anatomy so the organ at risk (OAR) can be spared when compared to the conventional central channel cylinder and (2) a multichannel cylinder with tandem that has a central channel which can accommodate a straight or a curved tandem that can be used to treat the disease in the cervical uterus. The central channel will allow for a more homogeneous dose distribution on the surface of the applicator, thus reducing the radiation for the uninvolved vaginal wall.

The team has also integrated deep inspiration breath hold (DIBH). DIBH is a radiation therapy technique that limits radiation exposure to the heart and lungs. The technique involves a patient holding their breath during treatment, which fills the lungs with air and moves the heart away from the chest wall. DIBH is often used for left sided breast treatment and is dependent upon unique patient anatomy. The technique may not be necessary for each patient and is reviewed as a possibility during the simulation process.

The Mount Sinai Hospital

In May 2021, under the guidance of Karyn Goodman, MD, MS, and Vishruta Dumane, PhD, and in collaboration with the physics and radiation therapy teams, the respiratory gating program was expanded to include the Hess Center. Respiratory gating is a motion management process that guides the delivery of radiation as a patient inhales and exhales in a specific pattern. The Department of Radiation Oncology also collaborated to create an audio coaching application featuring Keith Edwards, RT(T), Assistant Chief of Radiation Oncology at The Mount Sinai Hospital, coaching patients on inspiration and expiration speed which corresponds to the gating pattern. Respiratory gating is determined by the radiation oncologist at the time of simulation and is beneficial for a specific group of patients dependent upon disease type, patient anatomy, and tumor location.
In the News

Kenneth Rosenzweig, MD, Named CURE 2021 Lung Cancer Hero

Kenneth Rosenzweig, MD, Professor and Chair, Department of Radiation Oncology, was honored with the 2021 CURE Lung Cancer Hero Award during this year’s virtual Lung Cancer Heroes celebration. CURE Media Group is the industry-leading multimedia platform devoted to cancer updates, research, and education that reaches more than 1 million patients, survivors, and caregivers. Annually, CURE gives readers the opportunity to honor special individuals for their heroic contributions in the field of lung cancer and their profoundly positive impact on the lives of those with lung cancer. Dr. Rosenzweig is one of only three CURE Lung Cancer Heroes across the nation, and the first radiation oncologist ever to receive the award. Dr. Rosenzweig has made significant contributions to the field during his time as researcher, educator, and administrator, while maintaining a clinical practice devoted to improving the lives of patients with lung cancer and mesothelioma.

Castle Connolly Recognizes Mount Sinai Radiation Oncologists

Castle Connolly is a leading research and information resource for patients looking to find and connect with quality health care. New York Magazine recognizes these physicians annually in its Top Doctors article. Congratulations to Mount Sinai radiation oncologists for being recognized by Castle Connolly as 2021 Top Doctors in Radiation Oncology:

- Manjeet Chadha, MD – Also Exceptional Women in Medicine Awardee
- Paul Gliedman, MD
- Sheryl Green, MBBCh – Also Exceptional Women in Medicine Awardee
- Walter Hyumnin Choi, MD
- Roberto Lipsztein, MD
- John Rescigno, MD
- Kenneth Rosenzweig, MD
- Richard Stock, MD
- Shawn Zimberg, MD

To see the article, visit: www.nymag.com/bestdoctors/

Mount Sinai Radiation Oncology Highlighted by ACCC

Kavita Dharmarajan, MD, MSc, and our radiation oncology department are highlighted on the Association of Community Cancer Centers (ACCC) homepage and 2020 Impact Report. The ACCC is a community of more than 28,000 multidisciplinary practitioners and 2,100 cancer programs and practices nationwide. Founded in 1974, ACCC brings together health care professionals across all disciplines in oncology to promote quality cancer care. It is estimated that 65 percent of the nation’s cancer patients are treated by a member of ACCC. In 2018, the Mount Sinai Health System and The Tisch Cancer Institute, Department of Radiation Oncology, received the ACCC Innovator Award for Improving Care of Advanced Cancer Patients with a Dedicated Palliative Radiotherapy Team.
Dear Natasha,

As tomorrow is my last day of treatments, let me please offer my thanks and compliments to your TB staff. I know you are proud of them as I am thankful to them. I was certainly anxious as I started my radiation treatments. Given the limited time they have between patients, they still were able to help me feel secure. Nicole, Marvin, Andrea and Shafira were so sensitive to me. I asked many questions and I was anxious and yet they provided answers and support that made me feel confident. There even came a time where I actually looked forward to my treatments as I could then interact with them. Nicole, Marvin, Andrea and Shafira were so supportive and incredibly helpful. They are wonderful at their job and how sensitive and how kindly they related to me. I felt fortunate to be their patient. (Antonella I just got to know for my last few sessions yet she was also kind and helpful as well)

I will always be thankful to have received the benefits of their skills.

I am happy for you that they work with you.

Stay Healthy. Let us all hope for a new year with peace and regained strength and vigor.

My Best Wishes Always

A Heartfelt Thank You
A Letter from a Mount Sinai Radiation Oncology Patient

Recent Publications

Brianna Jones, MD, and Sheryl Green, MBCh, Published in Clinical Imaging
Brianna Jones, MD, and Sheryl Green, MBCh, published an article in Clinical Imaging titled “Modern radiation techniques in early stage breast cancer for the breast radiologist.” Partial breast irradiation and ultra-hypofractionated whole breast irradiation are contemporary alternatives to conventional and standard hypofractionated whole breast irradiation, which shorten treatment from 3 to 6 weeks to 1–2 weeks for select patients. PBI and accelerated PBI can be delivered with external beam radiation, intraoperative radiation (IORT), or brachytherapy. These new radiation techniques offer the advantage of convenience and lower cost, which ultimately improves access to care. In this review, authors appraise recent data for these shorter course radiation treatment regimens, as well as, considerations for breast radiologists including surveillance imaging and radiographic findings. Find the full article here: https://www.sciencedirect.com/science/article/pii/S0899707121002813?dgcid=author

Danielle McDonagh, MS, RT(T), Highlighted in IMPACT Canadian Newsletter
Danielle McDonagh, MS, RT(T), Clinical Coordinator for Radiation Therapy Education and Research contributed to the Canadian Association of Medical Radiation Technologists (CAMRT) Influencing Models of Practice with Advanced Competency in Therapeutic Radiation (IMPACT) Spring 2021 Newsletter. The edition was dedicated to highlighting the momentum for expanding the Advanced Practice Radiation Therapist
Recent Publications (Continued)

Role internationally. Danielle shared insights on the opportunity for the APRT role in the United States noting current barriers and funding models.

Deborah Marshall, MD, MAS, and Multidisciplinary Team Published in The British Journal of Radiology
Deborah Marshall, MD, MAS, along with Zahra Ghiassi-Nejad, MD, Vishruta Dumane, PhD, Michael Buckstein, MD, PhD, Karyn Goodman, MD, MS, Julie Schnur, PhD, Barry Rosenstein, MD, PhD, and others were published in The British Journal of Radiology titled “A first radiotherapy application of functional bulboclitoris anatomy, a novel female sexual organ-at-risk, and organ-sparing feasibility study.” The bulboclitoris (clitoris and vestibular bulbs) is the primary organ responsible for female sexual arousal and orgasm. Effects of radiotherapy on the bulboclitoris are unknown, as its structure/function has yet to be described in radiotherapy, and it overlaps only partially with the external genitalia structure. The study aims included: describe bulboclitoris structure, function and delineation; compare volume of and dose delivered to the bulboclitoris vs external genitalia; and, compare bulboclitoris-sparing IMRT (BCS-IMRT) to standard IMRT (S-IMRT) to determine reoptimization feasibility. Find the full article here: https://www.birpublications.org/doi/10.1259/bjr.20201139

Vishruta Dumane and Green Publish Chapter in Highlights in Medicine and Sciences
The use of Volumetric Modulated Arc Therapy (VMAT) using a single isocenter to treat multiple cranial metastases produces conformal dose distributions while saving treatment time. Depending on the complexity, planning for these cases is very time consuming especially for the novice planner. A paper published by Vishruta Dumane, PhD, and Sheryl Green, MBBCh, investigates the first ever use of RapidPlan, which is a commercial software available from Varian Medical Systems for shortening planning time and improving efficiency without compromising plan quality. This paper was published in the Journal of Cancer Metastasis and Treatment and was selected as a chapter in Highlights in Medicine and Science published August 2021. Find the entire text here: https://www.bookpi.org/bookstore/product/highlights-on-medicine-and-medical-science-vol-18/

Eric Lehrer, MD, MS, and Brianna Jones, MD, Published in American Journal of Clinical Oncology
Eric Lehrer, MD, MS, and Brianna Jones, MD, co-authored an article in American Journal of Clinical Oncology titled “Trends in Diagnosis and Treatment of Metastatic Cancer in the United States.” Metastatic cancer has historically been considered fatal; however, there is a paucity of evidence characterizing the epidemiology of incidence, treatment, and outcomes in these patients. In this study, metastatic disease has been shown to have unique epidemiological patterns, and survival has improved. Continued research on metastatic disease is important in understanding and addressing the distinct health concerns of this population. Find the full article here: https://www.frontiersin.org/articles/10.3389/fmed.2021.723396/full

Eric Lehrer, MD, MS, Published in Frontiers in Medicine
Eric Lehrer, MD, MS, co-authored an article in Frontiers in Medicine titled “The Epidemiology of Lung Metastases”. Lung metastasis is usually associated with poor outcomes in cancer patients. This study was performed to characterize and analyze the population of patients with de novo (synchronous) lung metastases using the Surveillance, Epidemiology and End Results (SEER) database. Authors concluded Synchronous lung metastasis occurs frequently and is an independent predictors of poor patient outcomes. As treatment for lung metastases becomes more complicated, patients with synchronous lung metastasis represent a high-risk population. Find the full article here: https://www.frontiersin.org/articles/10.3389/fmed.2021.723396/full

Eric Lehrer, MD, MS, Published in International Journal of Cancer
Eric Lehrer, MD, MS, co-authored an article in International Journal of Cancer titled “Pan-cancer analysis of prognostic metastatic phenotypes.” Although cancer is highly heterogeneous, all metastatic
cancer is considered American Joint Committee on Cancer (AJCC) Stage IV disease. The purpose of this project was to redefine staging of metastatic cancer. Find the full article here: https://onlinelibrary.wiley.com/doi/10.1002/ijc.33744

**Eric Lehrer, MD, MS, Published in JAMA Network Open**
Eric Lehrer, MD, MS, co-authored an article in JAMA Network Open titled “Sex Differences in Academic Productivity Across Academic Ranks and Specialties in Academic Medicine.” Despite equal numbers of men and women entering medical school, women are underrepresented in the upper echelons of academic medicine and receive less compensation and research funding. Citation-related publication productivity metrics, such as the h-index, are increasingly used for hiring, salary, grants, retention, promotion, and tenure decisions. Exploring sex differences in these metrics across academic medicine provides deeper insight into why differences are observed in career outcomes. Find the full article here: https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2781500

**Eric Lehrer, MD, MS, Published in JNCI Cancer Spectrum**
Eric Lehrer, MD, MS, co-authored an article in JNCI Cancer Spectrum titled “Radiotherapy and Receptor Tyrosine Kinase Inhibition for Solid Cancers (ROCKIT): A Meta-Analysis of 13 Studies.” A total of 405 studies met the initial search criteria, of which 13 prospective randomized trials of radiotherapy with or without RTKi met the inclusion criteria, encompassing 5678 patients. Authors concluded that the addition of RTKis to radiotherapy does not improve survival and worsens toxicity. Find the full article here: https://academic.oup.com/jncics/article/5/4/pkab050/6278360

**Eric Lehrer, MD, MS, Published in The Cochrane Library**
Eric Lehrer, MD, MS, co-authored an article in The Cochrane Library titled “Protons versus photons for the treatment of chordoma.” Chordoma is a rare primary bone tumor with a high propensity for local recurrence. Surgical resection is the mainstay of treatment, but complete resection is often morbid due to tumor location. Similarly, the dose of radiotherapy (RT) that surrounding healthy organs can tolerate is frequently below that required to provide effective tumor control. Therefore, clinicians have investigated different radiation delivery techniques, often in combination with surgery, aimed to improve the therapeutic ratio. This article assessed the effects and toxicity of proton and photon adjuvant radiotherapy (RT) in people with biopsy confirmed chordoma. Find the full article here: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013224.pub2/full

**Karyn Goodman, MD, MS, Published in Journal of Clinical Oncology**
Karyn Goodman, MD, MS, co-authored an article in the Journal of Clinical Oncology titled “Value of Neoadjuvant Radiation Therapy in the Management of Pancreatic Adenocarcinoma”. Support for the role of neoadjuvant therapy in the management of nonmetastatic pancreatic adenocarcinoma is growing. However, prospective trials comparing different neoadjuvant management strategies are needed in pancreatic adenocarcinoma. Novel RT strategies should be refined and robustly evaluated prospectively to potentially improve outcomes in this devastating malignancy. Moreover, these studies will help to better define which patients are most likely to benefit from the incorporation of RT and which type of RT is most appropriate in different clinical scenarios. Find the full article here: https://ascopubs.org/doi/full/10.1200/JCO.20.03611

**Karyn Goodman, MD, MS, Published in Journal of Clinical Oncology**
Karyn Goodman, MD, MS, co-authored an article in the Journal of Clinical Oncology titled “Randomized Phase II Study of PET Response–Adapted Combined Modality Therapy for Esophageal Cancer: Mature Results of the CALGB 80803 (Alliance) Trial”. The study’s purpose was to evaluate the use of early assessment of chemotherapy responsiveness by positron emission tomography (PET) imaging to tailor therapy in patients with esophageal and esophagogastric junction adenocarcinoma. Early response assessment using PET imaging as a biomarker to individualize therapy for patients with esophageal and esophagogastric junction adenocarcinoma was effective, improving pCR rates in PET nonresponders. PET responders to induction FOLFOX who continued on FOLFOX during chemoradiation achieved a promising 5-year overall survival of 53%. Find the full article here: https://ascopubs.org/doi/abs/10.1200/JCO.20.03611

**Maria Dimopoulos, MBA, RT(T) Published in JMIRS**
Maria Dimopoulos, MBA, RT(T) authored an article in the Journal for Medical Imaging and Radiation Sciences titled “The Impact of Interpersonal Skills Training on the Transition to Radiotherapy Student Clerkship.” Radiotherapy students often
participate in the same undergraduate coursework with various health science disciplines, with a common goal of providing optimal patient care. This diverse classroom of radiation therapy, radiologic technology, and dosimetry students mimic the interdisciplinary team in radiation oncology, preparing students for clerkship in a safe and authentic environment. Interprofessional education serves as a vehicle to enhance the transition from the classroom to the clinic while simulating the alliance of healthcare professionals required for team-based care. Interpersonal skills training specific to radiation therapy education is lacking and further limited to research conducted in Canada, New Zealand, and Australia. The gap in research in the United States provides many areas of opportunity. Find the full article here: https://pubmed.ncbi.nlm.nih.gov/34162529/

Mount Sinai Radiation Oncology
Published in Clinical Lymphoma, Myeloma & Leukemia
Anthony Nehlsen, MD, Kunal Sindhu, MD, Kavita Dharmarajan, MD, MSc, and others co-authored an article in Clinical Lymphoma, Myeloma & Leukemia titled “The Safety and Efficacy of Radiation Therapy with Concurrent Dexamethasone, Cyclophosphamide, Etoposide, and Cisplatin-Based Systemic Therapy for Multiple Myeloma.” The concurrent delivery of radiation therapy (RT) with salvage chemotherapies in the management of relapsed and refractory multiple myeloma (MM) is an area of ongoing investigation. This study examined the safety and efficacy of palliative RT given in the setting of concurrent dexamethasone, cyclophosphamide, etoposide, and cisplatin (DCEP). Authors concluded RT administered concurrently with DCEP was well-tolerated by most of the patients in this series, with low rates of hematologic and RT-related toxicity. RT was also very effective, with the vast majority of patients demonstrating resolution of their pain and a significant response on follow-up imaging. Find the full article here: https://www.clinical-lymphoma-myeloma-leukemia.com/article/S2152-2650(21)02045-0/fulltext#%20

Mount Sinai Radiation Oncology
Published in International Journal of Radiation Oncology, Biology, Physics
Kunal Sindhu, MD, Jared Rowley, MD, William Smith, MD, Anthony Nehlsen, MD, Andrew Smith, MD, Eric Lehrer, MD, MS, Stanislav Lazarev, MD, Kenneth Rosenzweig, MD, and Michael Buckstein, MD, PhD published an article in International Journal of Radiation Oncology, Biology, Physics titled “The Holman Research Pathway in Radiation Oncology: 2010 to 2019.” There has not been an assessment of the Holman Research Pathway (HRP) in radiation oncology (RO) in nearly 10 years. In this study, authors sought to review the demographic characteristics, research productivity during and after residency, job placements, and National Institutes of Health (NIH) grant funding of RO residents who completed the HRP in the modern era. Over the past decade, the HRP has proven successful in training a new cohort of physician investigators in RO. Although productive, HRP residents have had relatively homogenous sex, educational, and racial backgrounds. Ensuring sufficient representation of residents from a variety of backgrounds in the HRP in the future will be crucial. Find the full article here: https://www.redjournal.org/article/S0360-3016(21)00738-0/fulltext

Mount Sinai Radiation Oncology
Published in The Journal of Geriatric Oncology
Anthony Nehlsen, MD, Pinaki Dutta, MD, PhD, Kavita Dharmarajan, MD, MSc, and others co-authored an article in The Journal of Geriatric Oncology titled “Impact of radiotherapy on daily function among older adults living with advanced cancer (RT impact on function in advanced cancer).” While radiation therapy improves function, and quality of life for patients with advanced cancers, patients frequently experience a period of acute toxicity during which functional abilities may decline. Little is understood about changes in functional outcomes after RT in older adults. This study aimed to examine changes in daily function at 1 and 6 months following RT. Find the full article here: https://www.geriatriconcology.net/article/S1879-4068(21)00168-5/fulltext

Richard Bakst, MD, Published in Cancer
Richard Bakst, MD, co-authored a commentary in Cancer titled “A proposal for risk-based and strategy-adapted de-escalation in human papillomavirus-positive oropharyngeal squamous cell carcinoma.” Authors concluded “the objective of de-escalation is well recognized, but the optimal candidates and methods are unknown at this time. To answer these important questions, we propose a risk-based and strategy-adapted approach to de-escalation in the form of 3 complementary RCTs that compare rationally selected de-escalation strategies in well-defined risk
groups. In our schema, surgical-based strategies are compared with CRT approaches in patients who have lower risk disease. Conversely, sequential therapy is compared with SOC CRT in patients who have advanced and higher risk disease. These comparative analyses will allow us to better understand how each strategy is best to be used for our patients. Moreover, the inclusion of more diverse cohorts in these trials, such as those with more extensive smoking histories, will provide the necessary external validity to apply de-escalation to the wide range of HPV-positive patients encountered in clinical practice. Find the full article here: https://acsjournals.onlinelibrary.wiley.com/doi/full/10.1002/cncr.33851#YWbCjWub24.twitter

Richard Stock, MD, Published in JAMA Network Open
Richard Stock, MD, co-authored an article in JAMA Network Open titled “Comparison of Multimodal Therapies and Outcomes among Patients with High-Risk Prostate Cancer with Adverse Clinicopathologic Features.” The optimal management strategy for high-risk prostate cancer and additional adverse clinicopathologic features remains unknown. This study compared clinical outcomes among patients with high-risk prostate cancer after definitive treatment. Findings suggest that among patients with high-risk prostate cancer and additional unfavorable clinicopathologic features receiving guideline-concordant multimodal therapy, prostate cancer-specific mortality outcomes were equivalent among those treated with RP, EBRT, and EBRT with BT, although distant metastasis outcomes were more favorable among patients treated with EBRT and EBRT with BT. Optimal multimodality treatment is critical for improving outcomes in patients with high-risk prostate cancer. Find the full article here: https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2781597

Radiation Therapy Student Proton Rotation Published in Scanner Newsmagazine
In June 2021, Maria Dimopoulos, MBA, RT(T), Associate Director for the Mount Sinai Center for Radiation Sciences Education collaborated with New York Proton Center (NYPC) staff Anh Kha, RT(R)(T), Andrew Oduhureigbe, RT(T) and Arpit Chhabra, MD, to publish an article describing the development of radiation therapy student proton observational rotations. Titled “The Proton Perspective, Student Benefits of Observational Rotations”, the article highlighted the collaboration between the education and NYPC team and benefits to student learning in a proton therapy facility.

Radiation Therapy Students Published in Scanner Newsmagazine
In September 2021, radiation therapy students Anya Burke, BS, Rubi Landestoy, BS, Matias Prando, BS, Vikas Shah, BS, Mengna Wu, BS, and Maliha Yeasmin, BS, published an article in the American Society of Radiologic Technologists Scanner newsmagazine titled “Student Perspectives”. The article shares student perspectives from the radiation therapy program’s clinical skills orientation, translating lessons learned from the classroom to the clinic. Students highlighted lessons from their educators, radiation therapy mentors, clinical preceptors and radiation oncologists as impactful in their preparation for clinical placements.

Sindhu, Lehrer and Dharmarajan Published in Annals of Palliative Medicine
Kunal Sindhu, MD, Eric Lehrer, MD, MS and Kavita Dharmarajan, MD, MSc, authored an article in Annals of Palliative Medicine titled “Identifying areas of emphasis for future palliative radiation therapy curricula via an examination of the Mednet.” Palliative radiation therapy is essential to the care of patients with advanced cancer. Unfortunately, despite their benefits, the principles of palliative radiation therapy and palliative and supportive care are underrepresented in radiation oncology residency curricula. In this study, authors identified areas of emphasis for future palliative radiation therapy curricula by examining the relevant questions posted to the Mednet. Authors found many common question themes and subthemes in the palliative radiation oncology questions posted to the Mednet. Findings suggest that several opportunities for education exist for radiation oncology residents in regards to palliative and supportive care and palliative radiation therapy. Find the full article here: https://apm.amegroups.com/article/view/73612