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**ASTRO's Commitment to Diversity,  
Equity and Inclusion**

*ASTRO CEO Laura Thevenot provides an overview on  
the Society's commitment to DEI programs and initiatives.*

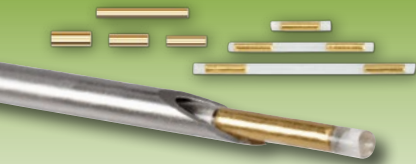
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**Council on Health Equity, Diversity  
and Inclusion**

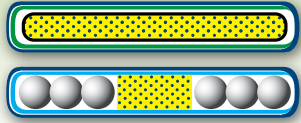
*An update from ASTRO's newest Council on their vision,  
objectives and plans for the future.*

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# ASTRO news

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**SENIOR EDITOR:**

Najeeb Mohideen,  
MD, FASTRO

**PUBLISHER:**

Laura I. Thevenot

**EDITORIAL DIRECTOR:**

Anna Arnone

**MANAGING EDITOR:**

Diane Kean

**DESIGN/PRODUCTION:**

Kevin Tseng

**ADVERTISING:**

Kathy Peters  
703-839-7342  
corporaterelations@  
astro.org

**CONTRIBUTING EDITORS:**

Lisa Braverman  
Alexander Carrigan  
Natanya Gayle  
Jennifer Jang  
Jeff White

**EDITORIAL BOARD:**

H. Joseph Barthold,  
MD, FASTRO

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## EDITOR'Snotes

BY NAJEEB MOHIDEEN, MD, FASTRO  
SENIOR EDITOR, *ASTROnews*

**HERE'S A STATISTIC:** Firearm-related injuries have become the leading cause of death among children and adolescents in the U.S.<sup>1</sup> Those numbers say nothing about the anguish that tears families apart, especially when children are the victims. As America faces up to yet another school shooting in this relentless series of tragedies, it behooves us to ask, what is the role of medical professionals?<sup>2</sup> For, this is clearly a public health crisis too.

Public health issues are complex and intertwined, and addressing them is a challenge on many different fronts. Toward that end, this specific issue of *ASTROnews* highlights ASTRO's commitment to Health Equity, Diversity and Inclusion (HEDI): what's been achieved, what's being done and what's in store. In our discussions with the ASTRO HEDI Council leadership, their message was very clear — it's not just the HEDI Council's function to champion this cause, but it has to be woven into the work of all ASTRO councils. Befitting this theme, I have the privilege of introducing our illustrious guest editor for this issue, the nominee for the ASTRO HEDI Council leadership, Dr. Iris Gibbs. Over to you Iris.



### GUEST EDITOR

Iris C. Gibbs, MD, FASTRO

### CANCER OUTCOMES AS ASSESSED BY REDUCTION

in mortality rates have dramatically improved over the past three decades resulting in over 3.5 million cancer deaths averted according to American Cancer Society statistics. Yet disparities persist along racial and socioeconomic lines with inequitable access to advanced radiation treatments and technologies. In addition, radiation oncology remains persistently plagued by burgeoning costs and lack of diversity in the workforce and leadership. While ASTRO's Strategic Plan in

2017 formally articulated diversity, equity and inclusion (DEI) as strategic goals along with the laudable vision to “ensure[ing] that all patients who benefit from radiation receive it,” the COVID-19 pandemic clearly spotlighted the stark impact of health inequities in such a way to accelerate ASTRO's commitment to DEI. The infrastructure for progress requires that the values of DEI are not siloed but rather built into the fabric of the organizational culture and operations of medical societies like ASTRO as well as woven throughout clinical care delivery, scientific investigation and scholarship. This issue of *ASTROnews* highlights exciting new developments and showcases how DEI is being approached across the Society and its various councils.

In the 2021 session, the membership voted overwhelmingly to create a new council, Health Equity Diversity and Inclusion (HEDI), which will have two votes on the Board of Directors. As we celebrate this remarkable step toward advancing ASTRO's commitment to prioritizing health equity, it is also fitting to recognize the foundational work that led to the realization of the council and the transformational impact that the preceding Committee on Health Equity, Diversity and Inclusion (CHEDI) has made to ASTRO as an organization. In this issue, Dr. Gita Suneja, the current chair of CHEDI and vice-chair of the HEDI Council Steering committee illuminates the crowning accomplishments of CHEDI and summarizes the five goals of the newly formed HEDI Council. In the area of workforce pipeline and career development, CHEDI was instrumental in spearheading the Minority Summer Fellowship Program in 2010, the Leadership Pipeline Program (formerly the Protégé program) in 2018 and the Aspiring Scientists and Physicians in 2019. The formation of the Council will not only strengthen collaborations among the board councils and thereby cascade elements of diversity and inclusion throughout but will also prioritize health equity as an essential goal. Furthermore, with the appointment of Kirsta Suggs as the inaugural Director of DEI, ASTRO reaffirms its commitment to building a robust infrastructure for DEI work. It is




also particularly refreshing that ASTRO has elevated considerations of health equity through its advocacy for a Health Equity Achievement in Radiation Therapy (HEART) payment to bolster its requests for modifications of the RO-APM.

Achieving health equity and realizing the benefits of diversity and inclusion are not just noble goals but yield notable benefits to the science and practice of medicine. In their submission, Drs. Brian Marples and John Buatti of the Scientific Affairs Council outline the benefits of diversity to scientific discovery and describe tangible strategies that are being undertaken to enhance diversity by mitigating bias in the grant review process, supporting existing pipeline programs and exploring new initiatives for professional career development.

With a lens of inclusion, radiation oncology workforce diversity is essential to assure that the providers meet the need of the rapidly diversifying demographics of the communities served. Dr. Jason Domogauer, vice-chair of the Sexual Gender Minority (SGM) Task Force under ARRO along with co-authors Dr. Rachael Conger and the co-leads of the HEDI SGM Task Force, Drs. Stephanie Terazakis and Shilpen Patel present a compelling call to action for inclusive practices that recognize SGM as a growing proportion of society with over one-fifth of generation Z individuals identifying as SGM compared to 3% of baby boomer generation. As radiation oncology training programs undergo critical self-evaluation in the context of decreasing interest in the field, it is prudent to understand these changing demographics to meet the clinical needs of patients and to build inclusive culture and work environments that attract a wider range of individuals. In their article, Drs.

Reshma Jaggi and Shauna Campbell raise an important discussion of barriers to gender diversity in radiation oncology leadership including gender harassment, bias and societal gendered expectations and provide innovative strategies to achieve improved representation in leadership.

In my educational roles across the continuum of medical learners from medical students, postgraduate trainees and young faculty, I have observed and concluded that in the final analysis, the primary motivations for those pursuing careers in medicine, including radiation oncology, is to benefit human beings and to ensure that people's lives are impacted through science and medicine. Radiation oncology is well known for its innovations but has received much scrutiny in recent years for rising costs related to skyrocketing utilization of high-valued advanced therapies without commensurate improvements in health outcomes. By embracing innovations in DEI toward eliminating health disparities, creating inclusive cultures and advocating for policies that advance these values, radiation oncology has the opportunity to contribute meaning for patients and providers. 

*Dr. Mohideen welcomes letters to the editor at [ASTROnews@astro.org](mailto:ASTROnews@astro.org).*

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## CHAIR'S *Update*

BY LAURA A. DAWSON, MD, FASTRO, CHAIR,  
BOARD OF DIRECTORS

# Be the **Change**

**LEADING THE SOCIETY IS AN HONOR** I don't take lightly. As Chair, I enjoy hearing from many of you on issues that are important to you and to the field, with resultant initiatives that are aimed to ultimately improve the care we provide our patients in an equitable manner. At the end of the day, we all serve to improve the lives of our patients and strengthen the field of radiation oncology.

Before thinking about how we can make the most substantial impact on patients, we need to remember to take care of ourselves, taking time to relax, exercise and enjoy friends, family and hobbies. When we are our best selves, we are more likely to have a positive impact. I am proud to be part of a change to move efforts forward to lessen inequities in care among cancer patients and to increase diversity in the field.


Disparities in cancer care and health outcomes are well documented. Having a more diverse physician workforce is one step toward addressing disparities. ASTRO has made it a priority to increase workforce diversity in the specialty of radiation oncology. Work toward these efforts has been underway for many years and includes leadership pipeline programs, gender equity communities, targeted education regarding the field of radiation oncology to underrepresented minority medical students and more. And thanks in large part to years of valuable leadership

of the committee — now Council — on Health Equity, Diversity and Inclusion (HEDI), we are starting to see results of these programs, such as the Minority Summer Fellowship, where the majority of recipients go on to enter the field of radiation oncology, come to fruition. Be sure to read this issue page to page, starting with Laura Thevenot's article on page 8 and Gita Suneja's update from the HEDI Council on page 10 to learn more about the programs ASTRO offers and plans for the future.

To further grow these efforts and continue to make substantial impact, we all must do our part to be the change. It's not up to one group of people to make change; it's up to all of us. We should all become more aware of our own biases, and learn to become effective allies, mentors and sponsors for underrepresented individuals and groups. It is important to have an equity lens in all we do, from basic research, education and clinical trials to advocacy and policy.

I am proud to be part of such wonderful change within the Society on moving DEI efforts forward. I ask all members to be

more inclusive and to continue to learn about how to decrease inequities.

As you will read in this issue, there are many ways we can all take action to be more inclusive, create more equitable care and better serve our patients. Together we can make a difference! 

"We all must do our part to **be the change**. It's not up to one group of people to make change; it's up to **all of us**."

## ASTRO welcomes new Director of DEI



**IN MAY, ASTRO WELCOMED KIRSTA SUGGS** as the Society's first Director of Diversity, Equity and Inclusion (DEI). In this role, Kirsta will lead the development and implementation of a range of DEI programs and initiatives of the Society, including strategies to engage

and retain a diverse membership that better represents the patient communities radiation oncologists serve, as well as efforts to mitigate health equity disparities for people with cancer.

Kirsta brings a wealth of knowledge and experience to the Society. Before joining ASTRO, Kirsta spent nearly two decades with the Endocrine Society. For more than 15 years, she was a key contributor to the organization's DEI and early career strategies and lead on building society-wide approaches to support DEI. She oversaw programs to expand the pipeline of underrepresented minority scientist and physician leaders and developed educational programming around health disparities and other DEI issues.

## Mentoring at ASTRO 2022

**WHETHER YOU ARE A MENTOR OR A MENTEE**, mentoring relationships can have powerful, positive effects in your personal, academic and professional life. ASTRO created Mentor Match to help connect mentors and mentees and through this program we are offering a host of mentoring opportunities at this year's ASTRO Annual Meeting. We encourage you to plan ahead to take advantage of these opportunities.

### Three Mentor/Mentee engagement opportunities:

1. ASTRO can help facilitate one-on-one mentoring connections. When registering for the Annual Meeting, in-person and virtual registrants will be prompted to indicate if they are interested in mentoring or meeting with a mentor during the Annual Meeting. An ASTRO representative will follow up with those expressing an interest to assist in making the connection.
2. A Speed Mentoring event will take place on Tuesday, October 25 from 12:45 p.m. to 2:45 p.m. in the Exhibit Hall. Speed mentoring is a series of short, focused conversations on specific topics. Mentees can rotate to different mentors during the allotted time period. ASTRO will invite mentor volunteers to discuss assigned topics.
3. If you already have a mentor/mentee, take advantage of being at the Annual Meeting by scheduling an in-person meet up.

Want to get started as a mentor or mentee right away? Learn more at [www.astro.org/MentorMatch](http://www.astro.org/MentorMatch).

Plus — don't miss the Awards Ceremony at the Annual Meeting where ASTRO will recognize two outstanding mentors with the new Mentorship Award. This award recognizes individuals who have dedicated their time, energy and expertise to advance the careers of the next generation of radiation oncology professionals.

## Member Reminders

**Update Your Profile Information:** When was the last time you reviewed your ASTRO profile? ASTRO members are encouraged to log in to [astro.org](http://astro.org) to update your membership profile and contact information. This is especially important if you are a radiation oncologist because your profile information populates Find a Radiation Oncologist on [RTAnwers.org](http://RTAnwers.org). While you are there, why not upload your photo for the ASTRO member directory?

**Complete the ASTRO Member Survey:** The Member Survey closes on July 21. If you haven't already done so, please complete your survey today. The information collected helps direct ASTRO initiatives to better serve you. By completing the survey, you can choose to be entered in a drawing to win one year of paid ASTRO membership dues. Find your unique survey link in your email from Laura A. Dawson, MD, FASTRO.





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## Patient Education Materials for Every Type of Practice

BY LEAH KATZ, MD, MPH, ON BEHALF OF THE COMMUNICATIONS COMMITTEE

### IN THE EVER-EXPANDING NUMBER OF DEMANDS

on physician time, we can sometimes forget to explain basic facts of radiation therapy to our patients and their families. Similarly, patients may experience information overload and anxiety and have difficulty absorbing verbal information at point of care. ASTRO's provider resources can help fill this void and help us to empower patients and their families.

The ASTRO Communications Committee has worked to provide approachable and accurate patient education materials as a service to ASTRO members. Starting with only a general overview video and a few brochures 10 years ago, the committee now produces and updates brochures and videos on most major disease sites and facilitates the production of other resources that are helpful in our busy daily practices. If you are not yet familiar with the provider resources that are available, the following descriptions of the offerings is a great way to learn about the diverse referring physician and patient education pieces that are available.

### Presentations:

Demystifying radiation therapy for the oncology patient: Two general, as well as disease-site specific, presentations are available.

- Download a 24-slide presentation for patients and caregivers that introduces radiation therapy and the radiation oncology team members' roles and describes processes and treatment planning and delivery of care with links to more information.
- Download a 36-slide presentation designed for health care professionals intended to familiarize our colleagues with the field.
- Giving a talk to colleagues or a group of patients? A series of educational PowerPoints for many disease sites are available for customization for your practice and presentation.


### Brochures:

Help your patients and their families make the most of their time in the radiation oncology waiting room with patient education brochures.

- The brochures are written in layman's terms for all educational levels and cover broad topics, such as radiation therapy for cancer, as well as specific disease sites.
- Several brochures are available in Spanish, including an introduction to radiation therapy and stereotactic radiotherapy, as well as site-specific brochures for breast, lung and prostate cancers.
- The color brochures are available to view online and for ASTRO members to order in packs of 50, with bulk pricing available for 10 packs or more.

### Videos:

Several papers suggest that video-based education is well suited to patients of all education levels, as well as for those who are illiterate. Videos offer a powerful way for patients and their caregivers to view information.

- A series of patient care videos have been created to help patients better understand what to expect when receiving radiation therapy for cancer.
- The series includes an introductory video and eight disease site specific videos: brain, breast, gynecologic, head and neck, upper GI, lower GI, lung, and prostate. All videos are available with Spanish voiceover options.
- Some offices use these videos to help educate new staff members joining their team who may not be familiar with radiation therapy.
- The videos are available for members to view or embed on their own facility websites and can also be purchased as downloadable files from the ASTRO product catalog. Patients can access these videos directly at [RTAnswers.org](http://RTAnswers.org). 



See all the provider resources for patient and referring physician education at [www.astro.org/ProviderResources](http://www.astro.org/ProviderResources).

## DIVERSITY AND INCLUSION ARE ASTRO CORE

**VALUES**, and all of us, from the Board to the staff, recognize that it is vital for the radiation oncology community to better reflect the patients they treat. We also work to ensure that diversity and inclusion are part of our internal operating culture: that our staff is diverse and works in an environment where each person is respected for their backgrounds and beliefs.

In December 2021, ASTRO members overwhelmingly approved a bylaws change to elevate the Health Equity, Diversity and Inclusion (HEDI) committee to a full Council that

# ASTRO's Commitment to Diversity, Equity and Inclusion

BY LAURA THEVENOT, ASTRO CEO

includes two Board positions and dedicated staff support. While DEI work has been incorporated into many different committees and Councils, having HEDI as a full Council will advance and operationalize a culture of inclusive excellence through the Society. Focusing even more of our programs and policies to directly address diversity, equity and inclusion will foster a stronger radiation oncology workforce and will ultimately improve health equity and access to care for people with cancer across the country.

ASTRO supports several important DEI initiatives and programs, with more planned for the months ahead. To start, the ASTRO Minority Summer Fellowship award introduces medical students from backgrounds that are underrepresented in medicine to radiation oncology early in their medical education. The fellowship provides medical students with an experience designed to expose them to clinical, basic and translational research questions in radiation oncology. The Aspiring Scientists and Physicians Program offers undergraduate and medical students, who are underrepresented in medicine, the opportunity to learn about the radiation oncology field at our Annual Meeting. The ASTRO Leadership Pipeline Program is our career development program aimed at increasing diversity among ASTRO leadership. The two-year program is designed to develop the next generation of ASTRO leaders. A Women in Radiation Oncology Affinity Group is a way for members to network, share concerns and successes, and bring important gender issues forward with regular articles on the ASTRO Blog. The ARRO Equity and Inclusion Subcommittee offers a mentorship initiative for those with careers or interests in DEI. The program includes a six-month mentor-mentee pairing, access to mentorship resources and periodic assessments.

ASTRO's journals work to foster DEI at all stages of the publication process. Our journals strive for editorial boards that represent ASTRO's membership and encourage diversity in study methodologies and thorough demographic reporting in published articles. The Red Journal is currently accepting submissions for an upcoming focus issue: Health Equity, Diversity and Inclusion in Radiation Oncology.

We appreciate that, to build a better future for the field of radiation oncology, we need to learn how to be more inclusive and how to create environments that empower the next generation of leaders. Currently, our committed HEDI volunteers are working with staff to engage an outside firm to conduct a Society-wide cultural audit. We will examine our current structures and practices using an equity lens, so that we can identify areas where we are doing well, and more importantly, areas for improvement or change. We anticipate that this equity assessment will



include listening sessions with members and staff; a review of organizational practices materials; how we communicate externally through our website and social media channels; and a look ahead to five-year DEI trends in association volunteer and committee work.

Our priority is to enact changes that will immediately improve the experiences of the underserved within our membership, while simultaneously building more equitable and open structures for the future. We believe this will improve diversity and inclusion within the Society and specialty and ultimately address health disparities and inequities for the people we serve. ASTRO is keenly aware that many patients with cancer experience health disparities that prevent them from initiating or completing treatments. ASTRO is advocating for a Health Equity Achievement in Radiation Therapy (HEART) payment as part of its payment reform efforts. The HEART payment would support wraparound services, such as transportation, nutrition assistance and other needed resources, to ensure that disadvantaged populations receive the support they need to start or complete their radiation therapy.

ASTRO is stronger because of the work and commitment of so many volunteers and staff who strive to improve our Society. Despite all that happened during these chaotic COVID years, it is all the more impressive that our volunteers launched a Diversity, Equity and Inclusion in Radiation Oncology (DEInRO) social education series discussing priority issues around diversity, inclusion and belonging within radiation oncology. To date, the series of recorded sessions covered important topics such as Addressing Structural Racism; Women and Leadership; Black Men's Health; and Sexual and Gender Minorities/ LGBTQ+ Issues in Radiation Oncology. The sessions have been viewed hundreds of times and we thank all who shared their personal stories and those who took time to watch the sessions. More discussions are to come in the months ahead.

Recognizing that ASTRO staff also deal with a myriad of lived experiences and emotions resulting from working in the Washington, DC region during the period of racial unrest and protests and the COVID pandemic, we engaged Carlton Green, PhD,

a well-respected psychologist and therapist to lead us in a series of workshops addressing racial trauma, allyship, anxiety, grief and loss. These thought-provoking discussions were attended by staff in the hope of creating a safer, more inclusive and respectful workplace.

And finally, I am pleased to report that Kirsta Suggs joined ASTRO as our new Director of Diversity, Equity and Inclusion (DEI) and will report directly to me. We believe that having a senior-level professional who understands our commitment to creating a stronger, more inclusive Society will make a meaningful impact on so many aspects of our work. I look forward to seeing how we grow as a Society as we strengthen our DEI commitment and work to meet the evolving needs of our membership and seek ways to strengthen our community. [A](#)



Our priority is to enact changes that will immediately improve the experiences of the underserved within our membership, while simultaneously building more equitable and open structures for the future.

# Council on Health Equity, Diversity and Inclusion

## *An update from ASTRO's Council*

BY GITA SUNEJA, MD, CHAIR OF THE COMMITTEE ON HEALTH EQUITY, DIVERSITY AND INCLUSION

### **IN FALL 2021, ASTRO MEMBERS VOTED TO AMEND**

the Society's bylaws to elevate the Committee on Health Equity, Diversity and Inclusion (CHEDI) to the Council on Health Equity, Diversity and Inclusion (HEDI). This change gives needed representation to the ASTRO Board of Directors and strengthens one of the Society's core strategic objectives on diversity and inclusion. The elevation from a committee to a council means HEDI will have two voting seats on the ASTRO Board of Directors. This provides greater representation of membership and elevates ASTRO's commitment to diversity and inclusion by ensuring a broader cohesion on diversity efforts across the Society.

With the bylaws change secured, work is underway to transform the existing workgroups that were previously under CHEDI into full committees, with the guidance of a Steering Committee charged with providing oversight and coordination of the Council's activities. The HEDI Council will include two board members, a steering committee, three committees and special interest affinity groups. The committees will focus on workforce diversity, health equity education, community engagement and advocacy while overseeing both new and existing programs that were initially started under CHEDI's leadership.

### **Committee missions and programs**

The Workforce Diversity Committee will provide support and opportunities for diverse learners interested in careers in radiation oncology to better reflect the communities served. The committee will work with the current pipeline and enrichment programs, including the Minority Summer Fellowship (MSF) program and Leadership Pipeline Program (LPP), as well as create new programming and opportunities. The committee will also support, in collaboration with the Science Council, the growing Aspiring Scientists and Physicians Program, which first launched in 2019.

Plans include continuing to grow the successful MSF, which was expanded from four to 10 fellowships in 2022 thanks to generous support from Varian. CHEDI launched this flagship program in 2010 to provide awardees with a summer training program and attendance at ASTRO's Annual Meeting. The majority of MSF awardees go on to match with radiation oncology residency programs. In its fifth year, the LPP aims to increase diversity in Society leadership. The two-year program has welcomed a new class of protégés each year since its inception in 2018, with a current class of five protégés working with various councils on special projects.

The Health Equity Education Committee will work to advance educational experiences focused on health equity, diversity and inclusion for the radiation oncology community. This includes developing educational sessions, events and programs for ASTRO meetings, including the Annual Meeting, and providing oversight of the HEDI scientific and educational tracks for the Annual Meeting. With CHEDI leadership, the 2021 Annual Meeting introduced a DEI track for both scientific and educational sessions, and efforts continue to expand both scientific and educational programming. This committee will also develop additional educational content and series to be delivered throughout the year for ASTRO members and radiation oncology learners.

The Community Engagement and Advocacy Committee is charged with advocating for equity, diversity and inclusion in patient care and structural and systematic changes at the national policy level within the field of radiation oncology. This committee will collaborate with other councils, such as Government Relations and Health Policy, to develop priorities related to health equity, diversity and inclusion. This committee will also increase visibility for health equity, diversity and inclusion within the field through advancing advocacy through



various communications platforms, nominating equity champions for ASTRO awards, providing input on ASTRO activities, including recommendations to improve diverse representation and inclusion on existing committees, educational events and position papers, and collaborating on national initiatives with other oncology societies.

The two affinity groups, Sexual Gender Minorities and Women in Radiation Oncology, will focus on strategies to promote special interests throughout HEDI and ASTRO activities.

### **HEDI Vision:**

The charge of this Council shall be to advance and operationalize a culture of inclusive excellence through the Society's membership body, programs and policies that will foster a diverse workforce and improve health equity in radiation oncology.

### **Five Strategic Goals:**

**Leadership** – Ensure the sustained inclusion of HEDI at the highest levels of societal leadership through the permanence of Board positions and Council representation.

**Diversity** – Develop and support a pipeline of diverse radiation oncology professionals that reflects the communities we serve.


**Inclusion** – Advance a culture of inclusive excellence in radiation oncology that values differences and seeks to eliminate bias.

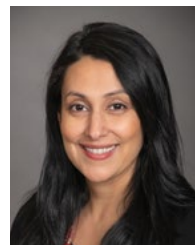
**Equity** – Prioritize health equity in cancer care and delivery through societal programming and policy.

**Harmonization** – Harmonize HEDI efforts across the Society and its related organizations to improve operational efficiency and cohesion, leverage resources and maximize impact.


### **Looking ahead**

The Council has many new initiatives underway in addition to continuing to enhance and expand the existing initiatives that were started under CHEDI's leadership. Kirsta Suggs joined ASTRO in late May as Director of DEI and will work closely with the Council to further implement HEDI initiatives throughout all ASTRO programs. ASTRO is also overseeing an external evaluation of DEI practices and opportunities and will engage an outside firm to conduct a Society-wide equity assessment.

In the 2022 elections, ASTRO members voted for the chair and vice-chair of the HEDI Council to serve on the Board. The results will be released soon. While the work of the Council is not new, the impact of having HEDI represented as a Council and on the Board, is a longstanding goal achieved and a big step in achieving more equity across the Society and field of radiation oncology. 



*Gita Suneja, MD, is an associate professor of Radiation Oncology at the University of Utah and an investigator in the Huntsman Cancer Institute. She is the chair of ASTRO's Committee on Health Equity, Diversity and Inclusion and will serve as the vice-chair of the HEDI Council Steering Committee.*

 *Twitter: @GitaSuneja*





# Identifying Gender Harassment, Bias and Expectations as Barriers to Diverse Leadership in Radiation Oncology

BY SHAUNA CAMPBELL, DO, AND RESHMA JAGSI, MD, DPHIL, FASTRO

**ALTHOUGH THE FIELD OF RADIATION ONCOLOGY** has made many advances toward promoting a more equitable environment and inclusive culture in recent years, a strikingly high proportion of female residents reports having experienced gender harassment or bias.<sup>1</sup> It is imperative that the profession reflect on how to eliminate these behaviors, that will otherwise continue to limit the full contributions of so many individuals whose talents should be respected and included in our field.

Gender harassment is behavior that demeans or derogates individuals on the basis of their gender, for example, by subjecting them to inappropriate communication, treatment and other offensive behaviors. Gender harassment in the workplace is a spectrum that ranges from blatantly inappropriate comments or actions that are easily identifiable (sometimes termed “macroaggressions”) to subtler and sometimes unconscious manifestations (sometimes termed “microaggressions”). It is critical that gender harassment, even if unintentional, be recognized and rejected, as differential treatment based on gender violates fundamental ethical principles and has resulted in underrepresentation of women and members of the

LGBTQIA+ community in leadership, compromising our ability to deliver on our professional mission.

One form of gender harassment discussed in recent publications is the lack of formal titles used to reference female physicians.<sup>2</sup> In comparison with male peers, a female physician is more likely to be called by her first name by patients, staff and when speaking in a professional setting. This simple difference in treatment introduces bias that the female physician may have less authority, qualifications or respect compared with her male peers. Likely due to their experience and awareness of gender bias, female physicians are more likely to use formal introductions when introducing speakers.

Other challenges include the ways that groups often systematically fail to honor or hear certain voices. Ideas suggested by women may be ignored until repeated by a male colleague. Allyship interventions recognize this and suggest that the many supportive men, often with privileged identities, should amplify good ideas from women in their groups while ensuring that credit for those ideas also goes to the original source.


Gender stereotypes contribute to bias and harassment as societal norms have dictated different

characteristics of an ideal man versus woman. The historical preference for male leaders is related to the association of typically masculine characteristics with leadership, even though evidence suggests that certain stereotypically feminine traits are important for successful transformational leadership. Moreover, when a woman possesses characteristics aligned with expectations of a man, the perception is usually negative, and she is typically penalized for her counter-stereotypical behavior. Not only can stereotypes prevent an individual from pursuing a potential interest, stereotype threat can cause a highly qualified person to underachieve due to their awareness that they do not fit the perceived societal stereotype and therefore are not expected to succeed.

Additional gendered expectations of society lead to discordance of family caregiving responsibilities and associated disruptions in career trajectory that often magnify gender disparities in outcomes. Female physicians commonly handle the majority of parenting and domestic responsibilities compared with male peers. This became especially apparent as the COVID-19 pandemic left many women to not only care for but educate children and provide daytime supervision. This impact is in addition to the baseline difference that existed in hours spent on family caregiving by gender and likely set a significant number of female physicians back many years in career promotions.<sup>3</sup>

To ensure equity and diversity in leadership, it is important that institutional systems be redesigned to account for these differences in gendered expectations and create an environment where all genders have the support necessary to participate in family caregiving while also pursuing their careers. Having a family while also being a successful radiation oncologist cannot be a privilege that is reserved for men alone. Nor should men who are radiation oncologists be penalized for counter-stereotypical behavior when they deviate from the historical patterns of work to participate more equally in their own families, for example, by taking paternity leave.

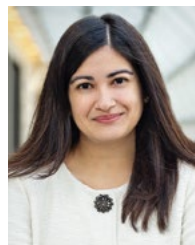
While the conscious and blatantly offensive forms of gender harassment may be significantly less in the modern era, microaggressions remain a considerable barrier to equity, diversity and inclusion in radiation oncology. Deliberate efforts and transformative innovation of the leadership development, rewards and promotions systems in our field are required to combat gender bias and harassment, as we work to achieve proportional representation within leadership reflective of the gender distribution within the medical school

body and our society more generally. Indeed, not only are gender harassment and bias among the mechanisms that drive inequality in leadership, but the lack of equitable representation of different groups provides the environment within which inappropriate behaviors of harassment and bias themselves thrive. We must break this vicious cycle within our field, both because doing so is essential to demonstrate respect for all human beings, and also, because it is the best way for us to achieve our shared goals as a profession. 




*Shauna Campbell, DO, is a radiation oncologist at Cleveland Clinic specializing in the treatment of musculoskeletal and head and neck malignancies. She is a former ARRO Executive Committee Chair and is an active member of ASTRO dedicated to graduate medical education and gender equity.*

 *Twitter: @ShaunaRadOnc*



*Reshma Jagsi, MD, DPhil, FASTRO, is the Newman Family Professor, Deputy Chair and Residency Program Director in the Department of Radiation Oncology at the University of Michigan. She also serves as director of the University's Center for Bioethics and Social Sciences in Medicine, chair of ASTRO's Ethics Committee, and chair of the new Work Group on Women in Radiation Oncology of the HEDI Council.*

 *Twitter: @reshmajagsi*

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# Sexual and Gender Minority Inclusion in Radiation Oncology: A Call to Action, **NOT** Checking a Box

BY JASON D. DOMOGAUER, MD, PHD; RACHAEL CONGER, MD; STEPHANIE TEREZAKIS, MD; AND SHILPEN PATEL, MD, FASTRO

**WHEN APPLYING TO RESIDENCY**, a faculty position or any new role, feeling welcomed and safe is an important consideration for any person. Unfortunately, minority individuals commonly face psychosocial safety hazards stemming from stress related to experienced and/or perceived harassment, intimidation, unconscious bias, communication difficulties, job insecurity and overt discrimination. Thus, when one identifies as part of a marginalized, minority group, there are additional cues and aspects to consider in assessing the inclusivity of the work environment. Navigating this process can be even more complicated for radiation oncology trainees, faculty and practicing physicians that identify as members of the Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, Intersex/Differences of Sexual Development and/or Asexual/Autosexual (LGBTQIA+) community, also referred to as sexual and gender minorities (SGM) or more colloquially referred to as the “invisible minority.” Such invisibility can be a catch-22 for many, as it can be used as a safety mechanism to conceal one’s identity until the environment is deemed safe/welcoming. Unfortunately, this can also result in situations where SGM persons are faced with having to frequently navigate “outing” themselves to colleagues, employers, etc., which may not always result in positive outcomes, such as risk of termination from positions, inability to receive positive recommendations, denial of patient referrals, lack of promotions, being socially ostracized and subjection to outright discrimination.<sup>1</sup> Invisibility can also lead to a perceived lack of LGBTQIA+ representation, and a subsequent concern from applicants that the field is not welcoming. Further, it is important to note that, similar to other racial and ethnic minorities, not all SGM individuals have the privilege of choosing whether to disclose their identity, and thus may confront unconscious and/or overt stigma, discrimination and bias more directly. Unfortunately, such challenges are further compounded for those at the intersection of multiple, marginalized identities. For example, a transgender, Latinx woman of color would have to navigate the individual and interacting barriers resulting from their racial, ethnic and gender identity.

The above takes on even greater significance as the proportions of incoming SGM medical students


and residents, as well as patients, continue to increase. A Gallup poll from February 2022 found that more than 1 in 5, or 21% of generation Z adults self-identify as a SGM. That is double the proportion of millennials (ages 26 to 41) at 10.5%, nearly five times generation X (ages 42 to 57) and baby boomers (ages 58 to 76) at 4.2% and 3%, respectively, and 20 times of traditionalists (77+) at 1%.<sup>2</sup> So what should our field do to ensure that we are not missing out on nearly a quarter of the young adults who may be interested in becoming a radiation oncologist, physicist, therapist or dosimetrist? And how do we ensure we are properly prepared to care for a growing, aging SGM population? It starts and ends with implementing a culture of inclusion and safety within individual departments and across the field.

Importantly, the solution should **NOT** be the expectation that all SGM residents, faculty and staff either “out” themselves or carry the responsibility to create change. Rather, there should be intentional partnerships between the SGM community and individuals, departments, state, national and international institutions/organizations to ensure workspaces become inclusive and safe for all people. Within the health care training and work environments, such efforts are likely to be multipronged, yet all should have a foundation of non-discrimination protections with specific inclusion of sexual orientation and gender identity. Further, these policies should be featured alongside others’ pertinent information to the application and hiring processes, including inclusive benefits for same-sex spouses or domestic partners, as well as parental leave for “non-traditional” family building (e.g., surrogacy, adoption) and health care coverage for fertility treatments and/or gender affirming care. Further, due to the persistence of traditional and conservative conventions in radiation oncology, there is a resulting limited space for self-expression — a significant component of queer identity. To improve the culture in radiation oncology for SGM, as well as other diverse-identifying individuals, the shift should be a move away from these conservative ideas of professionalism toward a more inclusive definition, which does not originate in whiteness, heteronormativity nor cisgender norms.



Beyond ensuring inclusive hiring and benefits practices, additional efforts should also be made to ensure clinic spaces are inclusive to staff and patients alike. An essential component is providing training in cultural humility and SGM-focused training to ensure faculty and staff feel prepared and comfortable in caring for SGM-identifying patients and their chosen families, with an understanding on how to tailor treatment conversations given SGM patients' unique concerns and needs. Such training provides a foundation for adaptability of people and spaces, especially given the rich evolution of concepts surrounding sexuality and gender identity. Additionally, visual cues such as non-discrimination signage, SGM representation in patient-facing materials, focused resources (e.g., support groups), inclusive paraphernalia (e.g., rainbow flags, pins, pronoun buttons), as well as all-gender restrooms and changing rooms are important to include. However, any space intent on signaling to the SGM community of its safety must be deliberate, not simply posting signage without doing the fundamental work first.

Furthermore, research and community engagement surrounding SGM health disparities, especially along the cancer continuum, are crucial toward improving the health of numerous SGM individuals. Unfortunately, addressing health disparities for marginalized communities has historically relied upon and continues to depend upon the "minority tax"<sup>3</sup> — extra, financially uncompensated duties and responsibilities that minorities are asked to perform for their institutions. Instead, such efforts must be supported robustly and funded by departments and the field, as well as at the state and federal level. Further, without the collection of sexual orientation and gender identity at the patient and national level (e.g., inclusion in national cancer registries), research efforts will continue to be stunted and thus perpetuate the ongoing known and unknown disparities impacting the SGM population.

All of the above needs to be approached with a long-term outlook that views achieving a diverse and inclusive workplace as a fundamental value — not simply checking a box. 

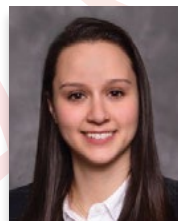
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For questions, comments and/or interest in being kept up to date on SGM-focused activities within ASTRO/ARRO, scan the QR code below using your smartphone's camera and tap the link to contact the newly formed ASTRO SGM task force and ARRO SGM task force.



*Jason Domogauer, MD, PhD, is a resident physician (PGY-5) in the Department of Radiation Oncology at NYU. He has led LGBTQIA+-focused education development, community outreach and patient care initiatives at the institutional, state and national level for over 10 years. He currently serves as the vice-chair of the SGM Task Force under the ARRO Equity & Inclusion Subcommittee.*




*Rachael Conger, MD, is a resident physician (PGY-2) in the Department of Radiation Oncology at UCSF. She is passionate about making a difference in health equity for underserved communities and is looking forward to continuing this work as a radiation oncology resident.*

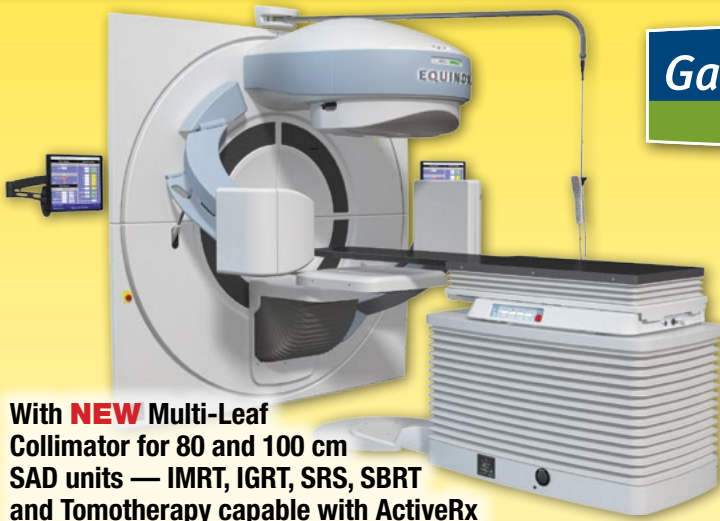


*Stephanie Terezakis, MD, is professor and chair of the Department of Radiation Oncology at the University of Minnesota where she practices radiation oncology specializing in pediatric cancers and hematologic malignancies. She is the co-lead for the SGM Task Force under HEDI for ASTRO.*



*Shilpen Patel, MD, FASTRO, practices radiation oncology in the Bay Area and is the Principal Health Equity and Inclusive Research Medical Director at Genentech. He currently co-leads the SGM Task Force under HEDI for ASTRO.  Twitter: @PatelShilpen*

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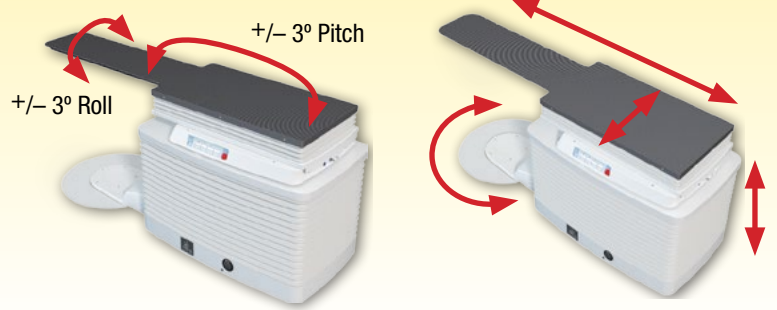
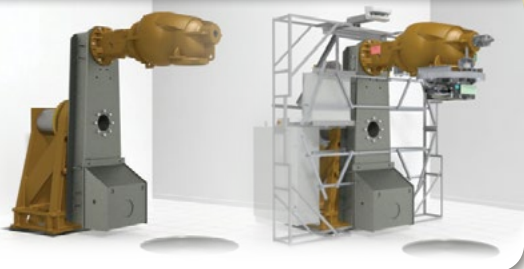
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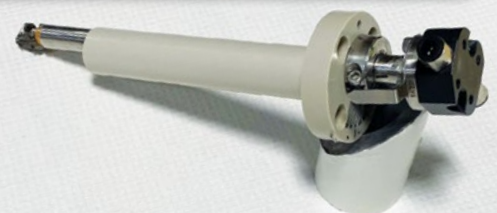
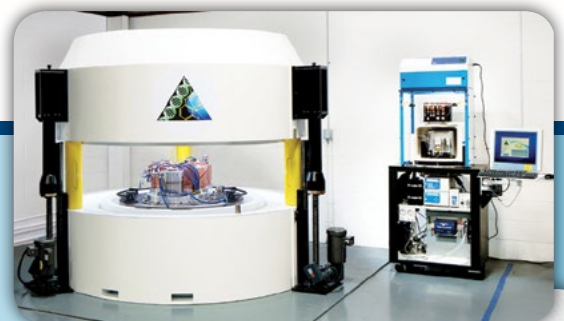
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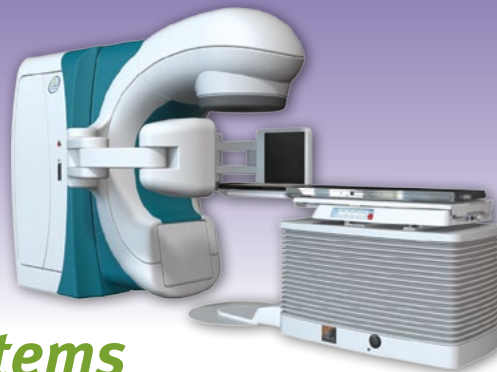
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# Unconscious Bias in Cancer Care and Legal Ramifications

BY TONY S. QUANG, MD, JD, AND SUSHIL BERIWAL, MD, MBA, FASTRO



**EVOLVING DATA CONTINUE TO ESTABLISH** the benefits of diversity in the workplace. Studies have found that diverse health care organizations garner higher profits, patient satisfaction, accuracy in diagnosis and employee retention.<sup>1</sup> Therefore, creating an environment of diversity is a must in the cancer care workplace to derive these benefits. Most importantly, diversity mirrors the patient population being served. In the practice of radiation oncology, it is critical to foster diversity lest it obfuscate the goals of caring for patients by leaving out a particular population in the community. Only when patients can be reached, the optimization of the win-win quadruple aim in health care can be achieved.

Just as set-up uncertainty can thwart the accurate dose delivery to a tumor, bias can thwart this diversity effort to achieve its aims. Bias is defined by the American Psychological Association as an inclination or predisposition for or against something.<sup>2</sup> Unconscious bias, also known as implicit bias, in the workplace is a subconscious preference that may influence an opinion based on facts or experiences from the past. Bias does not just occur in a toxic work environment of blatant discrimination and harassment. Even if an organization is welcoming with a strong diversity, equity and inclusion program, unconscious bias can persist.

Unconscious biases are generally not illegal. They can often be classified into three categories: *reprehensible*, *unethical* and either or both of which can rise to the level of being *illegal*. Reprehensible biases include overweight, conformity, affinity, beauty, name, height and attribution biases. Unethical biases include nepotism. Illegal biases differ based on jurisdiction,

but can include ageism, sexism, gender identity, race, ethnicity, national origin, sexual orientation, religion, pregnancy and disability. No doubt these types of biases offer unfair advantage to the beneficiary. One of the most costly tolls of these biases is preventing diversity in the workplace.

For an organization to thrive, leadership should be aware of these biases and work to mitigate them. Training and education are of paramount importance in this mitigation effort because they are the first steps to bringing out self-awareness to unmask the unconscious biases. However, education is not sufficient to address biases fully.<sup>3</sup> Active mitigation efforts must take place.

*Example: In the case of a reprehensible bias, if a department chair notices that everyone on the cancer care team looks like they belong on the cover of a fashion magazine, the chair may want to develop an action plan to recruit and retain employees based on their credentials and performance rather than their physical appearance.*

Failure to manage reprehensible biases can negatively impact the success of the organization, as these biases are inimical to the meritorious talent and skills needed to move an organization forward. Moreover, while attractiveness is used as an example, other reprehensible biases, such as age and race, are also illegal biases.

Unethical biases can be more difficult to address. While unethical biases can be disruptive to the organization, they do not necessarily rise to the level of criminality. Nepotism can be tricky to mitigate. A best practice in recruitment and retention is for a chair to avoid hiring family and friends who are directly under their supervision. Other measures to minimize



ethical issues include setting ethical values statements, discussing ethics during performance reviews, reinforcing ethical behavior, retaining ethical employees and making ethics a hiring priority. Once unethical behaviors fester, they are difficult to manage and usually contribute to poor morale.

Legislatures have recognized the potential harm created by some reprehensible and unethical biases and codified prohibitions on those biases into law.<sup>4,5</sup> If leadership fails to address illegal biases, the organization will become vulnerable to litigation. For instance, employees of a hospital or clinic are protected from gender discrimination and sexual harassment under Title VII of the Civil Rights Act of 1964.<sup>4</sup>

*Example: If a transgender male-to-female lesbian physicist in a radiation oncology department is disparaged for her sexual orientation, or if other staff members refuse to use a new spelling of her name or a preferred pronoun as a matter of discrimination, the physicist may have a legal cause of action against the department.*


Another potential basis for an organizational violation in employment is Title I of the Americans with Disabilities Act (ADA),<sup>5</sup> which requires organizations to provide otherwise qualified employees and job candidates “reasonable accommodations” as to enable them to apply for and perform the essential functions of a job and to enjoy the equal benefits and privileges of employment despite their disability.

*Example: An otherwise qualified paraplegic dosimetrist candidate in a wheelchair cannot be denied a position because it would likely require a ramp to be installed in the building, or if an employee is returning to work after a stroke that caused left eye blindness, they cannot be denied a request to see a neurologist for follow-up appointments.*

An organization’s failure to agree to and make these respective accommodations, or to deny employment based on a request for such accommodations, could be legally actionable.

A plaintiff employee claiming an employer violated these laws can receive base pay, back pay, lost benefits, punitive damages, emotional distress damages and attorney fees. Furthermore, many state and local jurisdictions have laws providing greater protections for employees than those provisions present in Title VII of the Civil Rights Act or Title I of the ADA, and imposing greater penalties for non-compliance.<sup>4,5</sup>

In addition to the financial costs to the organization, serious consideration must also be given to loss of reputation and other consequential harm.

As an organization, it is important for leadership to thoroughly examine their biases, conscious or unconscious, to prioritize them in the order of severity and urgency, and address systematically the ones that could pose legal risks and create legal liabilities. If remedial measures are deemed necessary, they should be properly documented, and records of the remediation kept and backed up consistent with the organization’s records retention policies and applicable laws. 

### Acknowledgement:

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*Tony S. Quang, MD, JD, is a radiation oncologist at the Seattle Veterans Affairs Hospital, associate professor of Radiation Oncology at the University of Washington School of Medicine, adjunct associate professor of Law at the University of Washington School of Law and visiting lecturer at Bellevue College. Dr. Quang is also president of the American College of Legal Medicine.*



*Sushil Beriwal, MD, MBA, FASTRO, is the Academic Chief of Radiation Oncology at Allegheny Health Network Cancer Institute, Pittsburgh.*

# Diversity, Value and Your Science Council

BY BRIAN MARPLES, PHD, AND JOHN M. BUATTI, MD, FASTRO



**DIVERSITY IS MORE THAN A CATCHWORD** or political mandate. It adds real value in an evidence-based manner. It has repeatedly been shown that diversity brings excellence and opportunity, and in your Science Council, this is no exception.

Science itself thrives on diversity. At the most rudimentary level, more well-rounded hypotheses are developed when scientists with diverse backgrounds work together. Diversity in collaboration therefore benefits the scientific mission. The inclusion of scientists with different scientific perspectives (e.g., those studying basic chromosomal structure, redox biochemistry and the physico-chemical interactions of radiation within biomolecules, organelles, cells and organs) offers a more all-encompassing scientific thought process. This, therefore, benefits the diverse patient population we treat with radiation therapy. Furthermore, scientists explore populations through epidemiologic hypotheses, raising issues of disparity and potential interventions impacting social determinants of health that affect cancer incidence and outcomes, in no less profound ways than Nobel-prize-winning work on the potential of novel immune-based interventions on cancer. This diversity of thought brings impact.

While we have learned and demonstrated this value repeatedly in science, it appears this principle remains suppressed societally and within our organizational structures broadly. At virtually every level of social

organization, it is evident that gaps in racial, ethnic, gender, socioeconomic, religious and rurality diversity exist. At some level, there is recognized unconscious bias that is no doubt stimulated and nurtured by an insidious systemic bias that is indeed now in our consciousness, and hence there is no longer an excuse. Bringing this diversity to our organizational processes and organizational structures will bring value and opportunity that brings impact. The Science Council is gender-diverse but is still making progress toward the goal of a wider racial and ethnic diversity.

To further these efforts, the Science Council participates in the ASTRO Leadership Pipeline Program and has valued input from Roberto Diaz, MD, PhD, our first protégé, along with Debra N. Yeboa, MD, and Raymond B. Mailhot, MD, MPH, our current protégés, as well as ASTRO's Council on Health Equity, Diversity and Inclusion (HEDI), to provide the widest possible breadth of thought.

One role of the Science Council is to solicit research concepts for our varied portfolio of grant opportunities. This year, ASTRO collaborated with the Breast Cancer Research Foundation and identified a proposal from an early career researcher for a development award to study health disparities to advance breast cancer and radiation oncology research. With the NRG Oncology, the Science Council is discussing the concept for a new fellowship opportunity with the hope of developing and supporting underrepresented minority scholars

## Effective Efforts to Address Systemic Bias in NIH Grant Funding

In the past decade, the U.S. National Institutes of Health (NIH) has made a concerted effort to address racial disparities in their funding, responding to a 2011 report<sup>1</sup> that demonstrated a 10% lower funding rate awarded to Black/African American (B/AA) scientists after controlling for other factors. In response, NIH and the biomedical community's efforts built upon a set of 13 recommendations<sup>2</sup> drafted after the report, centered on areas such as better data collection and analysis, more targeted training and mentorship programs, and stronger infrastructure to support underrepresented groups, resulting in some notable improvements to shrink the funding gaps.

As a result,<sup>3</sup> since 2013, the number of Research Project (R01) Grants awarded to B/AA awardees has increased by 219%, resulting in a shrinkage of the funding gap from 10% to 8%, and the number of applicants increased by 65%. A sizeable distance still needs to be closed though, as B/AA still only comprise 2% of the entire pool of applicants.

K awards support senior postdoctoral fellows or faculty-level candidates and are intended to bring them to a place of independent research and to have the capacity to be competitive for major grant support.

From 2013 to 2020, B/AA K awards increased by 215%, and the funding gap decreased from 12% to 7% of the total awards. Hispanics/Latinos awards went from a 4% gap to no gap by 2020. With 8% of the total, momentum is moving in favor of positive change to increase diversity. Other areas of improvement are in education, as STEM PhDs jumped from 7% to 17% in 2019 compared to the previous decade, and training grants from 10% to 22% in 2020 for underrepresented groups (URG).

NIH understands that a multi-pronged approach is necessary to address the complexity of diversifying the biomedical field. As a result, in 2014, NIH established the Diversity Program Consortium (DPC), a network of institutions established to improve training and mentoring to enhance success in biomedical research careers. The initiative has a specific aim to transform institutional culture and biomedical training and mentoring. They have dedicated \$500 million over a 10-year period and are working toward diversifying training program appointees, research project appointees, widening their mentoring network, especially for underrepresented groups, and developing webinars and products such as the Scientific Workforce Diversity Toolkit. 

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as radiation oncology health equity clinical trial investigators.

In addition, the Science Council has been optimizing ASTRO's scientific review process to enhance diversity in ASTRO research funding

programs. Tangible steps that the Science Council has taken include:

- (1) Added a PI demographics section in ASTRO's application used to evaluate representation among our applicant pool.

*Continued on page 23*

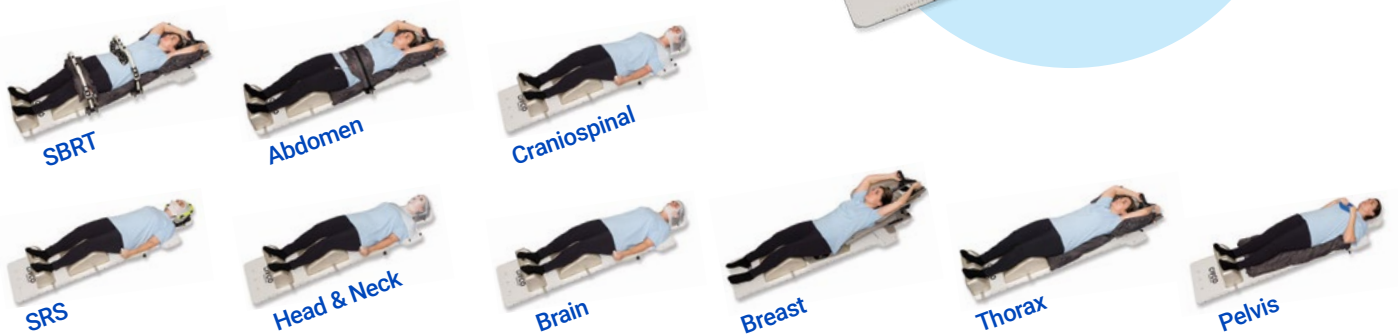


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- (2) Reduced subconscious bias by emphasizing the requirements for reviewers to provide specific comments on the strengths and weaknesses pertaining to their scores.
- (3) Invited CHEDI to recommend researchers with pertinent scientific expertise and track records in grant success to join ASTRO's pool of potential ad hoc reviewers.
- (4) Invited CHEDI to share ASTRO's research funding opportunities with underrepresented scientific communities.

For professional development and mentoring support, the Science Council invited ASTRO's Minority Summer Fellowship award and Aspiring Scientists and Physicians Program alumni to participate in the Research-Oriented Career Knowledge and Support (ROCKS) programs that were originally designed for ASTRO's past award applicants and grant writing workshop attendees. In May, ASTRO hosted a ROCKS web session titled NCI Diversity Supplements and Other Awards Targeting Underrepresented Populations.

In conclusion, great opportunities are available to improve our science through enhanced diversity. The Science Council is committed to working collaboratively to attain impactful diversity goals. 



*Brian Marples, PhD, is the chair of the Science Council. He is a radiobiologist and the Dr. Sidney H. and Barbara L. Sobel Professor in Radiation Oncology at the University of Rochester, New York.*



*John M. Buatti, MD, FASTRO, is vice-chair of the Science Council. He is a physician, clinical translational scientist and professor and chair of the Department of Radiation Oncology at the University of Iowa Carver College of Medicine.*

## Updates on ROI's Improving Diversity and Inclusion in Radiation Oncology Awards

The Radiation Oncology Institute (ROI), ASTRO's research foundation, advances lifesaving and quality-of-life research made possible thanks to the generosity of our donors. In 2020, ROI awarded grants to four outstanding research teams to conduct projects focused on improving diversity and inclusion in radiation oncology. To learn more and/or donate, visit [www.roinstitute.org](http://www.roinstitute.org).



### Finding a Better Way to Assess Skin Toxicity Across Skin Tones

**RADIATION ONCOLOGIST SARA ALCORN, MD, PHD, MPH, AND DERMATOLOGIST CRYSTAL AGUH, MD,** are collaborating on the development of a new web tool to objectively assess acute skin toxicity in patients receiving radiation therapy to treat breast cancer. The team is creating a more inclusive grading system for skin toxicity since current tools are inadequate for characterizing radiation effects across a range of skin tones, especially in people of color. In an ongoing clinical trial of patients receiving hypofractionated whole breast radiotherapy, they collect provider ratings of acute skin reaction (ASR), patient-reported outcomes and digital photos that can be translated into colorimetric measures to quantify hyperpigmentation and detect erythema. Dr. Alcorn's and Dr. Aguh's team is using this data to determine the best statistical model for assessing ASR, which serves as a foundation to build and test a web tool that will assign an ASR grade based on photos taken with standard mobile or tablet devices. "Our goal is that improved characterization of skin reaction across a range of skin tones will help reduce the rates of higher-grade toxicity and improve quality of life, perhaps particularly for patients with more pigmented skin," says Dr. Alcorn. They envision making the web tool available to clinics worldwide.

*Continued on the following page*



## Advancing Cancer Care for the LGBTQ+ Community

**PSYCHOLOGIST G. NIC RIDER, PHD, AND RADIATION ONCOLOGIST STEPHANIE TEREZAKIS, MD,** lead a project to improve cancer care for patients who identify as lesbian, gay, bisexual, transgender, queer and/or questioning (LGBTQ+). Discrimination, access to health care and a lack of knowledgeable providers are major barriers for LGBTQ+ individuals seeking care. These patients are also less likely to receive routine cancer screening and thus, have elevated cancer mortality rates. Dr. Rider and Dr. Terezakis aim to better serve this medically vulnerable population by assessing current health care practices and the needs of health care providers working in radiation oncology with LGBTQ+ patients. “Current health care provider education lacks routine training in how to work with LGBTQ+ patients with cancer, and training providers who do not discriminate and are knowledgeable about the unique needs of the LGBTQ+ community is essential to reducing disparities,” says Dr. Rider. The team interviews health care providers about their experience working with LGBTQ+ patients with cancer, their comfort level working with this population, and their professional training needs specific to working with LGBTQ+ patients and has begun analyzing the data. Next steps include developing and conducting a larger-scale survey of multiple radiation oncology departments in the U.S. and creating an online educational module.




## Improving the Delivery of Radiation Therapy in Prisons

**OLUWADAMILOLA OLADERU, MD, MA, MBA** studies the delivery of radiation therapy at the Federal Medical Center, Butner North Carolina (FMC Butner) to document and address health disparities experienced by incarcerated individuals. Cancer incidence is rising in the incarcerated population, and FMC Butner is the only one of seven medical centers in the Federal Bureau of Prisons that has the capacity for on-site radiation therapy, chemotherapy and palliative care service, requiring a transfer to the facility for the duration of treatment for anyone who needs cancer care. Incarcerated individuals are disproportionately from racial and ethnic minority groups and socio-economically disadvantaged

communities, compounding the disparities present in the prison health care system. Dr. Oladeru measures cancer incidence and mortality in the federal prison system, characterizing the utilization of radiation therapy at FMC Butler, and assesses the relationship between incarceration status, race, socioeconomic status, quality of multidisciplinary care and cancer-related mortality. Using this data, Dr. Oladeru will develop an integrated value-based model for cancer care delivery in the federal prison system that can be adapted to state prisons. Dr. Oladeru says, “The outcome of this study will have a positive impact on patients’ lives, offer health strategies to legislative bodies and spread awareness about a growing silent population in our oncology community.”



## Increasing Diversity in the Radiation Oncology Workforce

**MALCOLM MATTES, MD,** has launched an initiative to encourage more diverse medical students to choose radiation oncology as their specialty. Currently, underrepresented minority physicians make up only 7% of the radiation oncology workforce compared to 16% of medical school graduates and 30% of the U.S. population. “A key component to motivating any student to pursue radiation oncology is ensuring adequate exposure to the specialty in the first place. Only then, once interest has been inspired, can effective mentoring help shape that student into a strong candidate for a radiation oncology residency position,” says Dr. Mattes. He and his collaborators take a multifaceted approach to understand and improve outreach efforts to diverse medical and premedical student groups. The team recently published results in the Red Journal of a survey of radiation oncology departments showing that most do not reach out to medical student groups for women or minorities. To increase awareness of the specialty, Dr. Mattes has given presentations at numerous individual medical schools with a higher enrollment of minority students but lacking a radiation oncology residency program and also organized a virtual oncology lecture series for medical students, which is now available online at [www.astro.org/LectureSeries](http://www.astro.org/LectureSeries). He also facilitates research and mentorship opportunities for students who express an interest in learning more about radiation oncology. 



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ANNUAL 2022 MEETING

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## WHAT'S NEW FOR 2022:

**This year, registration for the in-person and live virtual meeting will both include access to all SA-CME sessions, the Practical Radiation Oncology (PRO) Program, and the entire meeting onDemand (available shortly after the live session is presented) all for no extra charge!**

## MEETING HIGHLIGHTS:

- An outstanding lineup of speakers and topics including two dynamic keynote speakers—Ruha Benjamin, PhD, and Richard Deming, MD, presenting on the themes outlined in *Race After Technology* and optimal living in survivorship.
- The top science in the field with practice-changing research.
- A Presidential Symposium focused on “AI and EI: Caring for the Patient in a Wireless World.”
- The “Cancer Breakthroughs” session highlighting the year’s top oncology research from a variety of disciplines.
- Six Science Highlight sessions held live for in-person and virtual meeting registrants. Additional Science Highlights sessions available onDemand.
- Live SA-CME sessions are now included as part of in-person and live virtual meeting registration options.
- Master Classes, Storytelling and poster sessions are back to supplement your learning.
- An Exhibit Hall featuring the latest products and services with the ability to engage directly with exhibitors including product demos and a Networking Reception from 4:00 p.m. to 5:00 p.m. on Monday, October 24.
- Numerous networking opportunities, social connections with colleagues and more to help you connect and recharge.



Ruha Benjamin, PhD



Richard Deming, MD

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## I AM PLEASED TO PROVIDE AN UPDATE

on efforts at the *International Journal of Radiation Oncology • Biology • Physics* (*IJROBP*) in support of equity, diversity and inclusion (EDI). While *IJROBP* operates with editorial independence from ASTRO, we are the Society's journal and our editors share and support the organization's overall goals of EDI. As a scientific journal, *IJROBP* follows trends from medical publishing as much as those from within radiation oncology. The journal's means to accomplish EDI

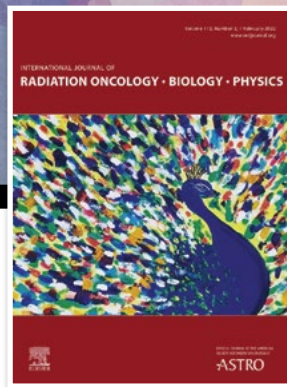
are distinct, as the scope of operations is focused on publishing and editorial work.

Over the past decade, *IJROBP* has been committed to fostering diversity. One initiative was to correct imbalances affecting women's access to editorships and other forms of publishing opportunities. In 2011, the editorial board at *IJROBP* had 15% women. At this time, then editor-in-chief Anthony Zietman, MD, FASTRO, installed term limits on editorships, double-anonymous review of articles, and intentionality in recruiting more women to the editorial board. As a result, in 2022 the journal's editorial board is now 42% women overall and the current editor-in-chief and one of the two deputy editors are female. Studies have shown that a larger presence of women on an editorial board is associated with more invitations to women to review articles and write editorials. Furthermore, double-anonymized review reduces biases against disadvantaged authors including women. These mechanisms have not been studied at *IJROBP* specifically but subsequent to these numerous changes the proportion of female authors at *IJROBP* significantly increased from 27% to 34%.<sup>1</sup>

Other recent initiatives at *IJROBP* include a survey of the editorial board for gender identification and a forthcoming Gender Diversity Indicator, a report of

# The Commitment to Equity, Diversity and Inclusion at the Red Journal

BY SUE S. YOM, MD, PHD, FASTRO




these survey results that will be published on the *IJROBP* homepage. The language and format of the gender survey was supported by our publisher Elsevier, which has endorsed the Joint Commitment for Action on Inclusion and Diversity in Publishing and has recently adopted the Sex and Gender Equity in Research (SAGER) guidelines.<sup>2,3</sup> With technical assistance from our publisher, *IJROBP* has also initiated "Use of Inclusive Language" throughout its processes and webpages. The guidance recommends "avoiding the use of descriptors that

refer to personal attributes such as age, gender, race, ethnicity, culture, sexual orientation, disability and health condition unless there is scientific or clinical relevance."<sup>4</sup> For example at *IJROBP*, "sister journal" has been changed to "companion journal" and "double-blinded" has been changed to "double-anonymized."

In addition, following the example of the New England Journal of Medicine, *IJROBP* has just completed the rollout of a voluntary generalizability table that authors may complete.<sup>5</sup> This table is always published as supplementary table 1 if submitted. It describes potential limitations to generalizability and is intended as an opportunity for authors to reflect on possible avenues for enhancing their future research. The decision to offer this table was the culmination of a careful development process. Meetings and a formal survey of our section editors determined what the table should be called and how this information should be queried and presented, and then the table was pilot tested by our executive editors before implementation. An editorial was issued explaining the rationale and use of the table to our readership.<sup>6</sup> The plan is to re-evaluate use of this table over time and in relation to trends at other leading journals to determine if it should become mandatory.

Lastly, *IJROBP* is committed to the development of high-quality research in EDI. A call for papers is active on [redjournal.org](http://redjournal.org) for a planned special issue on health equity, diversity and inclusion in radiation oncology. Submissions are being accepted until August 1, 2022, and this special issue is expected to be published in early 2023. Global health equity is included in the scope of this call. Numerous editors contributed to editing this call to ensure that all sectors of the radiation oncology community would be able to participate.

One learning point from these processes is that this type of work does take time, requiring thoughtfulness and consideration of many viewpoints. *IJROBP* as a top journal of a small subspecialty does not and cannot plan to lead in this challenging and complex area. Instead, the journal will most likely continue to take cues from other major journal families and publishers as well as ASTRO, understanding that this is an area of ongoing progress — and in the spirit of kaizen — not being afraid to try and see what works. 

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*Sue S. Yom, MD, PhD, MAS, FASTRO, is the Irwin Mark Jacobs and Joan Klein Jacobs Distinguished Professor in Head and Neck Cancer Radiation Oncology and professor in the departments of radiation oncology and otolaryngology-head and neck surgery at the University of California, San Francisco, and serves as Editor-in-Chief of the International Journal of Radiation Oncology • Biology • Physics.*

## 2022 CORPORATE AMBASSADORS

ASTRO PROUDLY RECOGNIZES THE ONGOING COMMITMENT OF OUR CORPORATE AMBASSADORS FOR THEIR OUTSTANDING YEAR-ROUND LEADERSHIP AND PROMOTIONAL SUPPORT OF RADIATION ONCOLOGY.

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## Improving Quality, Improving Lives

### Diverse Perspectives Enhance Quality Initiatives

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**BENEFIT** from multimodality therapy. Multidisciplinary treatment brings people of diverse training and expertise together with a shared goal of providing the best care for the patient and, not surprisingly, it can improve outcomes. The same principle applies to quality and safety work. The paradox is that a backbone of safety and quality is uniformity and yet diversity is also needed. Let's examine these two seemingly opposed requirements.


Often the goal of quality improvement initiatives is to remove unnecessary variation. After all, standardization is relatively high on the hierarchy of effectiveness as a system-focused approach for interventions. Efforts like quality assurance processes seek to confirm the accuracy of information compared to previous documentation or set expectations (e.g., confirming prescription dose matches the planned dose). Any staff person with the appropriate training should be able to perform the same quality assurance tests and get the same results. As part of a strong quality management program, radiation oncology practices should have well-defined, written policy and procedure documents that are consistently followed by all staff. The objective is practice homogeneity.

However, diverse perspectives are key when evaluating quality and addressing deficiencies. Radiation oncology, like multidisciplinary care, requires collaboration among members of various teams, each with unique skillsets and viewpoints. For this reason, practices must proactively seek and encourage input from varying team members in their quality improvement activities. There are countless examples of its value. Interdisciplinary peer review (e.g., charts

rounds), with all members of the radiation oncology clinical team, is an opportunity to get feedback on more subjective clinical items where difference in experiences and opinions is extremely valuable. Similarly, inclusive membership and participation on quality and safety committees and related activities (e.g., accreditation, incident learning) benefit patient care and safety. When investigating errors, identifying mitigation strategies, and developing standard processes for staff to follow, diversity in thought and background is helpful. Programs like ASTRO's Accreditation Program for Excellence® (APEX) and RO-ILS: Radiation Oncology Incident Learning System® provide the framework to bring all staff together to work toward a common goal where everyone's voice matters.

These different voices contributing to quality improvement can come from different professions, cultural backgrounds, ages, genders, geographic regions, etc. Hearing from varying perspectives provides teams with a more holistic view of the issues at hand and can spark new ideas. This can lead to greater innovation in efficiency, safety and operational excellence.

With this awareness, ASTRO aims to promote diverse perspectives on its quality initiatives. In the spirit of improvement, ASTRO is identifying ways to be more inclusive. For example, a new online nomination form promotes upcoming guidelines and seeks volunteers to serve on guideline panels. Bookmark [www.astro.org/GuidelineNominations](http://www.astro.org/GuidelineNominations) to keep abreast of upcoming opportunities.

Whether it is working directly with ASTRO or within your own practice, quality and safety activities require everyone to speak up and get involved. 


## The ABR Commitment to Diversity, Equity and Inclusion: Challenges and Opportunities

**THE MISSION OF THE AMERICAN BOARD OF RADIOLOGY (ABR)** is “to certify that our diplomates demonstrate the requisite knowledge, skill and understanding of their disciplines to the benefit of patients.”<sup>1</sup> As such, the ABR recognizes the critical importance of health care from a diverse and inclusive workforce and acknowledges the well-documented disparities in clinical outcomes engendered by a lack of access to screening programs, timely and expensive therapeutics and focused research. As a volunteer-driven organization, the ABR is dependent on access to a diverse workforce but is not directly involved in the development of that workforce. The actions of the ABR regarding radiation oncology (RO) diversity, equity and inclusion (DEI) are further complicated by the nature of RO clinical exam development: eight clinical category committees require participation by physicians who are content experts in their respective clinical disease sites. Conflict of interest policies require a wide range of geographic distribution and practice types. Within these constraints, there are positive steps the ABR can take and has taken to improve the DEI elements that it can impact.

In the past, as an unbiased assessor of knowledge and skills, the ABR has not captured gender, racial, ethnic or country of origin statistics. Thus, the only direct information available to the Board about its volunteers is observable gender. All publicly available demographic data is obtained indirectly from stakeholder published data, often based on approximations and small samples. In 2019, ASTRO indicated that approximately 24% of radiation oncologists were women.<sup>2</sup> At that time, 33.6% of ABR RO volunteers were women, and the 2019 cohort of certifying (oral) exam volunteers comprised 37.5% women. In April 2022, 11 of 30 new RO clinical category committee volunteer invitations were offered to women (36.6%). These new assignments raise the current RO clinical category committee complement to 242 volunteers, of whom 82 are women (33.9%).

Women continue to serve in volunteer leadership roles within the ABR at a higher rate than that

generally reported for the four ABR primary disciplines (RO, diagnostic radiology, interventional radiology/diagnostic radiology, and medical physics); three of nine (33.3%) members of the policy-making Board of Governors (BOG) are women, and 11 of 20 (55%) of the exam development Board of Trustees are women. Four of the current trustees are radiation oncologists, of whom two (50%) are women.

Despite its established track record in gender equity, ABR volunteer and staff leaders recognize that more can and should be done. At its November 2021 meeting, the BOG established a standing DEI Committee comprising representatives from each of the four disciplines and a public BOG member. This panel has been tasked with developing study guide syllabus material for each of the primary discipline exams that will include data related to health care disparities and bias. Exam development teams in all disciplines will be monitored to assure that this material is present in exam content. ABR volunteers are encouraged to facilitate recruitment and mentoring of underrepresented minority candidates to their institutions and programs, something that is already occurring at many institutions.<sup>3</sup> As these individuals reach practice status, the DEI Committee will strive to ensure that they populate the ranks of ABR volunteers in greater numbers. 

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*Authors' Note: Drs. Davis, Ng, Suh and Yashar are ABR trustees; Dr. Alektiar is an ABR governor; and Dr. Mathews is President of the ABR BOG. Dr. Wallner is the Associate Executive Director for Radiation Oncology.*



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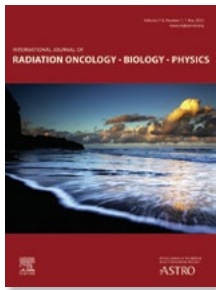
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## HIGHLIGHTS FROM INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY • BIOLOGY • PHYSICS

**March 15, 2022**

### Patient-reported Outcomes in the Acute Phase of the Randomized Hypofractionated Irradiation for Prostate Cancer (HYPRO) Trial

*Sinzabakira et al.*

The authors evaluated patient-reported acute bowel and bladder symptoms in prostate cancer patients who were randomized to either standard or hypofractionated radiation therapy in the randomized phase 3 HYPRO trial. Patients received 3.4 Gy for 19 fractions given three times per week or 78 Gy in 39 fractions given five times per week. Hypofractionated treatments resulted in significantly higher rates of acute bowel and bladder symptoms. However, at three months postradiation, these toxicity rates were similar between arms. Hormonal therapy was associated with less acute gastrointestinal symptoms. The authors conclude that hypofractionated radiation resulted in more acute rectal and bladder toxicity, but these complaints resolved to standard levels by three months after treatment.

**April 1, 2022**

### Understanding the Differences Between Bayesian and Frequentist Statistics

*Fornacon-Wood et al.*

This article sheds light on one of the most confusing and tantalizing questions in modern statistical design. In this “Statistics for the People” tutorial, the authors aim to distinguish the frequentist approach, which is based on null hypothesis significance testing as opposed to the Bayesian approach, governed by Bayes’ Theorem and based on the determination of conditional probability. Whereas the frequentist approach assigns probabilities to data, the Bayesian approach assigns probabilities to hypotheses. Bayesian models also incorporate prior knowledge into the probabilities as more data becomes available.

**May 1, 2022**

### Variable Effect of the COVID-19 Pandemic on Radiation Oncology Practices in the United States

*Wakefield et al.*

Early in the pandemic, ASTRO began surveying leaders of U.S. radiation oncology practices to understand responses to COVID-19. These surveys were repeated every several months. This updated report summarizes the practices’ evolving responses through January 2021. The authors report that patients’ access to radiation oncology was mostly preserved, especially in the later period of the pandemic. By early 2021, clinics were no longer deferring or postponing radiation treatments (a strategy that had earlier been mostly applied to prostate, breast, non-malignant and palliative conditions). Community-based practices were more likely to report increases in late-stage disease presentation, treatment interruptions, shortages of personal protective equipment, and vaccination barriers than academic practices. The authors propose a formal consideration of resilience theory as a conceptual mechanism that could protect the field in a future of rapid, unpredictable changes.

*These articles represent a sampling of content from Dr. Yom’s Issue Highlights, printed at the beginning of each Red Journal. For additional highlights, please visit [www.redjournal.org/issues](http://www.redjournal.org/issues).*

## HIGHLIGHTS FROM PRACTICAL RADIATION ONCOLOGY



**March/April 2022**

### PROshot: Internal Mammary Coverage, Dose-reduced Radiation After Transoral Surgery, Sequencing of Total Neoadjuvant Therapy for Rectal Cancer, Hypofractionated Whole Breast Intensity Modulated Radiation Therapy, Hypofractionated Prostate Fossa Radiation Therapy, and Stereotactic Body Radiation Therapy for Oligoprogressive Cancer

*Dulaney and Dover*

In this edition of the PROshot, Drs. Dulaney and Dover review six practice pearls covering five different disease sites: breast cancer, head and neck, gastrointestinal systems, genitourinary systems and metastases broadly. They explore coverage of the internal mammary nodes in breast cancer patients;

*Continued on the following page*

transoral surgery followed by dose-reduced radiation results in disease control, survival and toxicity; neoadjuvant therapy for locally advanced rectal cancer; hypofractionation and intensity-modulated radiation therapy techniques; comparisons of hypofractionated prostate fossa radiation and conventional fractionation; and the success of ablative radiation for oligoprogressive cancer based on cancer type.

### **Stereotactic Radiosurgery for Postoperative Spine Malignancy: A Systemic Review and International Stereotactic Radiosurgery Society Practice Guidelines**

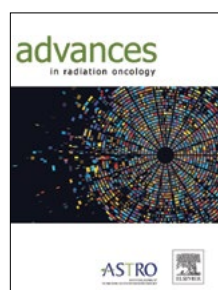
*Faruqi et al.*

In this critical review, Faruqi et al., sought to determine the safety and efficacy of postoperative spine stereotactic body radiation therapy (SBRT) in the published literature and to present practice recommendations on behalf of the International Stereotactic Radiosurgery Society. A systematic review of the literature was performed, specific to postoperative spine SBRT, using PubMed and Embase databases. A meta-analysis for one-year local control, overall survival and vertebral compression fracture probability was conducted.

### **Financial Toxicity in Women With Breast Cancer Receiving Radiation Therapy: Final Results of a Prospective Observational Study**

*Yusuf et al.*

In this original report, Yusuf et al., aimed to quantify financial toxicity (FT) present in a prospective cohort of women with breast cancer receiving radiation therapy (RT), identify predictors of FT, correlate FT with health-related quality of life, and determine whether duration of RT is associated with FT. Patients with cancer face direct costs from hospitalizations, procedures and medications that are traditionally shared with insurance providers. However, indirect costs also frequently arise during treatment, which the patient incurs without the support of the insurance provider.



### **HIGHLIGHTS FROM ADVANCES IN RADIATION ONCOLOGY**

**March/April 2022  
Psychosocial Impact of the War  
in Ukraine on Pediatric Cancer  
Patients and Their Families**

### **Receiving Oncological Care Outside Their Country at the Onset of Hostilities**

*Ugurluer et al.*

As part of *Advances'* special collection on the war in Ukraine, Ugurluer et al. evaluated the psychosocial impact of war on pediatric Ukrainian cancer patients and their families who had left their country prior to the onset of the conflict to undergo treatment of pediatric malignancies at their medical center. These families shared the problems they have experienced following the Russian invasion of Ukraine in four categories: emotional stress experienced by the patients, families and relatives related to the dangers of war; difficulties in obtaining previous hospital records in Ukraine; medical expenses; and the uncertainty regarding the patient's and their family's future and the ability of the children to ever return to their homes.


### **Radiation Oncology in a Humanitarian Emergency: Experience with Ukrainian Refugees at Two Cancer Centers in Poland and Italy**

*Malicki et al.*

In this brief opinion, Malicki et al. study two cancer care centers in Italy and Poland, both of which accepted Ukrainian refugees fleeing the war. As war can force medical centers to redirect care to trauma victims, this can result in fewer resources available to the frailest patients, such as those with cancer. This article examines how both countries have adapted to refugees with health issues, including dealing with infections and vaccination status, providing psychological support, and the measures developed to admit patients to cancer centers in Poland and Italy and to manage their treatment in the radiation oncology department.

### **Radiation Oncology Residency Training in Latin America: A Call to Attention**

*Li et al.*

In this article, Li et al. performed a cross-sectional analysis of universities and training centers for radiation oncologists in Latin America. Despite the call to increase the number of radiation oncologists in Latin America, the quality, similarity and number of residency training programs are unknown. The authors sought to describe the current state of residency programs in radiation oncology in Latin America by identifying and contacting current residents and specialists at each center to obtain information and documents that described their training curricula. 

# Accuray Industry Expert Theater during **ASTRO 2022**



PRESENTING:

# AI: Adapt Intelligently

Sunday, October 23<sup>RD</sup> • 11am – 12pm  
Theater 1 in the Exhibit Hall

During the Accuray symposium, we will redefine what adaptive is, leveraging Accuray innovations from across our portfolio. Expect to hear from inspiring keynote speakers on how high-fidelity imaging, dynamic motion correction and powerful dose optimization tools come together to create a comprehensive toolkit for providers to **Adapt Intelligently**. We invite you to explore key thought leadership perspectives on the future of biological guidance.



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#### Important Safety Information

Most side effects of radiotherapy, including radiotherapy delivered with Accuray systems, are mild and temporary, often involving fatigue, nausea, and skin irritation. Side effects can be severe, however, leading to pain, alterations in normal body functions (for example, urinary or salivary function), deterioration of quality of life, permanent injury, and even death. Side effects can occur during or shortly after radiation treatment or in the months and years following radiation. The nature and severity of side effects depend on many factors, including the size and location of the treated tumor, the treatment technique (for example, the radiation dose), and the patient's general medical condition, to name a few. For more details about the side effects of your radiation therapy, and to see if treatment with an Accuray product is right for you, ask your doctor.





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Castle Biosciences is proud to support the ASTRO 2022 Annual Meeting with innovative approaches to improve care for high-risk squamous cell carcinoma patients.

We look forward to seeing you at ASTRO 2022 in San Antonio October 23-26!  
For meeting inquiries, please email [bking@castlebiosciences.com](mailto:bking@castlebiosciences.com)

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