AMERICAN ASSOCIATION of PHYSICISTS IN MEDICINE

IMPROVING HEALTH
THROUGH MEDICAL PHYSICS

AAPM NEWSLETTER

November/December 2026 | Volume 51, No. 6



Special Interest Feature:

Women's Professional Subcommittee

IN THIS ISSUE:

- Chairman of the Board's Report
- Interim Executive Director's Report
- EDIC - Annual Meeting Indegenous Community Outreach (AMICO) Working Group Report
- Report From the Smart Expansion Subcommittee
- Science Council Associates Mentorship program Report

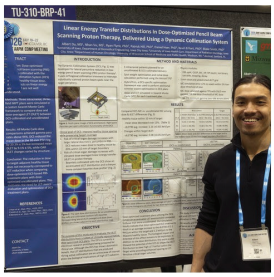
...and more!

AS AN AAPM MEMBER
DISCOVER
THE BENEFITS WAITING FOR YOU

As we open the Association's 69th year, we're grateful for the community your membership sustains — and we invite you to **renew your membership now** for 2027.









ATTEND

Connect with the medical physics community to exchange knowledge, build relationships, and advance the practice with discounted AAPM meeting registration fees.

LEARN

Explore the AAPM Virtual Library and grow your expertise through the Online Learning Center, with an optional CAMPEP-approved MPCEC subscription to support your continuing education.

ADVANCE

Take the next step in your career with AAPM Career Services, stay informed with data from the Annual Professional Information Survey, and protect your practice with optional professional liability insurance available exclusively to members.

ADVOCATE

Make your voice heard as a state champion, support key policy priorities through the AAPM Advocacy Action Center, and help guide AAPM's advocacy by volunteering on committees like GRAC and ECON.

EXPAND your knowledge with AAPM reports and practice guidelines, **REMAIN CURRENT** with the latest research in Medical Physics and JACMP, and **EXPLORE** select NCRP, ICRU, and ICRP publications through AAPM's organizational subscriptions.

RENEW TODAY!

AAPM.ME/2027DUES

AMERICAN ASSOCIATION *of* PHYSICISTS IN MEDICINE

Log in and click **Pay Membership Dues** under **My Account Links** on your profile.

AAPM NEWSLETTER is published by the American Association of Physicists in Medicine on a bi-monthly schedule.
AAPM is located at 1631 Prince Street, Alexandria, VA 22314

TABLE OF CONTENTS

November/December 2026 | Volume 51, No. 6

REPORTS IN THIS ISSUE

5 Newsletter Editor's Report
7 Chair of the Board's Report
11 Interim Executive Director's Report
13 Government and Regulatory Affairs Committee Report
17 Health Policy and Economic Issues Report
21 Updates From ACR HQ
25 EDIC - Annual Meeting Indigenous Community Outreach (AMICO) Working Group Report
27 Sexual and Gender Minority Subcommittee (SCMSC) Report
31 Special Interest Feature: Women's Professional Subcommittee
- 31 The 2026 Women Physicists Luncheon
- 34 Making the Invisible Visible: A Conversation with Ellen Wilcox, PhD
- 37 Building Comaraderie in Medical Physics Through Women Who Coffee and Curie

39 Report From the Smart Expansion Subcommittee
47 Science Council Associates Mentorship Program Report
50 Report From AAPM Summer School and SCAMP Associates
53 International Council Associate Mentorship Program (ICAMP) and Global Medical Physics Education and Training Committee (GMPETC) Report
56 Global Clinical Education and Training Committee Report
59 ABR Update
61 ASTRO Clinical Affairs
64 RTSEC Activity Report
67 Person in the News

EVENTS/ANNOUNCEMENTS

6 AAPM 2027 Important Dates
6 AAPM 2027 Spring Clinical Meeting
16 AAPM Career Center
42 JACMP Special Issue Call for Papers
60 AAPM Committee Classifieds
63 RDCE

Jennifer Pursley, PhD, Editor
Associate Professor
Mayo Clinic Radiation Oncology
200 First St SW
Rochester, MN 55905
507-284-2511
newsletter@aapm.org

SUBMISSION INFORMATION

To keep all reports uniform, we kindly request that submissions be made through a QuestionPro portal.

Questions? Contact Nancy Vazquez

PUBLISHING SCHEDULE

Next issue: January/February 2027
Submission deadline: January 11, 2027
Posted online: week of February 15, 2027

CONNECT WITH US!

EDITOR'S NOTE

I welcome all readers to send me any suggestions or comments on any of the articles or features to assist me in making the AAPM Newsletter a more effective and engaging publication and to enhance the overall readership experience. Thank you.

All articles appearing in this newsletter are expressions of the authors' own personal views and are not a reflection of the views of their places of employment or of AAPM.

Progress, accelerated.

Introducing Accela.



The future of radiation therapy
is here, and it's about time.

Scan the QR code
for more information

510(k) pending. Not available for sale in any market.

© Varian Medical Systems, Inc. – A Siemens Healthineers company 2026
All trademarks are the property of their respective owners. QR700046465

SIEMENS Healthineers

Year-End Reflections and New Beginnings

NEWSLETTER EDITOR'S REPORT

Welcome to the November/December issue of the 2026 *AAPM Newsletter*. It's been an eventful year, and 2027 is shaping up to be just as exciting. In this issue of the *Newsletter*, interim Executive Director **Robert McKoy** shares his priorities and vision as he steps into this guiding role. We also have timely updates on changes to the Medicare proposed rules for 2027, which AAPM has submitted comments on to CMS. Along those lines, the Government and Regulatory Affairs Committee (GRAC) report highlights comments from AAPM to the NRC on the proposed changes to the radiation protection framework.

The Special Interest Group for this issue is the Women's Professional Subcommittee (WPSC), with an overview of the WPSC Luncheon from **Emily Draeger** among other reports. There are a few other reports from the 68th Annual Meeting in Vancouver, including a summary of the first land acknowledgement ceremony to be held at an AAPM Annual Meeting. In this issue you will also find an update on the SCAMP program, a report from an ICAMP mentee who participated in an international rotation in Ghana during residency, and many more. We would also like to congratulate AAPM member **Daniel Low** who received the ASTRO Gold Medal this year!

We hope every AAPM member finds something relevant to them in the *Newsletter*. Our goal is to have the AAPM Newsletter content reflect current topics of interest and importance in medical physics. We will consider all submissions and suggestions from AAPM members and groups, which can be submitted directly through the link on the *Newsletter* page. Please enjoy this issue of the *Newsletter* and send us your feedback and ideas for the future. Best wishes for the holidays and we'll see you next year! ■



Jennifer Pursley, PhD
Mayo Clinic

AAPM 2027

69TH ANNUAL MEETING & EXHIBITION
JULY 25–28 | COLUMBUS, OH

LEADING TRANSFORMATION.
SAFEGUARDING PATIENTS.



Mark Your Calendar

with these IMPORTANT DATES

- **NOVEMBER 10, 2026**
  Abstract submission site opens
- **JANUARY 26, 2027**
  Abstract submission deadline
- **APRIL 6, 2027**
  Registration & hotel reservations open
- **APRIL 22, 2027**
  Disposition notifications sent



AAPM SPRING CLINICAL MEETING

April 10–13
2027

MEETING PROGRAM AVAILABLE: DECEMBER 2

REGISTRATION OPENS: DECEMBER 8

HYATT REGENCY DENVER

DENVER, CO

Coming Together, Moving Forward: Reflections on Leadership and Service

CHAIR OF THE BOARD'S REPORT

It is an honor to pen the final column of the year for the AAPM Newsletter. Those of us on the AAPM presidential chain take turns writing a column for each issue, and as Board Chair, it is now my turn to share the activities of AAPM and to reflect on my role as an AAPM leader.

First of all, I would like to congratulate **Sonja Dieterich**, Secretary and Chair of the Governance Committee, and the members of the Governance Committee, who worked diligently to modernize the AAPM bylaws and to shepherd the process, which was approved by an overwhelming vote.

I have been very fortunate to have held a vantage point within AAPM over many years: first as newsletter editor (2006–2015), then as treasurer for two terms (2016–2021), and most recently as a member of the presidential chain (2024–2026). Overall, I have volunteered in one leadership position or another for the last 19 years, and I am very grateful for the trust that the members and the Board placed in me to serve in these roles. Looking back, AAPM has become a second family, and in the process, I have gained many lifelong friends who have enriched my life both professionally and socially.

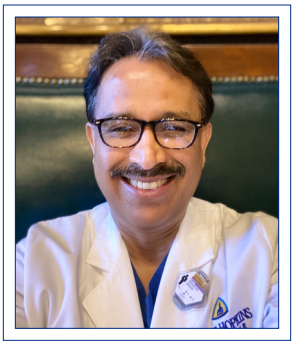
Reflecting on My Leadership Roles in AAPM

While serving as **Newsletter Editor** (2006–2015), I oversaw the transition from a glossy printed newsletter to the current online format. I consider the newsletter a chronicle of key AAPM activities and a mechanism for documenting and cataloging the history of the Association.

Serving as AAPM **Treasurer** (2016–2021) involved working with six AAPM presidents, members of the Board, the Executive Committee (EXCOM), and the Finance Committee to generate annual budgets based on the priorities of the organization and to keep it financially strong. One aspect of my role as treasurer of which I am particularly proud was obtaining approval from the AAPM Board to invest a small portion ($3M) of the AAPM reserve funds ($16M at the time) in slightly higher-return funds. Over the past few years, the data show that these funds have grown at a higher rate than the rest of the reserve funds.

Reflecting on my three years on the presidential chain (2024–2026), I would like to highlight a few things, especially my visits to several chapters as a representative of AAPM leadership, which were very fulfilling. Those visits further strengthened my conviction that the members and their dedication to volunteering form the backbone of our organization and our profession.

During my presidential year, I was proud of several new elements introduced at the Annual Meeting. The meeting itself followed a new, shorter format. In addition, new features were introduced, such as plenary sessions on



M. Mahesh, PhD
Johns Hopkins University

You alone are enough.
You have nothing to prove to anybody!
— Dr. Maya Angelou

the first and last days, designated as the opening and closing sessions. These aptly served as bookends to the meeting, with the Presidential Symposium remaining on Monday at its usual time. The two new plenary sessions addressed Artificial Intelligence (AI) on the opening day and Theranostics on the final day. Both sessions were well received, and I am pleased that the plenary format introduced last year continued this year; I hope it will become a permanent feature of the Annual Meeting.

The theme of the 2025 Annual Meeting, *"Coming Together to Forge Ahead in Medical Physics,"* was chosen to emphasize that we, the members of AAPM, irrespective of specialization, must come together to address emerging



topics. In this regard, the Education Council's effort to form a curriculum committee, which began developing a curriculum for AI with members from all five councils, is commendable. The committee worked on a fast track, and its AI curriculum report is in the final stages of acceptance. By removing "silos," we can address emerging topics efficiently and in a timely manner. There are already plans to develop similar curricula for theranostics and other emerging topics.

Another key initiative during my presidential year was the strengthening of advocacy efforts. In this regard, the invited speakers at the presidential session titled "Science and Advocacy" highlighted the importance of advocacy in strengthening and fostering science. For the first time, we held a "Capitol Hill Day" after the Annual Meeting. After undergoing advocacy training, attendees walked the halls of the US Congress and met with their elected representatives to discuss several key issues related to medical physics. (Read about the Capitol Hill Day visit here.) The Government and Regulatory Affairs Committee (GRAC), whose main objective is to advise AAPM on legislative and regulatory issues, has been very active these past two years and was recently elevated to a committee of the Board.

During my tenure on the presidential chain, we also spent considerable time planning the ***"AAPM Summit: Empowering Medicine Through Physics,"*** held earlier this year. The key points that emerged from the summit are now guiding us as we develop action plans.

Change is Always Around the Corner

I was expecting a quieter period after the Annual Meeting this year and thought I would have more time to reflect during my last few months as Board Chair. That changed when the Executive Director, David Gammel, resigned to join another organization. EXCOM had to step up and devote considerable time to keeping the organization running smoothly, aided by our dedicated staff and volunteers. In a short time, thanks to the headquarters staff, we were able to appoint an Interim Director, **Robert McKoy**, and establish a search committee to find the next Executive Director, while also monitoring several key projects, including the search for a new Director of the Medical Physics Institute.

These past three years have been both interesting and challenging. Angela Keyser, with whom I had worked closely as Treasurer, retired, and the new Executive Director, David Gammel, started his tenure at the same time that I stepped up as President-Elect; we have now also had to set up the process for selecting a new Executive Director. I have been amazed to witness the commitment and dedication of my fellow officers, who worked with the staff and the Board to ensure the smooth operation of AAPM without interruption.

As many of you know, we recently lost a giant of our field, **Dr. William R. Hendee**. I had the opportunity to represent AAPM at the memorial service organized by his family. Dr. Hendee's contributions are too numerous to list in this short column. He was widely recognized for them, not only by AAPM (the William D. Coolidge Gold Medal Award) but also by the American College of Radiology (ACR) and the Radiological Society of North America (RSNA), each of which awarded him its highest honor, the Gold Medal. Personally, I am very grateful for his guidance and advice at crucial times during my professional journey in medical physics, especially during my graduate school years.

What is Next?

As I rotate off the presidential chain at AAPM, I look forward to continuing to pursue my passion for advocating for medical physics, connecting medical physicists with

physician organizations, and elevating the role of medical physics in healthcare. For this, I have found a broader platform. I was recently elected to serve as vice president of the International Organization for Medical Physics (IOMP), after which I will step up to lead the IOMP as its president. IOMP currently serves nearly 30,000 medical physicists around the world, including nearly 10,000 members of AAPM. It has a unique position from which to engage with global organizations such as the World Health Organization (WHO), the United Nations (UN), the International Atomic Energy Agency (IAEA), and several others to strengthen the role of medical physics and medical physicists worldwide.

Closing remarks

I am very proud of the strength of AAPM, which is primarily due to the remarkable contributions of our volunteer members and the dedication of the Board members, officers, and headquarters staff. The enthusiasm and dedication of our volunteers are the true backbone of AAPM. We should also be proud that AAPM Task Group reports and Medical Physics Practice Guidelines (MPPGs) are **free to access** by anyone, which has helped shape medical physics practice not only in the United States but worldwide.

I am very thankful to AAPM for the opportunities and challenges that enabled me to learn new things and, in turn, enriched my life both professionally and socially. I would also like to thank my fellow EXCM members, with whom I have spent a considerable amount of time over the years, and wish the officers-designate very productive years in their leadership roles. Finally, I would like to sincerely thank my wife and children for their patience and support all these years in allowing me to take on these activities.

I would like to end my final column by sharing the following. When the world constantly asks us to "do more, be more, and prove more," the quote below is a helpful reminder: "You do not have to prove your existence to deserve peace, love, or belonging!" ■

You alone are enough.
You have nothing to prove to anybody!

— Dr. Maya Angelou

RAD formation

RadMachine

Starting machine QA from scratch builds character.

We'd rather see you leave work on time.

With RadMachine Template Manager, you can configure your core linac QA in a single working session.

1. Select your protocol
2. Define your equipment
3. Watch your workflow deploy

Your spreadsheets will understand. Your dinner plans will thank you.

Ready to call it a day?

Learn More About RadMachine Template Manager →

Stability Through Partnership: A Message from the Interim Executive Director

INTERIM EXECUTIVE DIRECTOR'S REPORT

It is with real excitement and a deep sense of responsibility that I step into the role of Interim Executive Director of AAPM. This Association has meant a great deal to me, and the chance to help guide it through this important chapter is one I do not take lightly.

Transitions invite reflection. They also invite momentum. My goal in the months ahead is to make sure we use this moment well: to steady what needs steadying, to finish what we have started, and to position AAPM for the future our members deserve.

Taking the Reins

My first priority is stabilization. Any organization in transition needs a steady hand, clear communication, and confidence that the fundamentals are sound. That work cannot happen alone.

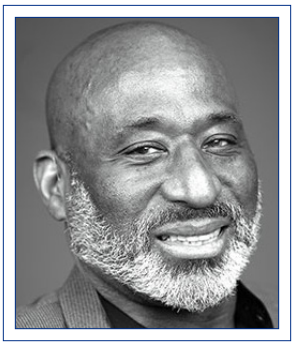
I am grateful for the strong partnership of the Executive Committee and the Board of Directors. Their guidance, candor, and commitment to AAPM's mission will shape every major decision we make. I intend to work closely with them, keep them well informed, and make sure that leadership and staff are moving in the same direction.

I also want to be candid: while I bring a strong foundation in finance/association leadership, I am still deepening my understanding of the inner workings of many of our committees. I am committed to closing that gap quickly, working collaboratively with staff and volunteer leadership.

Rebuilding Our Technology Foundation

For some time now, we have been working to stabilize a technology infrastructure that simply was not serving our members or our staff the way it should. Many of you have felt those frustrations firsthand, and I thank you for your patience. That work has been difficult, and much of it has happened behind the scenes.

I am pleased to say that we are now on the brink of something exciting. Over the next year, AAPM will launch several new platforms designed to transform how members engage with the association, from the website to how you access resources and education to how you connect with one another. These are not cosmetic upgrades. They are the foundation for a more modern, responsive, and member-centered AAPM, and I look forward to sharing more details as each launch approaches.



Robert A. McKoy, CPA, CGMA, CITP
Interim Executive Director, AAPM

A Season for Growth

What excites me most is the opportunity for growth and expansion. Over the past fifteen years, AAPM's growth has lagged that of many other not-for-profits. That reflects no shortcoming in anyone's effort. Rather, it tells us we have potential we have not yet fully realized.

With a stronger operational and technology foundation in place, we will be better positioned to pursue new opportunities: expanding our reach, deepening the value of membership, and finding new ways to serve the medical physics community. I believe the opportunities before us are significant, and I am eager to explore them with our leadership and members.

Together

Finally, I want to say thank you. The support I have received from our staff and from our membership since stepping into this role has been overwhelming. The notes of encouragement, the offers to help, and the dedication I see every day remind me exactly why this work matters.

They also remind me why everything I have described here is achievable. Stabilizing our operations, launching new platforms, and growing our association are ambitious goals. But they are well within reach for a community as talented and committed as ours.

I look forward to the work ahead, and to doing it together.

With gratitude,

Robert McKoy
Interim Executive Director, AAPM

AAPM Weighs in on Major NRC Radiation Protection and Medical Use Proposals

GOVERNMENT AND REGULATORY AFFAIRS COMMITTEE REPORT

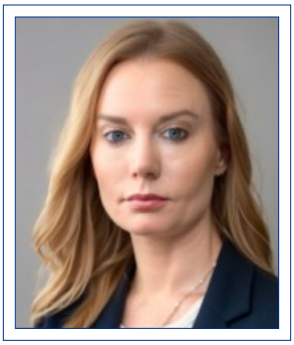
This summer, the U.S. Nuclear Regulatory Commission (NRC) undertook a significant review of its radiation protection and medical-use regulations. The result was an unusually concentrated period of regulatory activity for AAPM, with three proposals directly affecting medical physicists, radiation safety programs, medical-use licensees, and patients. AAPM submitted formal comments on changes to the NRC's radiation protection framework, medical-use licensing requirements, and patient-release guidance. Across all three proceedings, AAPM supported modernization and reduction of unnecessary regulatory burden where appropriate, while emphasizing that revised requirements must remain technically sound, clinically workable, and protective of patients, workers, caregivers, and the public.

Modernizing the Radiation Protection Framework

AAPM submitted comments on the NRC's proposed Reforming and Modernizing the NRC's Radiation Protection Framework, which includes significant revisions affecting 10 CFR Part 20. The American Physical Society joined AAPM's final submission as a co-signatory. One of the most consequential proposals would replace the subjective implementation of the NRC's "as low as is reasonably achievable," or ALARA, regulatory expectations with a clearer graded approach to dose management. Under a graded framework, the level of regulatory attention and protective measures would more closely reflect the magnitude of the potential dose and risk, with additional measures applied as exposure increases.

AAPM supported this change because ALARA can be interpreted differently across facilities and inspections. In medical-use settings, those differences can create inconsistent expectations and lead institutions to devote substantial personnel time and resources to achieving very small additional dose reductions that may provide little corresponding safety benefit. A more objective, risk-informed framework could focus regulatory attention where it has the greatest impact while maintaining robust radiation protection.

AAPM stressed, however, that the change should not be understood as eliminating radiation protection or existing good practices. Occupational and public dose limits, monitoring, shielding, contamination control, training, surveys, patient release, caregiver instruction, and radiation safety oversight would remain essential. AAPM urged the NRC to allow licensees to retain effective ALARA-based programs, internal investigation levels, institutional dose constraints, and other protective practices that are consistent with the revised regulations. Voluntary precautions below regulatory thresholds should remain permissible without automatically becoming enforceable requirements for every licensee. ASTRO filed comments supporting AAPM's position on the Part 20 proposal and included AAPM's comments with its submission, adding broader support for AAPM's recommendations.



Lauren DePutter
AAPM Director of Government Affairs and External Relations

TAKE ACTION

Ask Congress to protect NIST funding, strengthen the Radiation Physics Division, prioritize staffing and capacity for medical radiation measurement programs, and support the American Innovation Act, H.R. 2628 and S. 1276.

Reducing Barriers to Medical Use Licensing

AAPM commented on the NRC's proposed Reducing Barriers to Medical Use Licensing rule, which would revise 10 CFR Part 35 governing the medical use of byproduct material. The proposal included changes intended to make medical-use licensing more risk-informed, performance-based, and technology-neutral, including revisions to training and experience requirements, authorized-user pathways, therapeutic equipment requirements, decay-in-storage, medical-event reporting, and technologies currently regulated through the NRC's §35.1000 pathway. AAPM supported many of the modernization goals but stressed that regulatory flexibility must be accompanied by clear competency and quality expectations.

For training and experience requirements, AAPM supported reducing duplicative hour-based requirements where accredited residency education and supervised clinical training already establish competency. However, AAPM recommended retaining objective procedure-specific clinical experience when completion of a residency alone does not demonstrate competency for a particular medical use. AAPM emphasized the distinct role of the Authorized Medical Physicist, a role specifically defined in the NRC's Part 35 framework. Regulatory streamlining should not blur professional responsibilities or weaken requirements for the physics expertise necessary to safely commission, calibrate, and oversee therapeutic technologies.

Patient Release Guidance Raises Significant Concerns

AAPM's third submission addressed Draft Regulatory Guide DG-8070, the NRC's proposed Revision 2 to Regulatory Guide 8.39 on the release of patients administered radioactive material. AAPM supports updating patient-release guidance to reflect the rapid expansion of radiopharmaceutical therapy and the growing use of multi-treatment regimens. However, after extensive technical review, AAPM concluded that DG-8070 as drafted would not provide a workable framework for routine clinical implementation. AAPM reviewers identified concerns with the complexity of the proposed prospective calculation methodology, the number of patient-specific calculations that could be required, assumptions that may not reflect current clinical practice, and technical and numerical inconsistencies.

AAPM recommended that the NRC withdraw DG-8070 in its current form and develop a revised draft based on the established patient-release framework, updated with current evidence and practical experience from contemporary radiopharmaceutical therapy. The comments addressed how the guidance would operate in real-world situations involving multi-cycle therapies, caregivers, changing treatment schedules, nursing-home and home-health settings, dialysis patients, breastfeeding, public transportation, and patient-generated radioactive waste.

ASTRO filed comments supporting AAPM's recommendations on DG-8070 and included AAPM's comments with its submission.

Taking the Conversation to Agreement State Regulators

AAPM's NRC engagement extended beyond written comments. At the 2026 Organization of Agreement States Annual Meeting in Nashville, AAPM representatives engaged directly with state radiation-control officials and other participants in the National Materials Program.

Matt Wait, MS, DABR, DABSNM, a member of AAPM's Government and Regulatory Affairs Committee (GRAC), represented AAPM with a presentation titled "The Role of Medical Physicists in the Regulatory and Safety Inspection Process." The presentation highlighted AAPM Medical Physics Practice Guidelines, the State Champions program, and AAPM's ongoing regulatory work, including its responses to the Part 20 and Part 35 proposals.



Matt Wait, MS, DABR, DABSNM, presents "The Role of Medical Physicists in the Regulatory and Safety Inspection Process" at the 2026 Organization of Agreement States Annual Meeting in Nashville.

AAPM displayed a digital poster, "The American Association of Physicists in Medicine (AAPM) State Champions: Partners in Medical Radiation Safety and Regulation," highlighting the role State Champions can play in supporting medical radiation safety and regulatory engagement. **Lana Critchfield, PhD**, Vice Chair of the AAPM State Champions, attended on behalf of AAPM and helped represent the Association's state advocacy efforts, including by distributing educational materials and continuing to build relationships with regulators and OAS. The meeting was particularly timely because Agreement States play a central role in implementing radioactive-material regulations at the state level. The meeting generated positive feedback and additional opportunities for continued collaboration with state regulators.

What Happens Next

AAPM will continue monitoring these proceedings and engaging with both the NRC and Agreement State regulators as the proposals move forward. The NRC's broader regulatory modernization effort under Executive Order 14300 remains active.

For medical physicists, these proceedings demonstrate why engagement in the regulatory process matters. Requirements involving radiation protection, licensing, patient release, quality assurance, and professional qualifications ultimately must function in real clinical environments. AAPM's role is to ensure that regulatory modernization benefits from the technical expertise and clinical experience of the medical physics community while maintaining a strong foundation for safe patient care. ■

AMERICAN ASSOCIATION of PHYSICISTS IN MEDICINE

AAPM CAREER CENTER



POST YOUR RESUME

APPLY FOR JOBS

GET JOB ALERTS

GET STARTED!

Find your future at aapm.org/careers

AAPM Provides Comments to CMS on 2027 Medicare Proposed Rules

HEALTH POLICY AND ECONOMICS ISSUES REPORT

Hospital Outpatient Payment System: AAPM submitted comments to the Centers for Medicare and Medicaid Services (CMS) regarding the 2027 Hospital Outpatient Prospective Payment System (HOPPS) proposed rule on August 31, 2026.

Radiation Treatment Delivery Code 77407

CMS implemented revised Radiation Treatment Delivery codes 77402, 77407, and 77412 effective January 1, 2026 to establish a family of codes that does not differentiate between IMRT and 2D/3D. These revised codes include (bundle) image guidance and active motion management, when performed. CMS deleted intensity modulated radiation therapy (IMRT) treatment delivery codes 77385 simple and 77386 complex; and 77014 CT guidance for placement of radiation fields, which were consolidated in the revised Radiation Treatment Delivery code family. Although the CPT code numbers are the same for the remaining three CPT codes in the new Radiation Treatment Delivery family, they represent completely different sets of services.

CMS proposed to maintain the current ambulatory payment classification (APC) assignments for the revised Radiation Treatment Delivery codes 77402, 77407, and 77412 effective January 1, 2027 (see table below). The AAPM recommended that CPT 77407 (Radiation treatment delivery; Level 2) should be reassigned to APC 5623 *Level 3 Radiation Therapy*, as the current APC assignment does not adequately reflect the complexity or resource use of this service. The AAPM provided this recommendation in our September 11, 2025 comment letter to CMS regarding the 2026 HOPPS proposed rule and we reiterated this recommendation for reassignment to APC 5623 effective January 1, 2027.

CPT Code	CMS 2026 APC Assignment	AAPM Recommended 2027 APC Assignment
77402 Radiation treatment delivery; Level 1 (eg, single-electron field, multiple-electron fields, single isocenter 2D photons), including imaging guidance, when performed	5621	5621
77407 Radiation treatment delivery; Level 2, single-isocenter (eg, 3D or IMRT), photons, including imaging guidance, when performed	5622	**5623**
77412 Radiation treatment delivery; Level 3, multiple isocenters with photon therapy (eg, 2D, 3D, or IMRT) or a single isocenter photon therapy (eg, 3D or IMRT) with active motion management, or total skin electrons, or mixed-electron/photon field(s), including imaging guidance, when performed	5623	5623

CPT code 77407 (Radiation treatment delivery; Level 2) now describes radiation treatment delivery using a single isocenter photon technique, including imaging guidance when performed. The AAPM continues to support assigning 77407 to APC 5623 because deleted IMRT codes 77385 and 77386



Wendy Smith Fuss, MPH
Health Policy Solutions

AAPM's comment letters to CMS may be viewed at: AAPM Government Affairs - CMS - CY 2027 Health Policy Update

described services that are more closely aligned with the resources now reflected in the revised Radiation Treatment Delivery code family. Both IMRT codes 77385 and 77386 were previously assigned to APC 5623 *Level 3 Radiation Therapy*.

AAPM commented that maintaining CPT code 77407 in APC 5622 significantly undervalues a service that now accounts for a substantial portion of external beam radiation treatment delivery. Under the revised coding framework, code selection is driven by clinical complexity and patient characteristics rather than delivery method alone. Because IMRT complexity varies widely based on treatment site, target volume, differential dosing, and delivery technique, assigning 77407 to APC 5622 creates a major payment disparity that fails to reflect the actual resource intensity and clinical demands of these services.

HOPPS APC assignments also carry consequences beyond the hospital outpatient setting. Because CMS now uses the relative weight relationships among APCs 5621, 5622, and 5623 to establish Medicare Physician Fee Schedule (MPFS) practice expense valuations for CPT codes 77402, 77407, and 77412, misclassifying 77407 creates a cascading effect. An inaccurate APC assignment not only distorts hospital outpatient reimbursement but also undervalues practice expenses for radiation treatment delivery in freestanding cancer centers.

Site Neutral Payment for Imaging Without Contrast

For CY 2027, CMS proposed to use the agency's authority to apply the Physician Fee Schedule equivalent payment rate for any codes assigned to the imaging without contrast APCs when provided at an off-campus provider-based department (PBD) excepted the Bipartisan Budget Act of 2015.

The proposed 2027 volume control methodology applies to:

- APC 5521 *Level 1 Imaging Without Contrast*
- APC 5522 *Level 2 Imaging Without Contrast*
- APC 5523 *Level 3 Imaging Without Contrast*
- APC 5524 *Level 4 Imaging Without Contrast*
- APC 8004 *Ultrasound Composite*
- APC 8005 *CT and CTA Without Contrast Composite*
- APC 8007 *MRI and MRA Without Contrast Composite*

AAPM commented that we do not believe CMS demonstrated that payment differentials between hospital outpatient departments and physician offices are the primary driver of imaging utilization growth. We also stated that there are long-standing concerns regarding charge compression and the accuracy of CT and MRI cost reporting. The AAPM urges CMS to reconsider the proposal until a more comprehensive analysis of the impacts can be conducted.

Further, the AAPM is concerned that several key preventive imaging services (i.e., CT colonography, lung cancer screening CT, abdominal aortic aneurysm (AAA) screenings, and DXA bone density tests) are currently assigned to the imaging without contrast APCs affected by this proposal. Applying a Physician Fee Schedule equivalent payment rate to these services risks creating unintended consequences for beneficiary access to recommended screening examinations.

The CMS proposed methodology assumes that the Physician Fee Schedule-equivalent rate accurately reflects the resources required to furnish imaging services in hospital outpatient departments. If CMS finalizes this policy, the AAPM urges the Agency to establish a payment floor to ensure that HOPPS payment for these services does not fall below the corresponding Medicare Physician Fee Schedule technical component rate.

Diagnostic Radiopharmaceuticals

The AAPM supports replacing the Mean Unit Cost (MUC) with Average Sales Price (ASP) for diagnostic radiopharmaceutical reimbursement to ensure accurate, market-reflective pricing. The current MUC methodology is based on hospital claims and cost to charge ratios that are outdated and often misrepresent true acquisition costs. ASP is updated quarterly, is product specific, and reflects actual manufacturer-reported acquisition costs.

Medicare Physician Fee Schedule: The AAPM submitted comments to CMS regarding the 2027 Medicare Physician Fee Schedule (MPFS) proposed rule on September 10, 2026.

In response to our CMS comments regarding the 2027 hospital outpatient proposed rule (see above), the AAPM recommended that CPT 77407 (Radiation treatment delivery; Level 2, single-isocenter (eg, 3D or IMRT), photons, including imaging guidance, when performed) be reassigned to APC 5623 *Level 3 Radiation Therapy*.

In addition, CMS proposed to recalibrate the relative value units (RVUs) for radiation treatment delivery codes 77402, 77407, and 77412 based on actual 2026 utilization data. In the CY 2026 MPFS rule, CMS valued these codes based on the relationship between the HOPPS APC relative weights and assumed that 35% of services would be reported with CPT 77412 and 55% with CPT 77407. However, CMS reviewed the first three months of 2026 claims data and found that CPT 77412 accounted for only about 18% of total volume. AAPM supports CMS' proposal to recalibrate RVUs assigned to CPT codes 77402, 77407, and 77412 using actual CY 2026 utilization data. Using actual claims data is a more accurate and transparent approach.

Proton Beam Treatment Delivery

Payment amounts for Proton Beam Treatment Delivery services described by CPT codes 77520 (Proton treatment delivery; simple, without compensation), 77522 (Proton treatment delivery; simple, with compensation), 77523 (Proton treatment delivery; intermediate), and 77525 (Proton treatment delivery; complex) are currently determined by local Medicare Administrative Contractors (MACs). CMS notes that contractor pricing has resulted in substantial geographic variation in payment rates, with 2024 payments for CPT 77525 ranging from approximately $122 to $1,374, raising concerns about payment consistency. CMS has not previously established RVUs for these services due to the unique nature of the equipment costs associated with these services compared to other capital costs addressed by the usual practice expense methodology.

Effective January 1, 2027, CMS proposed to establish national payment rates for Proton Beam Treatment Delivery services with a methodology like the one adopted for radiation treatment delivery services in 2026. CMS proposed to allocate practice expense RVUs to the individual services using the relationship between the APC relative weights for APCs 5625 *Level 5 Radiation Therapy* (to which CPT codes 77522, 77523, and 77525 are assigned) and APC 5623 *Level 3 Radiation Therapy* (to which CPT code 77520 is assigned) under the HOPPS.

The AAPM appreciates CMS' recognition that Proton Beam Treatment Delivery services require capital-intensive and highly specialized resources that are difficult to value accurately under the standard MPFS practice expense methodology. However, we are concerned that CMS has not yet provided sufficient transparency or methodological detail to allow stakeholders to determine whether the proposed CY 2027 national rates would accurately reflect the reasonable costs of furnishing proton beam therapy. The AAPM recommended that CMS not finalize the proposed national payment methodology for Proton Beam Treatment Delivery codes 77520, 77522, 77523, and 77525 and maintain local MAC carrier pricing in 2027.

Indirect Practice Expense

As part of reforming the way practice expense RVUs are assigned to specific services, CMS proposed to reduce reliance on outdated specialty-specific practice expense per hour (PE/HR) data. Specifically, CMS proposed to remove the Indirect Practice Cost Index (IPCI) adjustment entirely (implemented over a two-year transition period), meaning indirect practice expense RVUs would be based directly on the code-level methodology without the final specialty-level rescaling step. While CMS notes that the IPCI is based on older data, it remains the only tool that adjusts for the substantial variation in overhead costs among specialties. AAPM recognizes CMS' concerns regarding reliance on outdated specialty-level data and agrees that the practice expense methodology should be informed by current and reliable information. However, eliminating an outdated data component is not necessarily the same as replacing it with more accurate data.

The AAPM recommended that CMS withdraw or delay the removal of the Indirect Practice Cost Index until new, validated specialty specific indirect cost data are available. If CMS proceeds with the proposal to remove the IPCI adjustment, it should be implemented over a four-year transition period. ■



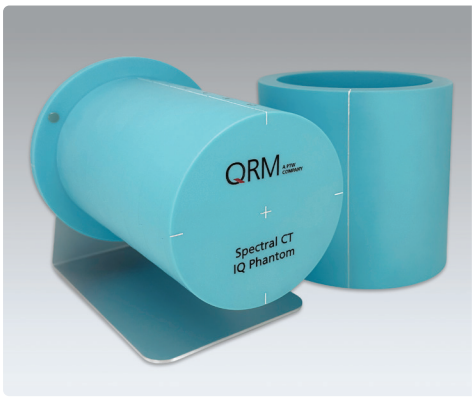
Spectral CT IQ Phantom

A New Benchmark for Spectral Imaging QA

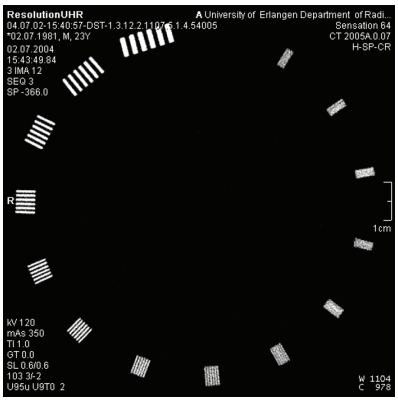
Evaluate spectral imaging performance across CT, PCCT, CBCT and radiation therapy platforms.

- Advanced evaluation of conventional and spectral image quality metrics
- Universal compatibility across modern imaging platforms
- Modular and future-ready design
- Compatible with IEC 63483, IEC 61223-3-5 and AAPM TG-299 recommendations

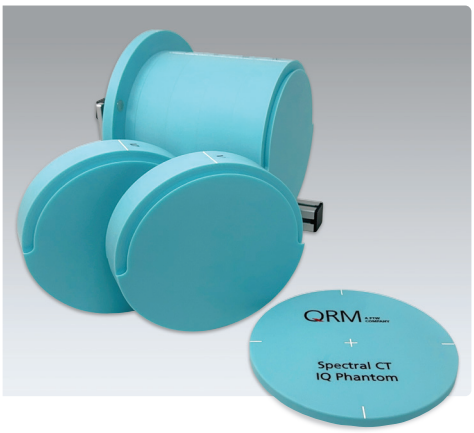
How well do you know your spectral imaging performance?



Energy-invariant design



Fine structures from
4 to 50 lp/cm



16 cm | 20 cm | 32 cm

qrm.de

QRM A PTW COMPANY

ACR Accreditation & More: Info for Medical Physicists

UPDATES FROM ACR HQ

Do You Know Your Options When an ACR Accreditation Submission Fails?

A failed accreditation submission does not automatically require starting over. Depending on the circumstances, facilities may choose to pursue an appeal, request supplemental review, repeat deficient portions of the submission, or enter a reinstatement process with documented corrective action. Appeals are typically for cases where the facility disagrees with the reviewers' assessment, and supplemental reviews are appropriate when required images, data, or documentation were inadvertently omitted from the original submission. Repeats allow facilities to demonstrate improvement through new testing, and reinstatement provides a structured pathway for addressing more significant deficiencies before re-entering the accreditation process.

Medical physicists play a critical role in helping facilities choose the appropriate pathway. Beyond interpreting reviewer comments, physicists can determine whether deficiencies stem from equipment performance, suboptimal or unintended image acquisition or reconstruction parameters, or submission errors, and can help develop and verify corrective action before resubmission. Understanding the available options and acting quickly is important, as facilities only have 15 days to select and initiate their course of action.

Read more about options after a failure here (non-mammography modalities) and here (mammography).

ACR Pulse users have can view real time statuses of all accreditation and registry touchpoints across their entire enterprise.

New: Scanxiety Toolkit for Patients

ACR's Patient- and Family-Centered Care initiative recently published a Scanxiety Toolkit for patients. The toolkit includes educational materials that explain scanxiety, practical coping strategies for patients and caregivers, discussion guides, and resources that imaging practices can use to improve the patient experience before, during, and after imaging exams. I encourage medical physicists to share these materials with their clients, institutional imaging leaders, and/or patient experience teams. While scanxiety is often discussed in the context of the imaging exam itself, operational and practice decisions around scheduling, workflows, exam delays, turnaround times, etc., can be contributing factors to scanxiety. Hopefully the ACR Scanxiety Toolkit can serve as a useful tool for improving patient-centered care.



Dustin A. Gress, MS
Senior Advisor for Medical Physics
ACR Quality and Safety, Reston, VA

In each issue of this newsletter, I present information of particular importance or relevance for medical physicists. You may also check out the ACR's accreditation support page for more accreditation information and QC forms. **Thank You** to all the other staff that keep ACR programs running and assist with creating the content in this column. This page has forms and quick links for all ACR accreditation programs.

Expansion of Modules in CT Accreditation Program

To better serve diverse clinical environments, the ACR CT Accreditation program now includes several new modules including Musculoskeletal (MSK), Spine and Calcium Scoring for adult exams and MSK and Spine for pediatric. Soft Tissue Neck is a new exam option for adult and pediatric head/neck modules. Every unit that performs diagnostic head/neck, chest, abdomen, spine, MSK, cardiac or calcium score examinations must go through testing for the site to be accredited. Every unit (including hybrid CT units) must apply for all modules performed on that unit for a facility to be accredited. Please note that if a unit performs dual diagnostic functions, (e.g., SPECT/CT unit that performs both diagnostic NM and diagnostic CT exams) and the site chooses to be accredited in both modalities, then the unit will need to be accredited in both modalities separately. Learn more here.

Flexibility in Clinical Exam Selection for Accreditation

To provide greater flexibility in accreditation clinical exam selection—especially for sites imaging pediatric patients — the CT, MRI and Ultrasound accreditation requirements now accept pathology, provided it doesn't detract from overall image quality. If you have questions, contact the ACR Accreditation Support Team.

Backlog of CT Phantom Orders

ACR is aware that there is currently a backlog in fulfilling CT phantom orders. The phantom manufacturer is working to resolve the current backlog and ACR is working with them to avoid such backlogs in the future. Please note that ACR is not prepared to accept alternative phantoms for accreditation submissions at this time. During the current backlog, ACR recommends that medical physicists consider using alternative phantoms, including CT manufacturer-provided phantoms, for annual medical physics surveys. Please submit a support ticket with questions or concerns on any upcoming ACR CT submission. By the time this AAPM Newsletter is published, I expect that ACR and the manufacturer will have additional information published on social media or through other official channels. ■

AMERICAN ASSOCIATION of PHYSICISTS IN MEDICINE

AI PRACTICE WATCH

RADIOLOGY | RADIATION ONCOLOGY | MEDICAL PHYSICS

AAPM DATA SCIENCE • COMMITTEE SMART BRIEFS • JULY 1–SEPTEMBER 2, 2026

Each cycle we present news relating to clinical AI use across radiology, radiation oncology, nuclear medicine, and medical physics. This issue spans practice parameters and society positions, international guidance, post-deployment monitoring, organizational governance, the regulatory landscape, and real-world evaluation in the clinic. This brief is curated using agentic workflows. Please read the footnote and disclaimer for further information.

FDA Seeks Public Feedback to Inform Regulatory Approach for Generative AI-Enabled Medical Devices

US Food and Drug Administration · August 18, 2026
The FDA issued a discussion paper on regulating generative AI-enabled medical devices and opened a public docket for feedback on risk assessment, premarket evaluation and postmarket monitoring; it also covers agentic AI and foundation models. Comments are due October 19, 2026, under docket FDA-2026-N-7874.
DOCUMENT TYPE: Discussion paper and request for comment · TOPIC: FDA Generative AI Devices

Artificial Intelligence for Radiation Protection in Medical Imaging and Radiotherapy: A Perspective From the AI Working Party of ICRP Committee 3

Physica Medica · July 25, 2026 · doi:10.1016/j.ejmp.2026.105906
A perspective from the AI Working Party of ICRP Committee 3 looks at how AI applications, both current and emerging, bear on justification and optimization in radiology (diagnostic and interventional), nuclear medicine and radiotherapy. It proposes a framework meant to inform future ICRP recommendations.
DOCUMENT TYPE: Working-party position · TOPIC: AI and Radiation Protection

Call to Action: Accelerating AI-Driven Transformation in Medical Imaging and the Broader Health Care System

Radiology · August 2026 · doi:10.1148/radiol.253974
A consensus statement by IS3R, the International Society for Strategic Studies in Radiology, reflecting agreement reached at its August 2025 Dublin meeting on how AI can help radiology meet rising imaging demand. It sets strategic direction in four areas: interpreting images, building capacity, governing data, and system-wide digital transformation.
DOCUMENT TYPE: International consensus · TOPIC: Radiology AI Strategy Consensus

Scaling AI-Enabled Imaging-Based Screening: Lessons From Reporting for the NHS England Lung Cancer Screening Programme

Clinical Radiology · July 10, 2026 · doi:10.1016/j.crad.2026.107429
Drawing on the NHS England Lung Cancer Screening Programme, the largest national low-dose CT screening implementation to date, this paper describes the technical and workforce architecture that supports reporting at scale: cloud-based imaging IT, a virtual national network of 180 thoracic radiologists, and integrated AI nodule detection that is monitored across the network for drift and for bias between populations. The program has issued over 2.5 million invitations, diagnosed 7,193 cancers and, over its first five years of evaluation, found 63.1 percent of them at stage I.
DOCUMENT TYPE: Review · TOPIC: National Lung Screening AI Reporting

Artificial Intelligence-Powered Radiotherapy for Resource-Limited Settings: Advancing Cervical and Prostate Cancer Treatment Planning With the Radiation Planning Assistant

JCO Global Oncology · July 9, 2026 · doi:10.1200/GO-25-00702
The web-based Radiation Planning Assistant was extended with deep-learning auto-contouring and knowledge-based planning for prostate and cervical cancer, aimed at resource-limited settings. In a retrospective validation on 50 test patients, 70 to 80 percent of target auto-contours and plans were judged clinically acceptable without edits.
DOCUMENT TYPE: Implementation report · TOPIC: AI Radiotherapy Planning

Scientific Evidence of Commercial Artificial Intelligence Products for Pulmonary Nodule Assessment on CT Scans: A Systematic Review

European Radiology · July 15, 2026 · doi:10.1007/s00330-026-12745-8
A systematic review of 95 studies published from 2012 to 2024 appraises the evidence behind CE-marked or FDA-cleared commercial AI products for pulmonary nodule assessment on CT. Studies were categorized with the RADAR efficacy framework: early work clustered at technical efficacy and diagnostic accuracy, and by 2024 over a third reached higher levels, while evidence on patient outcomes and cost-effectiveness remains limited.
DOCUMENT TYPE: Systematic review · TOPIC: Pulmonary Nodule AI

Artificial Intelligence-Supported Double Reading in European Population Breast Cancer Screening: A Systematic Review and Meta-Analysis of Prospective Programs

Clinical Imaging · August 11, 2026 · doi:10.1016/j.clinimag.2026.110923
This systematic review and meta-analysis pools three prospective, program-embedded evaluations of AI in European population breast screening (MASAI, ScreenTrustCAD and PRAIM), covering 597,419 examinations. Its exploratory program-level estimate is 0.9 more cancers detected per 1,000 examinations (95% CI -0.0 to +1.8) with no consistent increase in recall.
DOCUMENT TYPE: Meta-analysis · TOPIC: Breast Screening AI Double Reading

Image Quality in the Era of Artificial Intelligence: Understanding the Limitations of AI-Based Image Reconstruction and Postprocessing

Radiology: Artificial Intelligence · September 2, 2026 · doi:10.1148/ryai.260100
This report examines how AI-based reconstruction and postprocessing can make images look sharper while introducing new failure modes, widening the gap between perceived and actual diagnostic quality. It reviews image-quality assessment approaches, the regulatory framework for AI-enabled imaging devices, AI-specific failure modes, and mitigation strategies.
DOCUMENT TYPE: Review (FDA staff authors) · TOPIC: AI Image Quality Limitations

Generative AI, Foundation Models and Large Language Models in Radiation Therapy Physics: Clinical Applications, Challenges, and Future Directions

Medical Physics · August 6, 2026 · doi:10.1002/mp.70616
This scoping review surveys where generative AI, foundation models and large language models are entering radiation therapy physics, from processing and synthesizing images and automating routine tasks to supporting clinical decisions, streamlining clinical workflows and improving clinical-trial quality. It weighs the benefits against risks that include hallucination, limited interpretability and reproducibility, and data-privacy and regulatory-compliance concerns.
DOCUMENT TYPE: Scoping review · TOPIC: Generative AI Radiation Therapy Physics

Why Radiomics Rarely Reaches the Clinic: Reproducibility, Validation, and Evidence Gap: A Critical Narrative Review

Diagnostics · July 20, 2026 · doi:10.3390/diagnostics16142266
Tens of thousands of radiomics publications have produced almost no handcrafted signatures in routine use, and this review argues the cause is reproducibility and translation rather than algorithms. It describes seven fragility mechanisms, among them publication bias, analytical flexibility and misaligned incentives, and finds a literature with near-absent negative results and limited external validation, so the field generates paper-grade evidence far faster than decision-grade evidence.
DOCUMENT TYPE: Critical review · TOPIC: Radiomics Translation Gap

Ethical and Governance Challenges of AI in Medical Imaging and Diagnostics: A Systematic Survey and Policy Framework Recommendations

Healthcare · July 2, 2026 · doi:10.3390/healthcare14131975
A PRISMA-ScR-informed survey of 156 peer-reviewed, regulatory, policy and professional sources maps ethical and governance challenges across the imaging-AI lifecycle, from data acquisition through deployment and monitoring. It proposes a framework with five pillars: equity and mitigation of bias; transparency and explainability; oversight and accountability; infrastructure that preserves privacy; and regulatory alignment that adapts over time.
DOCUMENT TYPE: Systematic survey · TOPIC: AI Imaging Governance Framework

CURATORS This issue curated by Shengwen (Sean) Deng. Reviewed by Kristy K. Brock, Karen Drukker, Paul E. Kinahan, Douglas J. Moseley, Ying Xiao, and Joshua P. Yung.

AUTHORS AAPM Data Science Committee

DISCLAIMER The publications, news items, and external resources surfaced in this issue are provided strictly for informational and educational purposes. Inclusion of any item does not constitute endorsement, approval, recommendation, or adoption by the AAPM Data Science Committee (DSC), its curators, contributors, or any affiliated organization, of the positions, practices, methodologies, evidence, interpretations, or conclusions described therein. The materials linked or summarized here are the work product of their respective authors and publishers; readers should consult the original sources and exercise independent professional judgment before relying on any content. Nothing in this issue constitutes clinical, regulatory, legal, procurement, or financial advice, and the AAPM Data Science Committee and its curators expressly disclaim all liability for any direct or indirect consequences arising from the use of this information.

AAPM's First Land Acknowledgement at an Annual Meeting

EDIC – ANNUAL MEETING INDIGENOUS COMMUNITY OUTREACH (AMICO) WORKING GROUP REPORT

In the spirit of partnership that defined our joint AAPM | COMP meeting in Vancouver, we were honored to incorporate a land acknowledgement ceremony — a first for an AAPM Annual Meeting. This ceremony was the result of AAPM and COMP leadership coming together to identify ways to strategically and intentionally honor the people from the territories on which the meeting was held. Moving forward, AAPM HQ has established guidelines under MCC and EDIC for Land Acknowledgements at AAPM Meetings.

Recognizing the Indigenous peoples who have stewarded the lands where we gathered is a practice deeply valued by our COMP colleagues. Drawing on her roles as outgoing co-chair of the COMP Women's and EDI Committee (CWC-IDEA) and a member of AAPM's EDIC, **Meghan Koo, PhD**, spearheaded this initiative. She worked closely with our EDI counterparts at COMP to ensure the acknowledgement resonated with the meaningful tenor and impact that COMP participants have come to expect.

This ceremony was the result of AAPM and COMP leadership coming together to identify ways to strategically and intentionally honor the people from the territories on which the meeting was held. The proposed Annual Meeting Indigenous Community Outreach (AMICO) working group under AAPM's EDIC worked with AAPM President **Robin Miller, MS; Mariana Gallo**, Director of Meetings and Exhibits; **Robin Stern, PhD** and the rest of the AAPM Meeting Coordination Committee (MCC); and COMP's EDI Committee (CWC-IDEA) for months to create the event and establish relationships with the First Nations that participated. This process was supported fully by AAPM: President Miller committed part of her keynote address to providing time for a meaningful ceremony, and the meeting website had an inaugural land acknowledgement created in consultation and collaboration with COMP. The process was a learning experience for all the planning participants, and AAPM looks forward to future implementations of this experience.

During the Sunday keynote, we were welcomed to the traditional territories of the Skwxwú7mesh (Squamish), xʷməθkʷəy'əm (Musqueam), and səlilwətaɬ (Tsleil-Waututh) Nations by Knowledge Keeper Rebecca (Tsitsáyxemaat) Duncan from Squamish Nation and Elder Margaret George from Tsleil-Waututh Nation. Knowledge Keeper Rebecca led session attendees through a traditional song and dance to pay homage to the creatures from the forest (wolves), ocean (orcas and salmon), and sky (eagles). We were then led in prayer by Elder Margaret, and she spoke about our responsibility as health care workers in addressing the 94 calls to action from the Truth and Reconciliation Commission and urged us, as professionals gathering in Vancouver, to consider our own roles as stewards of the land.



Meghan Koo, PhD
University of California, Los Angeles



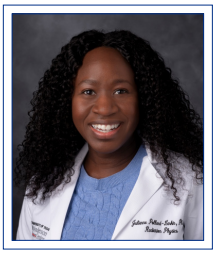
Alana Lopes, PhD
Verspeeten Family Cancer Centre



Samantha Lloyd, PhD
BC Cancer Kelowna



Patricia Baxter, MSc
Island Health



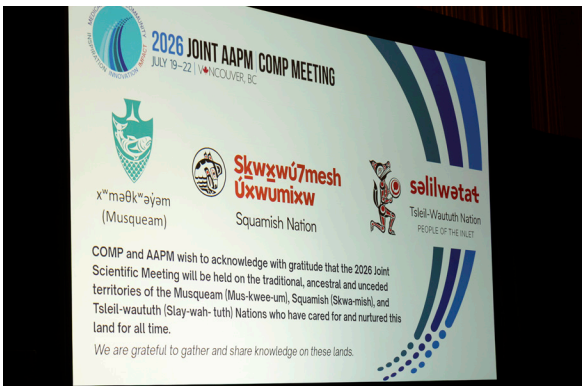
Julianne M. Pollard-Larkin, PhD
The University of Texas M.D. Anderson Cancer Center

EDIC – ANNUAL MEETING INDIGENOUS COMMUNITY OUTREACH (AMICO) WORKING GROUP REPORT , Cont.

This moving welcome transitioned directly into the Lunch & Learn, where conference attendees were invited to listen to and learn from Elder Margaret and Knowledge Keeper Rebecca through Indigenous storytelling. The session attendance exceeded expectations, as highlighted by attendees standing or sitting on the floor to hear about and reflect on the experiences living in the lower mainland (where Vancouver is situated). The reflections included several difficult-to-hear stories of medical trauma and racism experienced by the speakers' families. It was humbling to recognize that this is still a living memory.

Moving forward, AAPM HQ has established guidelines under MCC and EDIC for land acknowledgements at AAPM Meetings. As an organization, AAPM recognizes an obligation to acknowledge and show respect for the Indigenous peoples of the land on which its meetings are held. Land acknowledgements are an opportunity to honor history in a way that is genuine, location-specific, and consistent — not a box-checking exercise. These guidelines apply to all AAPM Annual Meetings and, as applicable, other AAPM-sponsored meetings and events. They are intended to give meeting staff, EDIC, and the President a shared framework so that the acknowledgement is handled with care and continuity year over year.

We are also establishing the Annual Meeting Indigenous Community Outreach (AMICO) working group under EDIC, and encourage AAPM members who are interested in this work to reach out and join. ■



AAPM-COMP 2026 Joint Meeting Land Acknowledgement



Knowledge Keeper Rebecca (Tsitsáyxemaat) Duncan from Squamish Nation



Elder Margaret George from Tsleil-Waututh Nation

Fun, Funk, and Fellowship at SGMSC's Annual Brunch

SEXUAL AND GENDER MINORITY SUBCOMMITTEE (SGMSC) REPORT

This year's 3rd annual SGMSC Brunch held during AAPM|COMP 2026 was the inaugural year for the SGMSC Brunch and Community Outreach Working Group (SGMSCBCO) team and highlighted local community partner the Community-Based Research Centre (CBRC).

On Monday, July 20, AAPM's Sexual and Gender Minority Subcommittee (SGMSC) hosted its third annual brunch during the 2026 Joint AAPM | COMP Annual Meeting in Vancouver, British Columbia.

SGMSC is an affinity group within the Equity, Diversity and Inclusion Committee (EDIC). Established in November 2021 and chaired by **Toni M. Roth, PhD**, and **Sunshine Osterman, PhD**, the subcommittee works to make medical physics more welcoming and equitable for LGBTQIA+ patients and professionals. It examines the challenges facing LGBTQIA+ physicists and trainees and shares resources that advance AAPM's broader diversity and inclusion efforts.

This year was the inaugural year for the SGMSC Brunch and Community Outreach Working Group (SGMSCBCO) team, who oversaw the planning of the annual meeting brunch. The working group, serving under the SGMSC, was formed to identify opportunities for community engagement and partnership to promote health equity and to build relationships with non-profit organizations aligned with the charges of SGMSC and AAPM's strategic mission through outreach events. The group's 11 members worked diligently to find a local community partner, locate a suitable venue and create swag and giveaways for the event.



FUNK Coffee Bar hosted the event and served a generous selection of drinks, unique pastries, and breakfast staples.

Committee Member **Charlotte Ferworn** opened the event, giving a brief introduction of the SGMSC, followed by Sunshine Osterman, who gave a primer on medical physics. Sunshine then introduced the event's Community Partner: the Community-Based Research Centre (CBRC).

Community Partners

When organizing their yearly brunch, the working group identifies community partners — organizations whose charges are aligned with the committee's



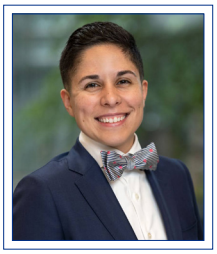
Glen Hawkins
AAPM Communications Manager



Charlotte Ferworn, BSc
Toronto Metropolitan University



K. Sunshine Osterman, PhD
Mount Sinai Health Systemr Kelowna



Toni Roth, PhD
Memorial Sloan Kettering Cancer Center



Sarah Aubert, PhD
Princess Margaret Cancer Centre



— in the city hosting AAPM's Annual Meeting. The Community-Based Research Centre (CBRC), our Vancouver partner, is a non-profit organization that works to improve the health of people of diverse sexualities and genders through research and development of community programs to meet identified needs. Founded in 1999, CBRC focuses on community-led research, sharing knowledge, building networks, and developing leaders, turning ideas into real-world action.



Michael Kwag and Ben Klassen present the Community Based Research Centre's research principles

Following CBRC's presentation, AAPM President **Robin Miller, MS, FAAPM**, and AAPM Secretary-Elect **Julie Pollard-Larkin, PhD, FAAPM**, gave brief remarks and thanked the committee for their ongoing work.

The event was fun and informative, and, as usual, soundtracked with an outstanding playlist, creating an easy environment for participants to share common challenges and needs, discuss how to better serve their patients, and enjoy spending time together. Your correspondent was and remains grateful to SGMSC for the opportunity to cover the event and join in the fun and fellowship.





AAPM Secretary-Elect Julie Pollard-Larkin, PhD, FAAPM (left), AAPM President Robin Miller, MS, FAAPM (right)

"It was awesome to be part of the newly formed SGMSCBCOWG this year!" said Charlotte Ferworn. "The SGMSC brunch is always one of my favorite AAPM events and, as a Canadian, to help organize the brunch for the AAPM and COMP joint meeting is extra special. A big shoutout to our (SGMSC) Chair and fearless leader, Toni Roth, for making this all possible." Special thanks to **Sarah Aubert**, the inaugural Chair of the SGMSCBCOWG for taking up the mantle and leading this important initiative.

Learn More and Participate

SGMSC's mission is grounded in a commitment to advancing equity for LGBTQIA+ patients and individuals in the medical physics community. Guided by its formal charge, the committee works to identify and address the unique needs of LGBTQIA+ physicists and trainees, raise awareness, and offer resources in support of broader Equity, Diversity, and Inclusion (EDI) efforts within the AAPM. They also actively collaborate with other underrepresented minority groups to foster intersectionality, support inclusive engagement across the organization, and increase representation and visibility through recruitment and mentorship efforts at various levels of training and education.

SEXUAL AND GENDER MINORITY SUBCOMMITTEE (SGMSC) REPORT , Cont.

Interested in getting involved? Check out the Committee Homepage and AAPM Committee Classifieds.

SGMSC also sponsors a merit-based award offered to medical physics students to support their attendance at the AAPM Annual Meeting. This grant can be awarded to all members of the AAPM and, at its core, celebrates medical physics students and trainees who actively promote a culture of respect, inclusion, and belonging within the field of medical physics. This year's grant was awarded to **Diana Carrasco Rojas**, a third year PhD student at MD Anderson, UT Health Houston. Her research is pivotal in the development of a head and neck credentialing phantom and a case review system for Imaging Radiation Oncology Core (IROC) which will help standardize adaptive radiotherapy in clinical trials across the country. In her own words, "by standardizing these complex treatments, we ensure that a patient's outcome depends on the quality of the science, not the resources of the specific clinic they happen to visit", a goal all of us at AAPM can get behind!

The newly formed SGMSC Travel Award Working Group (SGMSCTAWG), led by Sunshine Osterman (Chair) and **Michalis Aristophanous** (Vice Chair), facilitates the award adjudication process with the lovely AAPM staff member, **Nancy Vazquez**. Learn more about AAPM grants and fellowships here.

Message from the SGMSC Chair

There is a deep sense of pride that I feel for members of the SGMSC and the friends and colleagues who come to support the amazing initiatives of this group. Our mission has always been to provide a space where people can feel seen and know they can bring every aspect of themselves into the room and be celebrated for it. The community partners we have had the privilege to meet and learn from, have helped to set a foundation whereby AAPM can bridge the gap between medical physicists and the community that we work tirelessly to educate, recruit, and treat. Our organization's vision of improving health through medical physics begins and ends with our community. I am thrilled to be involved in the BCO WG and can't wait to see what the future will bring. Special thanks to all members past and present of the SGMSC. ■



Back row, L-R: Michael Kwag, Ben Klassen, David Gammel, Eric Ford; Front row, L to R: Sarah Aubert, M. Mahesh, Sonja Dieterich, Sunshine Osterman, Charlotte Ferworn, Angélica Pérez-Andújar, Julie Pollard-Larkin, Justin Stewart

Our Condolences

Arnold "Arnie" M. Able, MS • Frank A. DiBianca, PhD • Marlene H. P. McKetty, PhD
Surendra N. Rustgi, PhD • George Sgouros, PhD

Our deepest sympathies go out to the families. We will all feel the loss in the Medical Physics community.

If you have information on the passing of members, please inform HQ ASAP so that these members can be remembered appropriately. We respectfully request the notification via email to: 2026.aapm@aapm.org
(Please include supporting information so that we can take appropriate steps.)



2027 AAPM FUNDING OPPORTUNITIES





For regularly updated information on all AAPM funding opportunities, visit:

gaf.aapm.org

AMERICAN ASSOCIATION *of* PHYSICISTS IN MEDICINE

Special Interest Feature: Women's Professional Subcommittee

THE 2026 WOMEN PHYSICISTS LUNCHEON

Emily Draeger, PhD | Yale University

This year we celebrated the 15th anniversary of the Women Physicists Luncheon at the joint AAPM/COMP meeting in Vancouver, BC. The luncheon was held in a beautiful room in the Vancouver Convention Centre, with phenomenal views of Vancouver Harbour. Registration for this year's luncheon was capped at 300, and a waitlist was opened during meeting registration for those interested in attending the event. As the luncheon was getting started, many waitlist registrants were able to fill unclaimed seats.

The Women Physicists Luncheon is organized by the Luncheon Working Group, chaired by Sammie Hedrick. Sammie was unable to attend and introduce the luncheon this year, so another member of the luncheon working group, Sarah Aubert, started the event in her place. Sarah started by welcoming everyone to the luncheon and introducing the opening speakers, which included:

- Robin Miller, AAPM President
- Young Lee-Bartlett, COMP Representative
- Sandra Meyers, Women's Professional Subcommittee (WPSC) Chair

Robin Miller started by acknowledging past female presidents of the AAPM, the members of the Luncheon Working Group, and recognizing the newly elected women fellows. She talked about how the current



Emily Draeger, PhD

presidents of AAPM, COMP, and ASTRO are all women, which is a rare event and worth celebrating. She also spent some time talking about mentorship, a topic which she is very passionate about, and how women should work to lift each other up as they move into leadership positions in their careers.

Robin was followed by **Young Lee-Bartlett**, who spoke on behalf of COMP. She opened with a land acknowledgement and described the significance of these acknowledgements in Canada. She also welcomed everyone to Canada and gave some background on the COMP equivalent of the WPSC and women's luncheon that they hold.

Finally, **Sandra Meyers** welcomed everyone to her hometown of Vancouver and shared some of her favorite things about the area. This year was Sandra's first leading the luncheon as WPSC chair, and also marked the 15th anniversary of the luncheon, which was first hosted in Vancouver. Sandra also echoed Robin's statements about female leadership in AAPM and COMP and shared that the presidents of the Canadian and American certification bodies (CCPM and ABR) are also women this year — likely the first time that all four organizations (as well as the IOMP!) have been led by women at the same time. Sandra acknowledged our sponsors and the luncheon working group, and shared some other WPSC initiatives, including the Women Who Coffee and Curie (WWCC) and Edith Quimby's and



Current AAPM President Robin Miller (second from right), holding the Edith Quimby doll and posing with past AAPM women presidents and current IOMP President Eva Bezak (from left to right: Eva Bezak, Melissa Martin, Robin Miller, and Maryellen Giger). Photo courtesy of AAPM photographer Guy Raffee.

THE 2026 WOMEN PHYSICISTS LUNCHEON, Cont.

Sylvia Fedoruk's quests around the world.



Sandra Meyers, current Chair of the Women's Professional Subcommittee, giving her opening remarks at the luncheon. Photo courtesy of AAPM photographer Guy Raffee.

WWCC is a group that hosts virtual "coffee chats" to help foster support for female physicists at AAPM. Sessions are held via Zoom, and discussion topics range from burnout and imposter syndrome to motherhood and performance reviews. Anyone is welcome to join. The second initiative was started by the COMP Women's Committee and was originally planned for the 2020 Vancouver meeting, but was cut short due to COVID. The idea is to send dolls in the likeness of two pioneering medical physicists, AAPM's Edith Quimby and COMP's Sylvia Fedoruk, to clinics in their respective countries (and around the world) and share their journeys at the next meeting. This initiative has been restarted, and their journeys are underway and will be shared at next year's luncheon.

After the wonderful introductions by Robin, Young, and Sandra, Sarah introduced the theme and format for this year's luncheon. The theme was based on a book by Dava Sobel, which chronicles the life of Marie Curie through her collaborative legacy as a mentor to a large community of female researchers. A synopsis of the book was sent out to luncheon attendees prior to the event, and a list of discussion questions was distributed to tables for a moderated discussion. Questions included:

- Many of Curie's trainees succeeded without becoming famous. How do we measure "success" in mentorship beyond promotions and publications?
- Many of Curie's trainees entered science through nontraditional paths. What nontraditional pathways should we value more in medical physics?
- Curie rarely framed herself as exceptional, even when history clearly did. Do you see similar tendencies among women in medical physics today? What are the pros and cons of that mindset?
- Marie Curie was often the only woman in the room, even late in her career. When in your own career have you most felt like "the only one," and how did that shape your confidence or behavior?
- The book shows Curie persevering despite chronic illness. How does our field acknowledge (or fail to acknowledge) hidden burdens carried by colleagues?
- What support did you wish you'd had earlier, and how can it be provided more intentionally now?

Attendees had great discussions surrounding success, self-promotion, mentorship, and support. At my table, we discussed how to measure success in our mentees, and discussed metrics such as ensuring mentees have the support they need to reach their goals, helping mentees to define goals, and helping mentees find a career and field they enjoy. We discussed how many of us in medical physics have entered the field through nontraditional pathways, and how training in other fields helps bring fresh perspectives and new approaches to problem solving. We also discussed the importance of advocating for those from nontraditional pathways, as some may not see the value of those perspectives if they are focused on the more traditional pathways. We discussed how women tend to downplay their accomplishments, and how some women may struggle with getting into this field because they may not think certain items belong on their CV. Finally, we discussed the importance of support, and how it would be easier for many women to reach their career goals if there was more support (especially for childcare) from our departments and institutions.

The event closed out with attendees filtering out to various sessions. It was wonderful to catch up with old classmates, meet new people, and discuss the life and work of one of the pioneers of our field. All attendees received a bookmark from the luncheon working group, and a battery-operated fan from Sun Nuclear with a light-up message saying, "We're big fans of women in

THE 2026 WOMEN PHYSICISTS LUNCHEON, Cont.

physics." Special thanks to the luncheon working group for organizing this event, and our sponsors for making it possible. ■

Bronze sponsors:

- LAP
- American College of Radiology

Silver sponsors:

- Accuray
- RADformation
- PhantomLab
- TrueNorth Medical Physics
- RaySearch Laboratories
- Sun Nuclear

Gold sponsor:

- Siemens Healthineers



Luncheon attendees listening to Sandra's opening remarks. Photo courtesy of AAPM photographer Guy Raffee.

Special Interest Feature: Women's Professional Subcommittee

MAKING THE INVISIBLE VISIBLE: A CONVERSATION WITH ELLEN WILCOX, PHD

Mahsa Servati, PhD | MD Anderson Cancer Center

When I sat down with **Dr. Ellen Wilcox** to talk about her new memoir, *Physicist in the Cancer Center: My Role in a Medical Revolution*, I expected much of our conversation to be about technology. After all, Wilcox's career unfolded during one of the most transformative periods in radiation oncology, as radiation therapy moved from comparatively simple, manually calculated treatments toward the highly precise techniques we know today. The technology was certainly part of the story. But our conversation kept returning to people: patients, mentors, students, colleagues, women entering the profession, and the medical physicists whose work is essential to cancer care while remaining largely invisible to the people receiving it.

Perhaps fittingly, Wilcox did not grow up planning to become a medical physicist. "I had no idea medical physics existed," she told me. She had always been drawn to physics and at one point imagined astrophysics as a possible path. Life, however, had other considerations. She was married, had children, and the prospect of a career involving nights at observatories did not seem particularly compatible with the life she was building.

Her introduction to medical physics came through a far more personal route. A friend's sister developed cancer in her thirties, and Wilcox began trying to understand what was happening and how the disease was being treated. She went to the



Mahsa Servati, PhD

library, read, and, as physicists tend to do, kept asking questions. Eventually, those questions followed her into the radiotherapy department.

"We went with her to the radiotherapy department, and I asked lots of questions," Wilcox recalled. One of the radiation therapists finally told her, "You need to see our physicist." Her reaction was immediate: "What? There's a physicist here?!" When the physicist arrived, she asked him, "How did you get this job? What do I need to do? That's what I want to do!" She had found a field in which physics



could be used not only to understand the world, but to do something tangible for another person.

Wilcox completed her PhD in medical physics at the University of Alberta in 1984. What followed was a career that placed her in the middle of an extraordinary period in radiation oncology. The tools changed. Treatment planning changed. The ability to shape and calculate dose changed. Technologies that now feel fundamental to modern radiation therapy were, during her career, new problems that someone had to evaluate, commission, test, defend, and ultimately make safe enough to use on patients.

Listening to her describe those years, however, I was struck by how rarely she framed the story as one of individual achievement. Even when discussing programs she helped establish, or technologies she pushed to implement, the story quickly widened to include the physicists, physicians, students, administrators, and others who made them possible. That was especially apparent when we talked about mentorship.

"But you know what is the greatest pleasure, actually?" she told me. "To now see all of these young people I hired and trained, how successful they are." At the meeting where we spoke, she had been reconnecting with many of them. "I met so many of them, and, you know, 'What are you doing?' And so I am so proud of all of them." For

MAKING THE INVISIBLE VISIBLE: A CONVERSATION WITH ELLEN WILCOX, PHD, Cont.



someone whose memoir is subtitled My Role in a Medical Revolution, she seems remarkably uninterested in claiming the revolution for herself.

Our conversation also touched repeatedly on women in medical physics. Wilcox remembered interviewing highly capable women who did not always present their accomplishments as confidently as their qualifications warranted.

"When I was interviewing the women, they always were so humble, and they never bragged too much about their achievements," she said. "And so when I hired them, I was pleasantly surprised. They were a lot better than what they were saying." Her response was not to lower expectations, but to learn to recognize ability even when the person sitting across from her was reluctant to advertise it.

It is one of several places where her personal story intersects with a larger change in the profession. The radiation therapy world Wilcox entered in the 1980s was changing technologically, but the professional landscape was changing as well. Women were building careers, laboratories, clinical programs, and leadership roles in environments where doing so was not always routine.

Then, after a career spent in physics, Wilcox took on something rather different: learning how to write. There had always been storytelling somewhere in the family. Her father was an amateur poet, and he also made up stories for the children in the family. Still, Wilcox did not initially think of herself as a writer. Over time, encouragement from people close to her pushed her to take the idea more seriously. She attended writing workshops, took courses, and, during the pandemic, pursued creative-writing studies at Simon Fraser University. In other words, she approached writing rather like a physicist: she decided it was something she needed to learn, and then she learned it. The result is not intended only for medical physicists. In fact, some of the readers Wilcox seems most interested in reaching are people who may never have heard of us.

Cancer patients know their radiation oncologists. They see radiation therapists, nurses, and other members of their care team. They understandably form relationships with the people standing beside them during treatment. The physicist, meanwhile, may never enter the room. Wilcox spoke about that invisibility with a mixture of humor and frustration. Patients may thank the clinicians they see, while somewhere behind the treatment sits an enormous amount of work they never witness: calculations, measurements, commissioning, quality assurance, troubleshooting, and the responsibility of making sure that an extraordinarily powerful technology behaves exactly as intended. She illustrated it with something wonderfully ordinary: chocolates.

"I've written it mostly for the cancer patients and their families," she said. Patients undergoing radiation therapy develop relationships with the radiation therapists caring for them, she explained, and at the end of treatment they sometimes bring chocolates as signs of gratitude and recognition. "The therapists would leave the chocolates when they don't want to eat a whole box of chocolates, so they would leave the chocolates for the physicists who worked late at night," she said. "So we get the occasional chocolates." The story is fun and her point is a serious unmet topic: recognition for medical physicists. "What I am looking for is mostly, I need the patients and their families to recognize" the physicists whose work contributed to their care, she said, including "the physicist who's at the hospital right now and who is behind the scenes."

That is one of the reasons she wanted to write the book. She wants patients and families to understand more of

MAKING THE INVISIBLE VISIBLE: A CONVERSATION WITH ELLEN WILCOX, PHD, Cont.

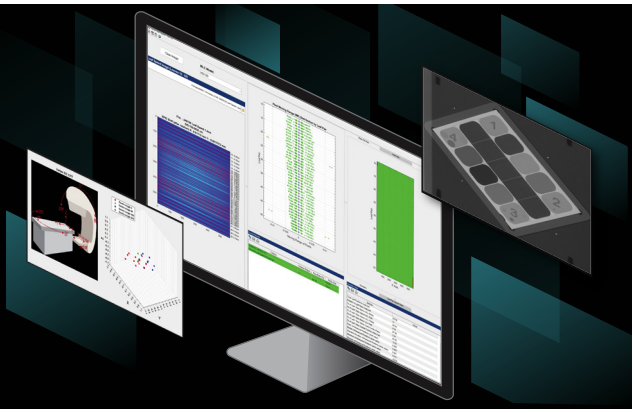
what happens behind the scenes of radiation therapy and who is there. She also hopes the book reaches young people considering careers in science, particularly young women who may, as she once did, love physics without yet knowing that a profession called medical physics exists.

As a medical physicist myself, that may have been the part of our conversation that stayed with me most. I entered the interview already knowing what the invisible work looks like. We all do. We know the measurements made before a patient ever enters the room, the checks performed after everyone else has gone home, the uncomfortable questions asked when something does not look quite right, and the enormous difference between a technology being impressive and being safe enough to trust.

What I had not expected was how often our conversation would return to recognition, not recognition for Dr. Ellen Wilcox herself, but recognition of the profession, of the people she trained, of the women who sometimes underestimated their own place in it, and of the collective work that turned new technology into better patient care. Perhaps that is the most interesting meaning of the "medical revolution" in the book's title. A revolution in cancer care is not simply a chronology of increasingly sophisticated machines. It is also the story of the people who questioned them, measured them, improved them, taught others to use them, and quietly made them part of medicine.

Dr. Wilcox has spent much of her career among those people. *With Physicist in the Cancer Center*, she is bringing them out from behind the scenes. ■

SEE *WHAT'S NEW* IN THE RIT FAMILY OF PRODUCTS



FOR VARIAN® USERS

- Targeted Varian Leaf Speed Analysis
- Expanded Varian Leaf Speed Compatibility
- Automated Gantry Retrieval for RapidArc® QA

FOR ELEKTA® USERS

- Targeted Elekta Leaf Speed Analysis
- EPID Picket Fence Test for Elekta Agility™

ADDITIONAL ANALYSES

- Accuray CyberKnife® Imaging Panel QA Analysis
- Isocenter Optimization 3D Axis Projection Detail Plot

CLICK TO EXPLORE THE NEW FEATURES IN VERSION 7.01

RapidArc® is a registered trademark of Varian Medical Systems, Inc.
Agility™ is a trademark of Elekta, AB. CyberKnife® is a registered trademark of Accuray, Inc.

RIT RADIOLOGICAL IMAGING TECHNOLOGY, INC.
sales@radimage.com | 1(719)590-1077, Opt. 4

©2026, Radiological Imaging Technology, Inc.

Special Interest Feature: Women's Professional Subcommittee

BUILDING CAMARADERIE IN MEDICAL PHYSICS THROUGH WOMEN WHO COFFEE AND CURIE

Rachel Trevillian, MS | Emory University • Julia Pakela, PhD | Ohio State University
Mahsa Servati, PhD | MD Anderson



Rachel Trevillian, MS



Julia Pakela, PhD



Mahsa Servati, PhD

Women Who Coffee and Curie (WWCC) came to fruition in 2024. The first WWCC session was held in September 2024 with the goal of increasing awareness of the group as an open forum where medical physicists could share experiences, seek guidance, support peers, and engage in guided discussions. The group organizes and facilitates virtual "coffee chats" for AAPM members to share their experiences and support each other's career development. Discussion topics are shaped by both the planning committee and attendees, helping to foster a supportive AAPM community where members can exchange perspectives, learn from one another, and discuss issues relevant to their professional experiences. In July 2025, we had the first AAPM meetup at the 2025 AAPM annual meeting in Washington, C.

As of April 2026, Women Who Coffee and Curie became officially recognized by AAPM as a working group under the Women's Professional Subcommittee. The working group is led by Chair **Kai Huang, PhD**, and Vice Chair **Lauren Smith, PhD**, who were both founding members. Our second AAPM meetup happened at the 2026 AAPM/COMP Meeting in Vancouver, Canada.

To further support the group's mission, Women Who Coffee and Curie introduced several recurring features. **Shot of Strategy** gives members the opportunity to submit anonymous questions about challenges they are facing and receive feedback and perspectives from others in the session. In February 2026, the group also introduced **Career Brew**, where members can share career opportunities with one another.

In 2026, sessions addressed topics relevant across career stages, including: conflict management, annual performance review & negotiation, navigating imposter syndrome, finding medical physics: journeys that weren't planned, getting credit and speaking up: advocating for yourself across career stages, AAPM follow-up: burnout, boundaries and balance, and career story: discussion on paths to leadership.

At our AAPM/COMP Annual meeting session, we discussed burnout, boundaries, and balance where at each table we had members embark on further discussions following the Women's Professional Subcommittee session. Some of the dialogue was spurred after some members read M.J. Amon's, PhD, "Looking through the Glass Ceiling: A Qualitative Study of STEM Women's Career Narratives." Thanks to all who donated to provide coffee during this session to allow everyone to appropriately coffee and curie together.





WWCC Leaders: Chair Kai Huang, PhD and Vice Chair Lauren Smith, PhD

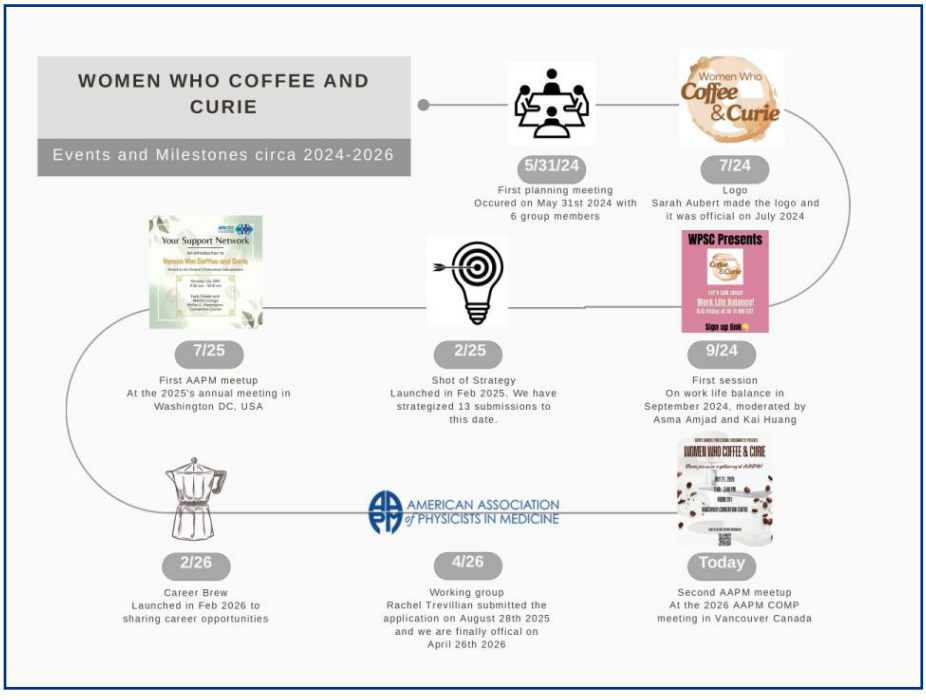
BUILDING CAMARADERIE IN MEDICAL PHYSICS THROUGH WOMEN WHO COFFEE AND CURIE, Cont.

Among the sessions on this year's WWCC schedule was the "Gender Pay Gap in Medical Physics," moderated by **Emily Hirata, PhD**, and **Rebecca Howell, PhD**, in October 2026. This session was based on a newly published paper from Emily and colleagues analyzing 21 years of salaries from 2003 to 2023 to quantify the gender pay gap, evaluate trends over time, and model the compounding impact of the gender pay gap on lifetime earnings.

In November 2026, our session topic was "Navigating pregnancy, maternity leave, and postpartum as a new mom" led by **Julia Pakela, PhD**, and **Jennifer Dorand, PhD**. Drawing from their own experiences, they shared practical perspectives on the challenges, transitions, and sources of support that can arise during pregnancy, leave, and the return to work.

We would like to give a special thank you to all of our incredible moderators for leading these successful sessions; we could not do this without you all! Women Who Coffee and Curie provides an open forum for all topics of interest to be discussed, so everyone is welcome to submit ideas to the working group to continue to broaden our scope of conversation in 2027.

As the group continues to grow, so does its impact: a community where women in medical physics can connect, be heard, and support one another at every stage of their careers. That impact comes through clearly in what members say about it. When asked what they love most about WWCC, people mention the "community" and "the opportunity to connect with and support other women in the field." One person said: "The camaraderie and insights. I have learned so many practical tips that have helped me become a better physicist and improve my work/life balance." Participants also appreciate the "topics" discussed, the "quality of conversation," and the "safe space." Another shared: "I love having the opportunity to learn from people at various stages of their career, and to have a platform to speak up about certain challenges and struggles I've faced that I don't know how to approach." Looking ahead, Women Who Coffee and Curie hopes to keep expanding its outreach — bringing more physicists into the fold so that even more people can find the same support, connection, and guidance that current members describe. The goal is simple: the more voices at the table, the stronger this community becomes. ■



WWCC Timeline

From Geometric to Molecular Precision: Medical Physics in the Era of Theranostics

REPORT FROM THE SMART EXPANSION SUBCOMMITTEE

As the scope of medical physics expands, we will need to prepare future physicists for these roles through new standardized educational and training opportunities, including updates to graduate curricula and new skills learned in residency training programs. Graduate students, residents, postdoctoral researchers, and practicing physicists should have accessible ways to learn about emerging applications and develop the skills needed to contribute effectively.

Written on behalf of the Smart Expansion Subcommitte

Traditionally, cancer management has rested on three pillars: surgical oncology, medical oncology, and radiation oncology, the field with which medical physics has been closely associated. As healthcare becomes increasingly multidisciplinary, data-driven, and personalized, many opportunities exist for medical physicists to contribute far beyond these traditional areas. The **Medical Physics 3.0 (MP3.0)** initiative provides a framework for exploring new frontiers. As an integral part of **MP3.0**, the **Smart Expansion Subcommittee** (MP3ESC) is charged with expanding medical physics research and clinical practice into emerging areas of healthcare and precision medicine. Our focus on molecular precision represents an important example of this ongoing work. Molecular precision addresses quantification, targeting, and control at the molecular (e.g., DNA), cellular, and individual organ levels. It has a wide scope that connects tools and techniques medical physicists already use (e.g., measurement, outcome modeling, high-throughput imaging, precision dosimetry, quality assurance, risk assessment, and data analysis) with new clinical applications.

Radioligand therapy (RLT) is one of the fastest-growing areas of precision medicine. By combining a ligand that binds to a specific antigen or receptor with a radioisotope, RLT can selectively deliver radiation to sites of disease while minimizing exposure to surrounding healthy tissues. Growing clinical implementation of RLT has created new technical and clinical challenges, which in turn yield new opportunities for medical physicists to get involved. Physicists can contribute to several aspects of RLT and theranostics. These include patient-specific dosimetry and dose modeling, quantitative imaging/image analysis, assay/measurement validation, development of treatment planning systems, workflow design, and overall safety management. As a leading organization in this space, AAPM will be able to help address these needs through task groups, educational activities, and collaborations with other professional societies. To develop the field further, input from medical physicists working alongside colleagues such as nuclear medicine physicians and technologists, radiochemists, radiopharmacists, and other specialists is necessary.



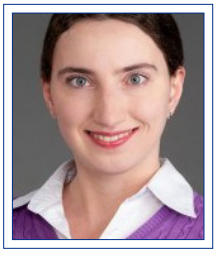
Peter R. Jermain, PhD
AAPM Inova Schar Cancer Institute



Dee H. Wu, PhD
University of Oklahoma



Sandeepan Ganguly, MS
University of Arkansas for Medical Sciences



Olga V. Pen, PhD
Advocate Health



Wendy Galbraith, PharmD, DPh
University of Oklahoma

Currently, there are four United States Food and Drug Administration (FDA)-approved theranostic radiopharmaceuticals in clinical use: Y-90 radioembolization for unresectable liver metastasis from primary colorectal cancer; Lu-177 PSMA (Pluvicto) for metastatic prostate cancer in combination with androgen receptor pathway inhibitor sensitive or naïve disease; Lu-177 dotatate (Lutathera) for somatostatin receptor-positive gastroenteropancreatic neuroendocrine tumors; and Ra-223 dichloride (Xofigo) for prostate cancer with symptomatic bone metastases. Many more agents are currently in the development pipeline. Combining immunotherapy with radiation therapy adds another level of complexity and introduces new questions yet to be answered. For example, are standard normal tissue complication probability and tumor control probability-based constraints still valid with the additional intervention? Adapting probabilistic, population-averaged toxicity constraints to individual patients may help drive the field forward with the support of artificial intelligence (AI). This perhaps is where the profession of medical physics will see its next evolution.

Expanding medical physics into new areas raises important questions regarding how to prepare physicists to work in these varied environments. Based on a recent survey of **Smart Expansion Subcommittee** members, potential areas of healthcare beyond theranostics under investigation include surgery, pathology, dermatology, and other medical specialties where quantitative methods and physics-based technologies have strong potential to address existing clinical challenges. Another important area is AI, where longitudinal analyses of patient records across diagnostic and treatment modalities could enable integrated, personalized care and prediction of future clinical conditions. Medical physicists' combination of clinical expertise, interdisciplinary communication, and understanding of data processing and AI model refinement uniquely positions them to contribute to the development, implementation, and maintenance of AI tools in a safe and ethical manner.

As the scope of medical physics expands, we will need to prepare future physicists for these roles through new standardized educational and training opportunities, including updates to graduate curricula and new skills taught in residency training programs. Graduate students, residents, postdoctoral researchers, and practicing physicists should have accessible ways to learn about emerging applications and develop the skills needed to contribute effectively. There is room for physicists at all different stages of their education and careers to make an impact. For example, students and trainees can contribute through research projects, participation in workshops, and outreach. Residents and practicing physicists can explore new clinical applications or collaborations with healthcare partners across academic, clinical, or industry ecosystems. The goal is not to move away from core areas of traditional medical physics or assume responsibilities typically handled by other role groups. It is to apply our physics-based strengths, training, and experience to move health science in new directions that result in safer, more effective care for patients.

Molecular precision is a fast-moving discipline. On the **Smart Expansion Subcommittee**, our focus includes making educational resources more accessible and readily available, such as workshop recordings, annual meeting presentations, reference materials, and webinars/virtual meetings. Future efforts will include additional free educational content and opportunities to connect physicists already working in these different spaces. We look for opportunities to empower members with existing resources while creating pathways for sharing knowledge and will continue exploring potential expansion through various platforms such as YouTube and Vimeo.

Theranostics represents an excellent example of this opportunity. AAPM's existing content consistently uses the terms *theranostics* and *radiopharmaceutical therapy*, while the phrase *radioligand therapy* appears to have relatively few mentions in current AAPM materials. Importantly, the AAPM Virtual Library already contains more than 40 recorded presentations from Annual Meetings, Summer Schools, Spring Clinical Meetings, and Conference of Radiation Control Program Directors Subcommittee training programs spanning from 2016 to 2024 that address theranostics-related topics. The existing content represents a substantial educational resource that could be more actively curated, promoted, and repurposed for members.

AAPM also has significant internal expertise through the **Radiopharmaceutical Therapy Subcommittee (RPTSC)**, chaired by Robert Hobbs, PhD, along with associated

task groups (e.g., TG-378, TG-381, TG-417, TG-426, and TG-454). These groups provide a foundation for technical content development, expert commentary, and future educational initiatives. At the same time, AAPM newsletter coverage of theranostics provides an excellent forum to further highlight advances in this rapidly growing area, including the dedicated special interest feature on Radiopharmaceuticals, Theranostics, and Nuclear Medicine at AAPM 2026 found in the July/August 2026 issue. Notably, there appear to be few current AAPM Reports or official AAPM position statements that address these topics, suggesting an opportunity for future discussion within Science, Professional, and Educational Councils and related groups as the field continues to mature.

Beyond specialty-specific efforts, collaboration remains central to our success. Engagement and partnerships with other professional societies create opportunities to share ideas, learn from diverse perspectives, and advance science together. For example, at the recent American Society for Radiation Oncology (ASTRO) 2026 Annual Meeting, several sessions focused on advancing theranostics care earlier in the treatment journey. We would also like to recognize and thank AAPM staff members for their continued assistance, institutional knowledge, and support, which facilitate volunteer activities and improves our ability to help other professionals. Their contributions remind us that advancing the mission of AAPM is a team effort shared by members, volunteers, leadership, and staff. One of the lessons of **MP3.0** is that progress comes not only from solving problems when they arise, but also from recognizing, supporting, and strengthening the people, relationships, and systems that make excellence possible every day in medical physics.

If you would like to join the Smart Expansion Subcommittee or get involved with the molecular precision initiative, please reach out to Dee Wu, PhD, Sandeepan Ganguly, MS, or Peter Jermain, PhD. There are many ways to learn more, contribute expertise, and define emerging areas of practice! ■

AMERICAN ASSOCIATION of PHYSICISTS IN MEDICINE

JOURNAL OF APPLIED CLINICAL MEDICAL PHYSICS

JACMP Special Issue Call for papers

Upright Imaging and Radiation Therapy

The Journal of Applied Clinical Medical Physics (JACMP) invites authors to submit manuscripts to a Special Issue titled “Upright Imaging and Radiation Therapy”.

Treating and imaging patients in the upright position is rapidly re-emerging as a clinically relevant paradigm in external beam radiation therapy. Yet the supporting clinical and medical physics literature remains fragmented across conference abstracts, vendor white papers, and a limited number of single-institution studies. A focused JACMP Special Issue would bring this emerging body of work together into a peer-reviewed, citable resource for the medical physics community at a pivotal moment, as upright imaging and treatment move from technical concepts toward clinical implementation.

Upright treatment is not new. It was used extensively in the early decades of radiation therapy, but the introduction of CT scanners in the 1970s pushed the field toward recumbent imaging and treatment so that planning geometry matched the supine scan. Early attempts to build upright CT systems were limited by long scan times, immature CT and computing technology, and inadequate immobilization, all of which produced unwanted intra-scan motion. Modern helical CT, MRI, robust upright positioning, and contemporary IGRT have removed these historical barriers, but the rigorous physics characterization needed to support routine clinical adoption has not yet been gathered in one place.

The clinical and economic case is compelling. The seated and standing positions exploit gravity rather than fight it, mirroring how patients naturally rest. Upright chest imaging yields larger lung volume and lower parenchymal density. For particle therapy and BNCT, upright fixed-beam delivery can eliminate the gantries that dominate facility cost and footprint, while enabling enhanced IGRT, progressive and real-time adaptive workflows, and faster patient entry and exit that improve throughput.

A Special Issue is particularly well suited to this field because many of its central questions remain active areas of research rather than settled areas of practice. Peer-reviewed investigations can provide the methodological rigor, transparency, and reproducibility needed to evaluate emerging technologies and clinical workflows and to establish a foundation for further development. With its open-access model and clinically focused readership, JACMP provides an ideal forum for reaching the medical physicists, dosimetrists, clinical engineers, and other professionals who will ultimately commission, validate, implement, and operate these systems.

We therefore welcome contributions that advance the scientific and clinical understanding of upright imaging and radiation therapy. We invite the medical physics

AMERICAN ASSOCIATION of PHYSICISTS IN MEDICINE
JOURNAL OF APPLIED CLINICAL MEDICAL PHYSICS

community to contribute to this timely Special Issue and help establish a rigorous, peer-reviewed foundation for the next generation of upright imaging and radiation therapy.

We accept a diverse collection of **original research articles, technical notes, case reports, dataset articles, topical reviews, editorials, best practice consensus, perspective visions.**

Scope of the Special Issue: Topics include, but are not limited to

- Clinical rationale and patient-specific benefits of upright imaging and treatment
- Gravity-induced organ motion and deformation, particularly in the pelvis and prostate
- Upright CT, MRI, and other diagnostic and treatment-planning imaging technologies
- Image quality, geometric accuracy, image registration, and dose calculation
- Upright patient positioning, immobilization, and reproducibility
- Respiratory, postural, and gravity-induced motion management
- Upright IGRT and adaptive radiation therapy, including progressive and real-time adaptation
- Photon, proton, ion, neutron, and other fixed-beam treatment configurations
- Particle therapy and BNCT applications
- Commissioning, quality assurance, and safety
- Clinical implementation and workflow optimization
- Patient throughput, positioning time, and operational efficiency
- Facility design, capital investment, and cost-effectiveness
- Historical perspectives, emerging technologies, clinical applications, and future directions

Focused Areas for Authors to Consider:

Theme	Suggested focus / candidate contributors
Historical perspective	Evolution of upright imaging and RT, and why the technology gap has now closed
Clinical rationale	Indication-specific evidence for upright treatment; motion and dosimetric implications
Positioning & immobilization	Upright positioning systems, stability, and reproducibility data
Adaptive radiotherapy	Progressive and real-time adaptation enabled by upright IGRT
Diagnostic imaging	Benefits and challenges of upright CT/MRI for planning and guidance

AMERICAN ASSOCIATION of PHYSICISTS IN MEDICINE

JOURNAL OF APPLIED CLINICAL MEDICAL PHYSICS

Modalities & delivery	Treatment modalities benefiting from upright; fixed-beam X-ray and particle delivery
Systems, workflow & finance	Upright system configurations, throughput, and facility/real-estate economics

Submission Instructions: Authors should select the "*Upright Imaging and Radiation Therapy Special Issue*" category at the time of submission. All manuscripts will undergo standard peer review in accordance with JACMP policies. Accepted papers will be published online as open access articles once they are ready for publication. After the submission period closes, all published papers in this category will be compiled into a virtual special issue.

Submission Start Date: October 1st, 2026
Submission deadline: July 1st, 2027

Publication schedule: Articles will be published online upon acceptance.
Article Publication Charges: Standard JACMP publication charges apply. These charges may be waived if the corresponding author's institution participates in the Wiley Open Access Account program. Please refer to Wiley Institutional Payments for details: (https://authorservices.wiley.com/author-resources/Journal-Authors/open-access/affiliation-policies-payments/institutional-funder-payments.html)

Inquiries
Questions regarding suitability of a proposed manuscript may be directed to: JACMPEditorial@wiley.com.

AMERICAN ASSOCIATION of PHYSICISTS IN MEDICINE

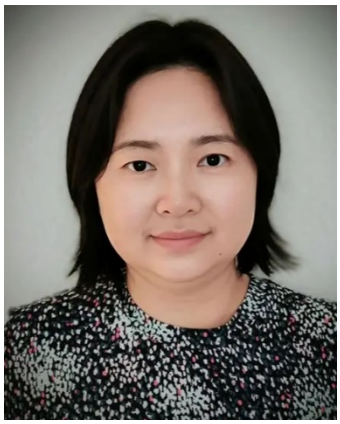
JOURNAL OF APPLIED CLINICAL MEDICAL PHYSICS

Guest Editors for the Special Issue:



Thomas R. Bortfeld, PhD

Massachusetts General Hospital



Ye Zhang, PhD

Paul Scherrer Institute



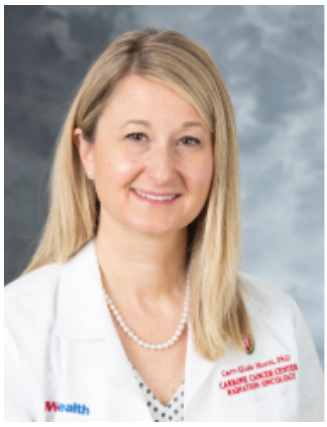
Lennart Volz, PhD

GSI Helmholtzzentrum für Schwerionenforschung GmbH



Laurence E. Court, PhD

UT MD Anderson Cancer Center



Carri K. Glide-Hurst, PhD

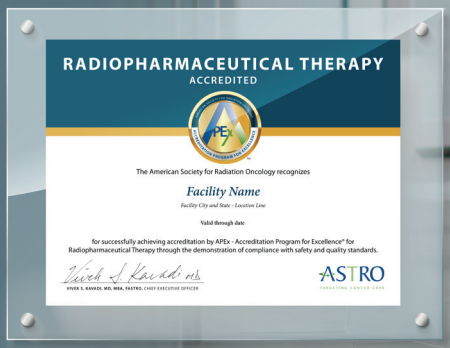
University of Wisconsin, Madison

Lead with quality.

DEMONSTRATE EXCELLENCE:
Prove your facility meets the highest national standards for RPT safety.

FLEXIBLE PATHWAYS:
The RPT accreditation can be completed as an add-on to your existing APEx accreditation or entirely as a standalone option.

TEAM-CENTRIC:
Built to engage all team members fostering a culture of quality and safety.



Start your RPT accreditation journey today.

astro.org/APExRPT

From SCAMP Applicant to Scientific Leader

SCIENCE COUNCIL ASSOCIATES MENTORSHIP PROGRAM REPORT

This article provides an overview of the SCAMP selection process, including application review, evaluation criteria, and cohort selection. It also highlights the growth and diversity of the SCAMP community and the program's impact on research, leadership, and service across AAPM.

Each year, the Science Council Associates Mentorship Program (SCAMP) receives applications from many talented early-career medical physicists interested in growing as scientific leaders within AAPM. One question we hear frequently is, *"How are SCAMP associates actually selected?"* This article provides a historical overview of the review process used in recent years, along with a look at the growing community of SCAMP associates and the impact of the program. For more background on the origins and goals of SCAMP, as well as some testimonials from former SCAMP associates, see the previous AAPM Newsletter article on the program.

As SCAMP continues to grow, the program regularly evaluates its selection criteria and review procedures to improve fairness, transparency, and alignment with the program's mission. Prospective applicants should always consult the current year's application announcement for the most up-to-date eligibility requirements and review criteria. The current SCAMP application and criteria can be found on the SCAMP application page.

To help guide the program, in January SCAMP established a SCAMP Panel composed of current and former program leaders and mentors. This panel will provide ongoing guidance regarding program structure, evaluation criteria, and potential future enhancements to ensure SCAMP continues to meet the needs of both mentees and the AAPM scientific community.

The SCAMP applicant pool has grown to represent a broad range of institutions and scientific backgrounds across many places (Figure 1A). These applications are reviewed by a broad group, making the process truly a community effort. Each year, approximately 20 volunteers participate, including current SCAMP mentors and associates, the SCAMP Chair and Vice Chair, the TG-369 Chair and Vice Chair, and other Science Council volunteers. Before review assignments are made, reviewers disclose conflicts of interest, and information on applicants' current and previous institutions is used to avoid potential conflicts. Each reviewer evaluates approximately 6–9 applications using a common scoring rubric with defined criteria and maximum points for each category.

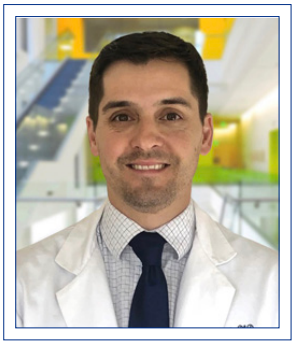
Following review, scores are normalized to account for differences in reviewer assignments. Historically, additional consideration has been given to applicants who have previously applied and those in their final year of eligibility. The reviewers then meet to discuss the results and select the



Rachel Ger, PhD
Mass General Brigham Cancer Institute / Harvard Medical School



Christina Brunnquell, PhD
University of Minnesota



Olivier Morin, PhD
University of California San Francisco

final cohort. In addition to the scores, the final group is considered as a whole, with attention to diversity across gender, scientific specialty, and institution. The resulting associate pool from 2021 to 2026 is shown in Figure 1B, demonstrating the geographic distribution of the program, which also reflects the geographic distribution of the applicant pool. While the largest concentrations of associates are in locations that also have large applicant pools, SCAMP has also reached beyond the United States, with applications from Australia, Bangladesh, Canada, and Nigeria, and an associate selected from Australia.

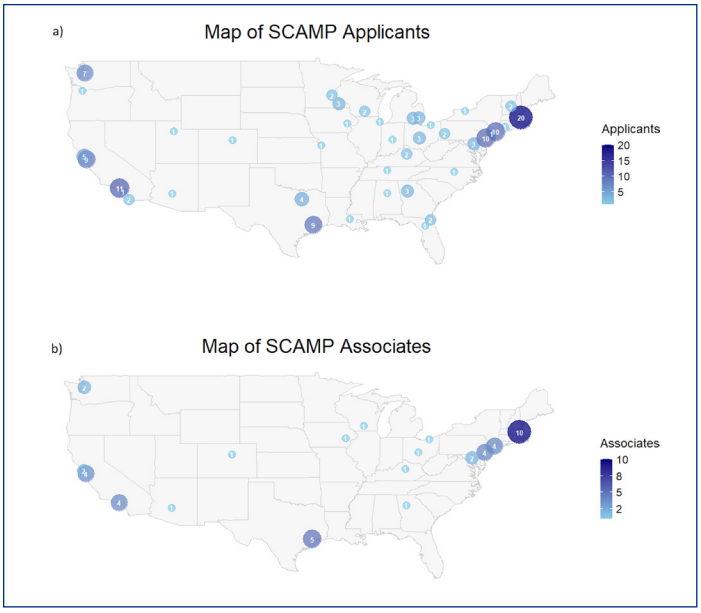


Figure 1. (a) SCAMP Applicant Pool and (b) SCAMP Associate Pool from 2021 to 2026. *The distribution of the number of (a) applicants and (b) associates across the US is shown. The darker blue represents a higher number of applicants with lighter blues being lower. There have also been applications from Australia, Bangladesh, Canada, and Nigeria, with an associate being selected from Australia. The applicant pool can be seen to be highest in several locations which correlate to the highest locations for the associates.*

Looking across the entire history of SCAMP, from its inception in 2015 through the present, the associate pool has represented a range of clinical and professional backgrounds. If associates are categorized into the traditional binary of therapy and diagnostic imaging, 66 have been associated with therapy and 10 with diagnostic imaging. However, this classification does not fully capture the evolving roles of medical physicists. At least four current and former associates are concentrated working in radiopharmaceutical therapy (RPT), with their primary role designations divided between therapy and diagnostic imaging. In addition, one former SCAMP associate is now in a non-clinical role, and at least two are working in industry. This diversity reflects the changing scope of medical physics and the range of career paths pursued by SCAMP associates.

One thing that has remained true every year is that there are far more excellent applicants than available mentee positions. Selecting a cohort is never easy, and many highly qualified applicants cannot be accommodated simply because of the limited number of slots.

Successful SCAMP applicants demonstrate scientific excellence, intellectual curiosity, and a commitment to advancing the field of medical physics through research, collaboration, and service. They have established a strong record of accomplishment appropriate for their career stage, show clear leadership potential, and articulate a thoughtful vision for their future contributions to the AAPM Science Council and the broader medical physics community. Equally important, the strongest applications are authentic. Reviewers value applicants whose personal statements reflect their own voice, clearly convey their motivations and aspirations, and provide meaningful insight into the experiences that have shaped their professional development.

Applicants should also recognize that the selection process is highly competitive, and persistence is often part of the journey. Many successful SCAMP participants were not selected on their first application but strengthened their applications over time and were ultimately successful. Figure 2 shows the number of applicants, re-applicants, unique institutions, SCAMP associates, associates who were re-applicants, and unique institutions represented among associates. Applicants who are not selected should therefore continue pursuing their scientific interests and consider applying again in future years.

The impact of SCAMP extends well beyond the mentorship experience itself. SCAMP associates complete projects as part of their experience, providing an opportunity to

develop and disseminate research while working with their mentors. Among associates from 2015 to 2024, SCAMP projects resulted in five oral presentations, one poster presentation, and three publications. Associates have also reported broader involvement in AAPM as a result of their SCAMP experience: 20 indicated that SCAMP led to their involvement in additional AAPM committees, 10 reported taking on AAPM leadership roles because of SCAMP, and 12 indicated that they became AAPM abstract reviewers as a result of their involvement with the program.

Former SCAMP associates have also gone on to take on significant leadership and scholarly roles throughout AAPM and the medical physics community. Currently, former SCAMP associates serve as Chairs of 14 AAPM committees and Vice Chairs of 13 committees. Six are currently Associate Editors for *Medical Physics*, five are Associate Editors for the *Journal of Applied Clinical Medical Physics* (JACMP), and one serves as a *JACMP* Department Editor. Former SCAMP associates are also currently leading 22 active research grants.

These accomplishments reflect the broader goal of SCAMP: to identify and support early-career physicists who will contribute not only through their own research, but also through leadership, mentorship, service, and collaboration across the field.

As SCAMP continues to mature, the program will continue to evolve as well. The goal is to make the review process as fair, transparent, and effective as possible while continuing to identify and support the next generation of scientific leaders within AAPM. ■

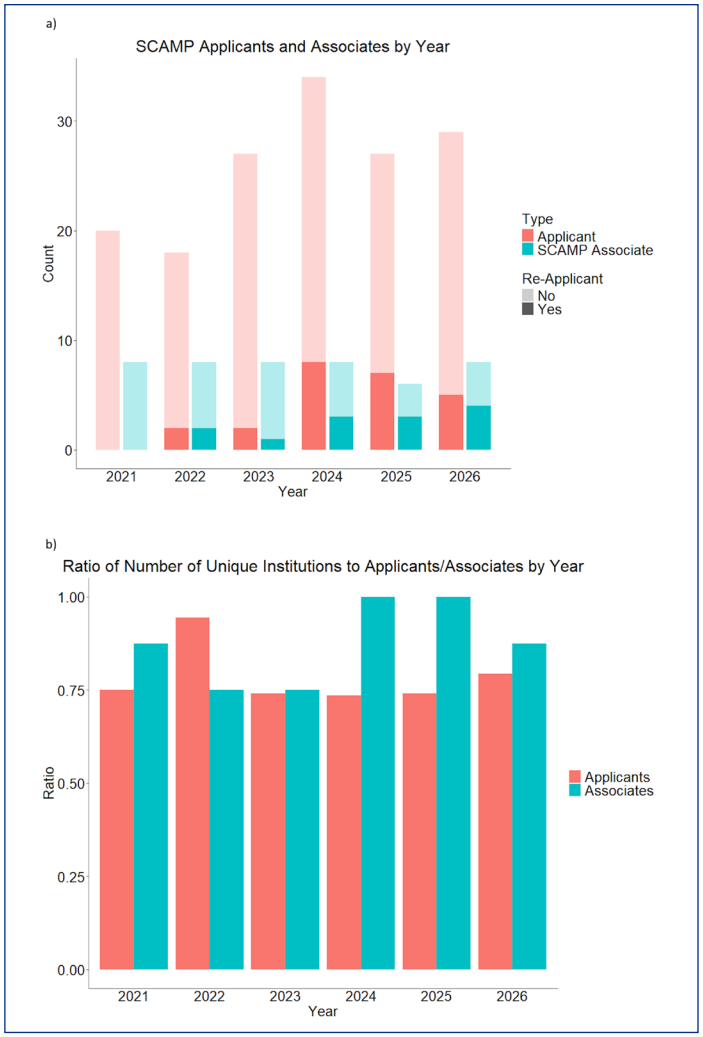


Figure 2. (a) SCAMP Applicant and Associate Pool Distribution with Total and Re-Applicants and (b) Ratio of Number of Unique Institutions to Applicants or Associates. *Each year there are many applicants, but only a small number of associates can be selected. Many associates are not selected their first year and are selected as re-applicants. The ratio of the number of unique institutions to the number of applicants is typically lower than the ratio of number of unique institutions to the number of associates, indicating the diversity of the associates relative to the applicants.*

Adaptive by Nature, Mentored by Design: Three Classes of SCAMP at AAPM 2026 Summer School

REPORT FROM AAPM SUMMER SCHOOL & SCAMP ASSOCIATES

SCAMP is designed to connect Mentees with Mentors. Sometimes, it does much more than that.

At the 2026 AAPM Summer School in Ann Arbor, Michigan, three Science Council Associates Mentorship Program (SCAMP) mentees from three different classes — **Xiuxiu He, PhD**, Class of 2023; **Claire Park, PhD**, Class of 2024; and **Mislav Bobić, PhD**, Class of 2026 — found themselves working on the same team alongside their respective mentors, **Dandan Zheng PhD**, **Laura Cerviño, PhD**, and **Heng Li, PhD**.

There was one interesting twist: all three mentors were also program directors of the 2026 Summer School.

What began as three separate mentorship matches evolved into something bigger: developing a Summer School proposal, shaping its scientific program, writing and reviewing monograph chapters, designing interactive activities, and building new collaborations.

In many ways, the experience captured what SCAMP can become at its best: mentorship that grows into scientific partnership, genuine friendship, and a community where diligent work and having fun come naturally hand in hand.

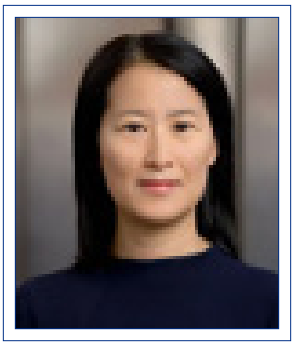
From SCAMP Mentees to Program Contributors

For Xiuxiu and Claire, the journey started long before everyone arrived in Ann Arbor.

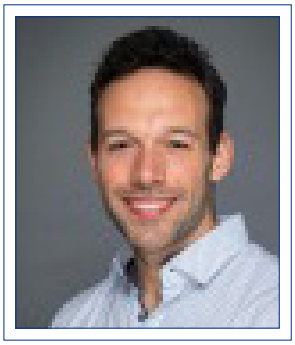
The idea for the **Summer School on Adaptive Radiotherapy** initially emerged from the **Therapy Imaging Subcommittee (TISC)**. Working under the inspiring leadership of **Laura Cerviño, PhD, Dandan Zheng, PhD**, and **Heng Li, PhD**, Xiuxiu and Claire contributed to the successful proposal for the 2026 Summer School, and subsequently helped develop the educational program. This gave them a unique opportunity to see a major AAPM educational initiative evolve from an idea into a full scientific program.

Their roles extended well beyond planning. Xiuxiu and Claire were invited to contribute as faculty and reviewed several of the 24 chapters in the Summer School Monograph. Rather than attending Summer School simply as learners, they helped build it.

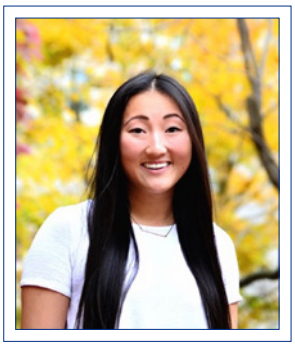
Under the vision of the Summer School leadership, **Vrinda Narayana, PhD**, and **Colleen Fox, PhD**, the program was deliberately designed to move beyond a traditional didactic format. **Adaptive Radiotherapy (ART)** is inherently multidisciplinary, technically complex, and rapidly evolving, so the educational experience needed to reflect that reality. Lectures were complemented by interactive sessions, including debates and discussions,



Xiuxiu He, PhD
Memorial Sloan Kettering Cancer Center



Mislav Bobić, PhD
Mass General Brigham Cancer Institute, Harvard Medical School



Claire Park, PhD
Mass General Brigham Cancer Institute, Harvard Medical School

breakout tables, clinical case studies, hands-on demonstrations, and audience participation.

Xiuxiu and Claire had the opportunity to lead several of these activities, including hosting the first-ever **Summer School Jeopardy** since the program was first established in 1969. The session set an energetic tone from the start, inviting participants to test their knowledge, laugh together, and engage with adaptive radiotherapy in a format that was both educational and fun, with some friendly competition. They also led interactive breakout sessions and discussions spanning "Technical Aspects of ART Implementation" and "Clinical Case Studies" alongside the expert faculty. These formats had a common purpose: to move participants from didactics to interactive discussions on how ART can be implemented in real-world clinical environments.

After all, adaptive radiotherapy is not the only thing that benefits from good planning. Keeping a room full of medical physicists engaged does too.

Enter Mislav: The Next SCAMP Generation

Mislav, a member of the 2026 SCAMP class and mentee of Heng Li, PhD, brought another dimension to the collaboration through his expertise in online adaptive proton therapy.

Together with Xiuxiu, Claire, **Chuan Zeng, PhD** of Memorial Sloan Kettering Cancer Center, **Antonia Kubiatowicz, PhD** of Mass General Brigham Cancer Institute, and **Serdar Charyyev, PhD**, of Stanford University, he co-authored Chapter 23 of the Summer School Monograph, "Collaborative Opportunities in Adaptive Radiotherapy: Photon-Proton Synergy & Community Practice." The chapter reflected a theme that became increasingly visible throughout the Summer School: the future of ART will be strengthened by greater collaboration across modalities and practice settings. Photon and proton adaptive therapy share many of the same challenges — including image guidance, contouring, dose accumulation, workflow efficiency, automation, quality assurance, and clinical implementation — creating valuable opportunities to learn from one another and advance the field together.

Mislav also co-authored Chapter 11, "Proton Adaptive Radiotherapy," with Serdar and Chuan, bringing perspectives from his work in online adaptive proton therapy. These collaborations carried into the Summer School program through sessions on Proton ART, Robust Photon & Proton ART planning, and broader opportunities for photon-proton synergy. He also co-led an Online vs. Offline ART discussion and debate with Heng, and co-organized an interactive Proton ART workshop with Serdar, featuring a live demonstration of an online adaptive proton therapy workflow.

For a member of the newest SCAMP class, the experience was an early opportunity not only to learn from established faculty but also to contribute alongside them. That distinction matters—SCAMP created a structure in which a mentee could enter the room as a trainee and still have meaningful expertise to bring to the table.

Three Classes, One Team

One of the most rewarding parts of the experience was seeing the traditional trainee-to-faculty hierarchy become less rigid. A 2023 SCAMP mentee, a 2024 mentee, and a 2026 mentee were working side by side, while their mentors served as program directors, co-authors, faculty members, collaborators, and colleagues. We shared chapter deadlines, workshops, debates, and plenty of laughter — including an impromptu birthday celebration for Claire. Along the way, we became colleagues, collaborators, and friends.

The same spirit shaped the Summer School. Rather than simply asking participants to listen, the program encouraged them to question assumptions, debate implementation strategies, work through clinical cases, troubleshoot technical challenges, and share their own experiences. In that sense, the program itself reflected how ART advances: through iteration, collaboration, and adaptation.

The closing **Future Directions** session brought this experience into focus. **Laura, Dandan**, and **Heng** led the discussion on where ART may be heading and whether it will become widely accessible or remain concentrated at high-volume centers. The question spans clinical, technical, economic, and educational dimensions, but it also prompted a parallel question for us: **How can mentorship grow beyond a single mentor-mentee relationship into a lasting scientific community?**

We are especially grateful to our incredible mentors—

REPORT FROM AAPM SUMMER SCHOOL & SCAMP ASSOCIATES , Cont.

Laura, Dandan, and Heng—for their leadership, guidance, encouragement, trust, and generosity. They did more than mentor us; they opened doors, created opportunities, and gave us space to contribute as colleagues and collaborators.

SCAMP gave each of us a mentor. The Summer School gave us a shared project. As we look toward future Summer Schools and SCAMP classes, we hope to continue that cycle: Learn. Collaborate. Contribute. Mentor. Have fun. Pay it forward.

Three SCAMP Classes. Three mentors. One Summer School. And hopefully, many more collaborations to come. ■



Three Classes of SCAMP Associates: Claire Park, PhD, Class of 2024; Xiuxiu He, PhD, Class of 2023; and Mislav Bobić, PhD, Class of 2026



AAPM 2026 Summer School Program Directors & SCAMP Associates: Claire Park, PhD, Class of 2024; Heng Li, PhD; Laura Cervino, PhD; Dandan Zheng, PhD; and Xiuxiu He, PhD, Class of 2023

Appreciating Medical Physics in a Global Setting: A Resident's Experience in Ghana

INTERNATIONAL COUNCIL ASSOCIATE MENTORSHIP PROGRAM (ICAMP) AND GLOBAL MEDICAL PHYSICS EDUCATION AND TRAINING COMMITTEE (GMPETC) REPORT



Tricia Chinnery, PhD
Princess Margaret Cancer Centre



Kelly Kisling, PhD
University of California San Diego



Derek Brown, PhD
University of California San Diego



Afua Yorke, PhD
University of Washington

International rotations during residency provide early-career physicists an opportunity to learn and study in a different environment, and they serve as an excellent avenue to discovering what could be possible within the global health space. In March of 2026, I (Tricia) had the pleasure of living and volunteering in the radiotherapy facilities in Accra, Ghana, as part of a month-long international rotation, a key block in the University of California San Diego residency program. As someone passionate about global health, a current associate of the International Council Associate Mentorship Program (ICAMP), and involved with other International Council (IC) committees, a visit outside of the United States to educate myself on how radiation oncology operates in a low- and middle-income country (LMIC) was very fitting for my career goals. Not only did I gain ideas for involvement in global oncology, but I had a productive experience and a change in perspective that I hope more medical physics residents will have access to as part of their resident training.

Ghana is located within West Africa, which comprises 16 countries. West Africa accounts for about one quarter of Africa's population, yet just 5% of the continent's external beam radiotherapy (EBRT) capacity is located there. In addition, 56.3% of the continent's cancer deaths occur in the West African subregion. There are only 22 EBRT machines in all of West Africa, and only seven of the 16 countries have access to the EBRT machines, which means cancer patients residing in nations without RT centers routinely travel to neighboring countries to seek care. This statistic translates widely across the rest of Africa as well, with Northern and Southern African countries (skewed heavily towards South Africa) dominating 90% of the EBRT capacity. Those numbers provide the regional picture. Living and working in Accra for a month, however, gave those numbers a very different meaning.

Ghana is one of the seven West African countries with access to radiation. There are six EBRT machines (four LINACs and two Cobalt machines) in the country, spread across three centers. The four machines in Accra, the country's capital, serve a population of 12 to 14 million people. The two machines in Kumasi, about 150 miles north of Accra, serve roughly the same population. This results in 0.17 treatment units per one million people in Ghana. For context, we have about nine machines per one million people in North America. Not to mention that the national shortfall in radiotherapy availability is compounded by significant regional disparities.

The majority of the rotation was spent in the radiotherapy department at the Korle Bu Teaching Hospital, the largest tertiary health facility in West Africa and the third largest hospital in Africa. In the window of opportunity to observe physicians' initial consults and follow-ups, one could easily see the influence that culture has on patient care. Oftentimes, with more than

one radiation oncologist/patient consult happening in the same room, it can make you realize that concepts such as patient privacy are ones we take for granted in the US. Additionally, everything is documented on paper charts, with clinicians relying on handwritten lab results and sketches to map out disease. Radiation oncologists commented that many patients present with late-stage disease due to the fact that virtually no screening programs exist in the country. Moreover, although a national health insurance scheme exists, it has limited cancer care coverage. Radiation treatments, examinations, imaging, and pathological services required in oncology are paid for out of pocket. Factor that in with cultural perceptions of cancer and superstitions around medical treatment, and this unfortunately leads to high levels of late presentation and treatment abandonment. On a positive note, the patients on treatment being seen in the clinic appear to tolerate treatment well, and it is inspiring to see the empathy and understanding shown towards patients during consults.

A great learning opportunity was shadowing the physicists, who doubled as dosimetrists, in the "planning room". Here, the six physicists at the center signed up for plans in rotation. However, there were just three workstations available, with one license for the planning optimizer. They had to coordinate closely before beginning an optimization to ensure that the software was not already in use by a colleague. This coordination was especially important given the large patient volume. What stood out to me was the collaborative environment the physicists had developed when it came to treatment planning. There were many fruitful conversations that I got to partake in between planning, as well. There was a lot to be shared, including differences in workflows, planning protocols, standards of practice, and tips for optimization.

All 3D conformal and IMRT treatments were delivered with the Varian Unique, and the machine treated around 50 patients a day. The LINAC had no kV imaging capabilities, so patients were set up using bony alignment on MV imaging. The radiation therapists found creative ways to put tattoo markings on the patients using Sharpie markers, although it was understood that these wouldn't last and had to be redrawn every few days. Treatments were delivered efficiently and effectively, in the absence of electronic scheduling methods. The amount of teaching that happened simultaneously at both the machines and in the planning room was impressive. There were always multiple graduate students and residents shadowing, and all were welcome. 2D treatments were performed with the Cobalt machine, mainly for palliative and metastatic patients. Through this visit, it became clear that machine downtime was a major issue, with some of the staff expressing that downtime can last a very long time because it takes weeks to fly someone out from the vendor for repairs. Therefore, the Cobalt machine remains a reliable workhorse for simple treatments where fields are drawn directly on the patients at the time of receiving a conventional simulation.

During brachytherapy observations, what was interesting was the role of the physicists in action. In this environment, physicists played some of the role radiotherapy nurses play in the Global North and more advanced settings. Physicists administered IVs, pushed bladder contrast, and helped with the ultrasound during insertions. It is well known that a lot of the focus of global medical physics has been on equipment availability and research opportunities, but it was personally eye-opening to see the lack of anesthesia. All of the gynecological cases were intracavitary, and performed without anesthesia or sedation.

In addition, I had the chance to spend some time in a private center (Sweden Ghana Medical Centre), observing treatments on their Elekta Synergy and viewing its resources in contrast to the public hospital. In visiting the University of Ghana Medical Centre, a purely diagnostic center, I had the opportunity to speak with some of the medical physics graduate students and gave a talk on my journey to becoming a physicist. Although the talk was based on a North American perspective, it was designed to be translatable. It was well attended, leading to many thoughtful discussions. Everyone I came into contact with was eager to help and support me during my time there, and it became clear that, although this was an educational visit, it was also a cultural immersion where I learnt a lot from the locals, be it through food or recommendations to visit local attractions.

I understand the immense opportunity I had as an early-career physicist to participate in a one-month, fully-funded international rotation during my training. It goes without saying that working in unfamiliar environments

INTERNATIONAL COUNCIL ASSOCIATE MENTORSHIP PROGRAM (ICAMP) AND GLOBAL MEDICAL PHYSICS EDUCATION AND TRAINING COMMITTEE (GMPETC) REPORT , Cont.

helps prepare trainees to succeed as the next generation of medical physicists. Not only did this experience help develop cultural and clinic-specific awareness, but it also helped shape collaborative partnerships and lifelong friendships. We strongly advocate for other residency programs to look into offering the opportunity for an international rotation, whether it takes place in an LMIC or a rural North American setting (which leaves room for revising the name of such rotations). This rotation was made possible by connections that were formed through the AAPM IC, mostly through the Global Medical Physics Education and Training Committee (GMPETC). We believe that if more residencies pursued a rotation like this, it could develop avenues to connect residents with centers around the world! ■



Radiotherapy Department at Korle Bu Teaching Hospital



Varian Unique LINAC for 3D and IMRT treatments



Cobalt machine for 2D treatments



Korle Bu physicists and medical physics residents



Exploring art galleries around Accra!

Learning Beyond the Lecture Hall: A Conversation with Medical Physicist Volodymyr Vashchyshyn

GLOBAL CLINICAL EDUCATION AND TRAINING COMMITTEE REPORT

Written on behalf of the Leadership Skills for Global Development Subcommittee



Volodymyr Vashchyshyn, MSc

The Leadership Skills for Global Development Subcommittee (GLEADSC), part of the Global Clinical Education and Training Committee (GCETC) within AAPM's International Council, promotes leadership development in medical physics through in-person and virtual training on soft skills, communication, and cultural sensitivity. By partnering with national and regional professional organizations and engaging experienced trainers and trainees worldwide, GLEADSC seeks to foster a more connected and effective global medical physics community. This interview launches the new GLEADSC newsletter trainee series, highlighting trainees' experiences and perspectives on global medical physics education, mentorship, and collaboration.

Brief Biography: *Volodymyr Vashchyshyn, MSc, is Chief Medical Physicist at Oberig Clinic in Kyiv, Ukraine, and former President (2024–2025) of the Ukrainian Association of Medical Physicists. His career has spanned the country's rapid transition from limited access to linear accelerators to modern IMRT, VMAT, and stereotactic practice. In this conversation, he reflects on learning without a formal clinical pathway, the value of mentorship and international training, and what trainees and trainers can do to make professional education more meaningful.*

What drew you to medical physics?

Volodymyr Vashchyshyn: My interest began with biology. By sixth grade I was taking extra biology lessons, and later I added chemistry, physics, and mathematics. My mother is a physician, so medical books were always around me. I wanted to remain connected to medicine without becoming a physician, and medical physics became the logical bridge. I began in nuclear medicine while completing my master's degree, but soon moved to radiation therapy, where I felt I could contribute more directly.

What was the path into medical physics like in Ukraine?

There was no clear pathway when I graduated in 2009. My university education gave me a good foundation in mathematics and physics, but no hands-on experience with linear accelerators, quality assurance, treatment



Denisa Goia, MsMP
West Virginia University



Surendra Prajapati, PhD
UT MD Anderson Cancer Center

planning, standards, or clinical workflows. Ukraine had very few accelerators at that time. As new systems were installed, my generation entered the field at a moment of rapid change. We often had to build the bridge from theory to practice ourselves.

Who helped you make that transition?

Informal mentorship was crucial. An experienced medical physicist helped me understand priorities and introduced me to CyberKnife, which became my first radiation-therapy position. Neurosurgeons also taught me the clinical details behind treating intracranial lesions and other challenging cases. That combination of physicist-to-physicist mentorship and close work with physicians helped me become a clinical medical physicist.

What have you expected from professional training, and were those expectations met?

Early in my career, I sometimes found courses less technically demanding than I expected. They often taught how to use a system without explaining what happens inside the algorithms. As a physicist, I want to understand why an optimization method behaves as it does, particularly in difficult cases where the planner must push the system to its limits. The formal teaching was useful, but the conversations after class were often equally valuable. They gave me space to question protocols, compare practices, and discuss details that could not fit into a lecture.

Which training approaches have worked best for you?

The answer changed with my experience. Early on, theory-rich programs such as a two-week school at the International Centre for Theoretical Physics helped strengthen my confidence. Later, the most valuable training became the kind closest to clinical practice. A proton-therapy course, for example, combined classroom instruction with a hospital visit where participants could see planning, QA, and workflow together. For experienced physicists, training that also shows how physicists and physicians collaborate is especially important.

What did training teach you about safety and QA culture?

Medical physics may use less complicated mathematics than some other branches of physics, but our responsibility is different. We are not paid for doing something extraordinary once; we are trusted to perform carefully every day. A mistake can harm a patient. Training should therefore explain not only the steps of a procedure, but also why each check matters, how the checks connect, and when a physicist must stop and question the process. Consistency, focus, and the willingness to speak up are central to our profession.

Did international training fit your local clinical reality?

It was most useful when it acknowledged the equipment, staffing, and professional structure of the local center. Ukraine moved from predominantly cobalt-based treatment to IMRT and VMAT in a relatively short period. That shift made medical physicists essential for commissioning, planning, and QA, and it changed how physicians viewed our role. Today, radiation oncologists and medical physicists increasingly share responsibility, although diagnostic imaging and nuclear medicine still need stronger professional and regulatory support.

What can trainers do better?

Know the audience. A group may contain physicians and physicists, beginners and experienced clinicians, or people working with very different technologies. Before teaching, trainers should learn who is in the room and adapt the depth, examples, and pace accordingly. Beginners need a clear foundation; experienced physicists need access to the underlying science, limitations, and edge cases. Clinical demonstrations, case discussions, and time for informal questions should be built into the program rather than treated as extras.

Did you feel comfortable asking questions and staying in contact afterward?

I became more comfortable with experience. Earlier in my career, I worried that a question might sound foolish. In the last several years, I have been much more willing to contact trainers or technical experts after a course. They

have responded, sometimes after a delay, and those exchanges showed me that they were supportive beyond the classroom. I contact trainers more often than fellow trainees, although both networks can be valuable.

How has your experience influenced you as a trainer?

I now begin by learning about the participants: their professions, specialties, experience, equipment, and goals. The same presentation can be delivered very differently depending on the audience. I also created a clinical-practice program for master's students based on the topics I wish I had known when I graduated. It combines missing theory, including relevant radiobiology, with practical work such as water-tank measurements and clinical workflow.

What advice would you give future trainees?

Be open and do not be afraid to start a conversation. Communicate with physicians, stay informed as technology and artificial intelligence develop, and be patient with the repetitive work that keeps patients safe. Remain focused even when the task feels routine. Finally, do not disconnect from academic life. Continue reading, teaching, questioning, and publishing. Training is not only the lecture you attend; it is also the professional relationships you build and the questions you continue asking afterward. ■

Radcal



Measure smarter.
Work faster.

Connect T3 and Accu-Gold Mobile for a faster QA workflow.

- **Save Time**
  Store and recall complete test setups in seconds.
- **Real-Time Results**
  View measurements instantly on your mobile device.
- **Mobile Freedom**
  Free app available for iOS and Android.

See a live demo at RSNA, #4316

www.iba-dosimetry.com
@iba-dosimetry-gmbh

Scan to learn more Accu-Gold T3 or download the app

New Medical Physics Trustee joins the ABR

ABR UPDATE



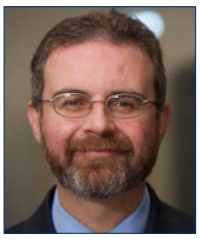
Katja Langen, PhD

The ABR is pleased to announce that **Katja Langen, PhD**, FAAPM has been named the next trustee for Therapeutic Medical Physics (TMP). Dr. Langen will succeed **Matthew Podgorsak, PhD**, FAAPM, who will complete his term as TMP trustee and chair of the Board of Trustees (BOT) after the October 2026 ABR Board Meeting. Dr. Langen will join **Jennifer Stickel, PhD**, FAAPM, and **Sameer Tipnis, PhD**, FAAPM, as a medical physics trustee. Drs. Stickel and Tipnis serve as the trustees for Nuclear Medical Physics and Diagnostic Medical Physics, respectively. Dr. Langen will also work closely with **Geoffrey Ibbott, PhD**, FAAPM, who continues to provide administrative support to the trustees in his role as the ABR's Associate Executive Director with the medical physics portfolio.

Dr. Langen is currently a professor in the School of Medicine at Emory University in Atlanta, where she serves as the Associate Director of medical physics and Chief of proton therapy physics. In these roles, she is responsible for the day-to-day operation of the medical physics services at the Emory Proton Center. She also teaches the Radiation Safety and Protection course for Emory's Medical Physics Certificate Program, which has been accredited by CAMPEP since 2020. Dr. Langen previously held academic and clinical positions at the University of Texas MD Anderson Cancer Center in Orlando and the University of Maryland School of Medicine in Baltimore.

Dr. Langen received her PhD in medical physics from the University of Wisconsin in Madison in 1997 and completed her residency in the Department of Radiation Oncology at the University of California at San Francisco in 2003. Between 1998 and 2000, Dr. Langen was a post-doctoral Fellow at the National Accelerator Centre in Faure, South Africa. Dr. Langen's recent research has focused on mitigating the uncertainties in proton therapy, and she has spoken extensively on this topic both nationally and internationally. In her early career, Dr. Langen was very active in developing protocols for Tomotherapy QA and was co-chair of AAPM's TG 148 dedicated to the subject.

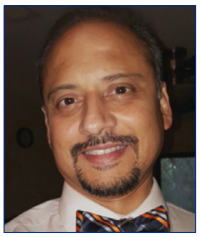
Dr. Langen's ABR service includes chairing the Therapeutic Medical Physics Certifying Exam Writing Committee for the past 3 years and contributing to this committee as a member for many years prior to becoming chair. Dr. Langen has also served as an oral examiner many times over the past two decades



Matthew Podgorsak, PhD
Roswell Park Cancer Institute



Jennifer Stickel, PhD
Colorado Associates in Medical Physics



Sameer Tipnis, PhD
Medical University of South Carolina



Geoffrey Ibbott, PhD
American Board of Radiology

and has distinguished herself as an excellent judge of the clinical knowledge and competence of her examinees. In recognition of her exemplary service, Dr. Langen received the ABR's Volunteer Service Award in 2021.

The BOT is responsible for guiding the development and continuous improvement of ABR assessments and making recommendations to the Board of Governors about exam structures, formats, and scoring. There are currently 23 trustees, 3 of whom are medical physicists. Each trustee has specialty and subspecialty expertise reflecting major areas of clinical practice certified by the ABR: diagnostic radiology, interventional/diagnostic radiology, medical physics, and radiation oncology. The BOT is looking forward to continued strong contributions from Dr. Langen in support of the ABR mission. ■



AAPM needs YOU!

Volunteers are essential to furthering the AAPM mission of *advancing medicine through excellence in the science, education, and professional practice of medical physics.* Become a part of this dynamic community via the AAPM Committee Classifieds. Exciting new opportunities are posted regularly; bookmark or check back often to explore the latest possibilities to get involved!

Functional Radiation Medicine: ASTRO's Initiative to Advance Education, Collaboration and Access

ASTRO CLINICAL AFFAIRS

In 2025, ASTRO's Annual Meeting theme promoted "rediscovering radiation medicine and exploring new indications." While the mainstay of radiation oncology has centered on cancer care, the use of radiation has a decades-long history of treating other medical conditions. "Radiation medicine" reframes the treatment modality beyond oncology, as terms such as "benign" and "nonmalignant" do not fully capture the significant symptoms, functional limitations, and quality-of-life challenges many patients experience. Following the meeting, ASTRO launched a focused initiative on functional radiation medicine (FRM) to advance awareness, education and collaboration in nononcologic applications of radiation therapy.

As part of ASTRO's initiative, an FRM Task Force was established, composed of radiation oncologists and medical physicists from around the world, including **Michael Moyers, PhD**, from Shanghai Proton & Heavy Ion Center, and **Michael Weldon, MS**, from The Ohio State University Medical Center. The Task Force is grouped into three multidisciplinary focus areas: central nervous system and functional neurology; musculoskeletal, skin and inflammatory conditions; and cardiac radioablation. The Task Force brings clinicians and researchers together to share emerging evidence, identify educational opportunities, and support the expanding role of radiation therapy in patient care. Over the last 12 months, the Task Force and broader ASTRO FRM initiative have been developing new resources to meet the needs of the field.

Advancing Education through Grand Rounds

A key component of the FRM initiative is ASTRO's international Grand Rounds webinar series, which connects experts from around the world to discuss emerging research and clinical applications. In 2026, four Grand Rounds events attracted strong engagement from the global radiation oncology community with hundreds of multidisciplinary professionals participating in each event. Grand Rounds features topics ranging from low-dose radiation therapy (LDRT) for inflammatory and degenerative musculoskeletal conditions to the evolving use of stereotactic body radiation therapy (SBRT) for cardiac arrhythmia. Together, these webinars highlighted the growing breadth and role of multidisciplinary collaboration in advancing radiation medicine.



One notable recent session, "From Bench to Bedside," featured speakers from the United States and Germany



Taiylor Russell, MPH
ASTRO

"Radiation medicine" reframes the treatment modality beyond oncology and highlights the broad use of radiation therapy to treat other medical conditions.

ASTRO established a functional radiation medicine (FRM) Task Force, an international group of radiation oncologists and medical physicists to support the initiative and help advance awareness, education and collaboration in nononcologic applications of radiation therapy.

ASTRO hosts a Grand Rounds webinar series, connecting experts from around the world to discuss emerging research and clinical applications of radiation medicine. Visit the Grand Rounds webpage to watch archived sessions and register to attend future events.

discussing LDRT for musculoskeletal conditions. Lisa Weissmann, PhD, of Strahlenklinik Erlangen, reviewed the biological foundation of this work with a focus on research examining how LDRT influences inflammation, immune-cell behavior and bone remodeling. Dr. Weissmann highlighted two preclinical LDRT studies using inflammatory arthritis mouse models showing that a locally applied, single-dose 0.5 Gy treatment can produce systemic osteo-immunologic effects.[1,2] She also discussed the prospective IMMO-LDRT01 trial at Universitätsklinikum Erlangen, which is evaluating patients treated with 0.5 Gy per fraction and assessing pain and immunologic responses.

To learn more about the underlying radiobiology, watch Dr. Weissmann's full presentation and visit the FRM Grand Rounds webpage to watch archived sessions and register to attend future events.

Improving Access through the STAR Map

Another major milestone in 2026 was the launch of ASTRO's **Stereotactic Arrhythmia Radioablation (STAR) Map**, an interactive resource identifying practices using SBRT to treat cardiac arrhythmias, most commonly refractory ventricular tachycardia.

Developed through the FRM Task Force cardiac radioablation subgroup, the STAR Map was created to address a challenge frequently identified by physicians and patients: locating centers with experience delivering these treatments. By providing a centralized directory of participating programs, the resource is designed to increase awareness, support referrals and improve access to care.

Practices performing cardiac radioablation not currently represented on the STAR Map can fill out this form to have their program added.

Building Momentum in Radiation Medicine

Interest in radiation medicine continues to grow as new research, clinical experience and multidisciplinary collaborations expand potential applications of radiation therapy. In 2026, ASTRO hosted its first FRM Workshop at the Annual Meeting, bringing together more than 15 speakers from around the world to share emerging research, clinical case studies and perspectives across multiple specialties.

ASTRO is also developing a multidisciplinary guideline focused on LDRT for osteoarthritis and tendinopathy. Together, these efforts reflect ASTRO's commitment to advancing evidence-based practice and fostering collaboration across the field.

Through educational programs and the development of supportive resources, ASTRO is helping connect clinicians, researchers and patients while promoting continued innovation in this evolving area of radiation medicine. Learn more at ASTRO's FRM website or email frm@astro.org. ■

References:

1. Deloch, L., Derer, A., Hueber, A. J., et al. (2018). Low-dose radiotherapy ameliorates advanced arthritis in hTNF-α tg mice by particularly positively impacting on bone metabolism. *Frontiers in Immunology*, 9, 1834. https://doi.org/10.3389/fimmu.2018.01834
2. Weissmann, T., Rückert, M., Zhou, J.-G., et al. (2022). Low-dose radiotherapy leads to a systemic anti-inflammatory shift in the pre-clinical K/BxN serum transfer model and reduces osteoarthritic pain in patients. *Frontiers in Immunology*, 12, 777792. https://doi.org/10.3389/fimmu.2021.777792

AMERICAN ASSOCIATION of PHYSICISTS IN MEDICINE

RDCE

NEWLY ADDED MPCEC QUIZZES IN THE AAPM ONLINE LEARNING CENTER

Radiotherapy Image-guided | Commissioning of a combined stereoscopic x-ray and surface guided radiotherapy system for performing breath hold gated lung radiotherapy

Cardiovascular | Cardiac Ablation to Treat Ventricular Tachycardia

Professional | Guidelines for Writing and Reviewing AAPM Task Group Reports

Computed Tomography | A comparative analysis of two dual-layer flat panel detector designs and mimicking of a triple-layer flat panel detector in spectral CT

Computed Tomography | Assessing variations in 3D image quality in chest CT across sites and scanners

Mammography | AAPM task group 234 report: Virtual tools for the evaluation of new 3D/4D breast imaging systems

Radiotherapy External Beam | Dose optimization with fully flexible vertex positioning for LATTICE radiotherapy

Radiotherapy | Quantum computing for radiation therapy optimization

Radiotherapy | Introducing and Applying Automation in Radiation Oncology: From Simulation to QA

Radiotherapy Imaging | CBCT, MRI, and PET Imaging in Radiation Therapy

AAPM MEETING CONTENT NOW AVAILABLE IN THE VIRTUAL LIBRARY

AAPM Annual Meeting - 2024

AAPM Summer School - 2024

AAPM Spring Clinical Meeting - 2024

QUESTIONS OR CONCERNS?

Contact Us: Online Learning Services Subcommittee

INTERESTED IN SUBSCRIBING TO THE ONLINE CONTINUING EDUCATION PROGRAM?

Contact membership@aapm.org to purchase a subscription

Enabling Secure Communication Between Radiation Therapy Systems

RTSEC ACTIVITY REPORT

Written on behalf of: Radiotherapy System Engineering Council (RTSEC)

In May 2026, the Radiation Therapy System Engineering Council (RTSEC) organized a multi-vendor hackathon in Trento, Italy, bringing together radiation oncology system architects, cybersecurity experts from participating vendors, and clinical radiation oncology professionals to address a practical problem that has long limited the deployment of secure communications in radiation oncology departments.

The hackathon was motivated by a gap identified by RTSEC in the deployment of secure interoperability between RT systems. The problem is not a lack of standards for secure communications. DICOM already supports secure communication through TLS for DIMSE services and HTTPS for DICOMweb services, and the IHE IT Infrastructure (IHE-ITI) domain has published profiles such as Audit Trail and Node Authentication (ATNA), further specifying the use of these services for interoperable secure communications and mutual authentication between systems. However, all these standards assume that participating systems already possess valid digital certificates and that a trusted PKI infrastructure is available to issue and manage them. In practice, integrating systems with healthcare provider PKI environments and managing the resulting certificates remains largely manual. As certificates periodically expire, certificate lifecycle management has become a significant barrier to the deployment of authenticated and encrypted communications between RT systems. Failure to renew certificates can result in loss of communication between RT systems, delaying or even preventing patient treatments from being delivered.

Several standards exist for certificate enrollment and lifecycle management, including Enrollment over Secure Transport (EST), Automated Certificate Management Environment (ACME), and Simple Certificate Enrollment Protocol (SCEP). RTSEC focused on evaluating whether existing standards could address the practical deployment challenges encountered in radiation oncology departments.

Through discussions within the group and guidance from cybersecurity experts participating in RTSEC, EST progressively emerged as the preferred candidate. Compared to legacy enrollment protocols such as SCEP, EST provides stronger authentication mechanisms, supports automated certificate provisioning and renewal workflows, and builds on widely deployed TLS technologies while remaining vendor neutral. Unlike ACME, which was designed primarily for Internet-facing services, EST directly addresses enrollment and trust establishment within enterprise PKI environments.

To validate the approach in practice, RTSEC developed the Kryptonian



David Wikler, MS
IHE-RO Technical Committee co-chair
IBA
Université Libre de Bruxelles

DICOM TLS, DICOMweb HTTPS, and IHE ATNA provide the foundations for interoperable secure communications. The missing piece to widespread deployment is certificate lifecycle management. Digital certificates must be issued, installed, renewed, and validated throughout their lifetime. Today, these activities often remain manual, and no common interoperable approach exists for establishing trust and authenticating systems.
When certificates expire, communication between RT systems stops, delaying or even preventing patient treatments.

RTSEC ACTIVITY REPORT , Cont.

Gateway, an open-source proof-of-concept implementation and test environment for certificate enrollment and renewal in RT systems using EST (RFC 7030) and existing PKIs. The Kryptonian Gateway sits between RT systems and healthcare provider certificate authorities, exposing a standard EST interface to RT systems while abstracting the diversity of backend PKI implementations.

The Kryptonian Gateway also provides Registration Authority (RA) functions between RT systems and healthcare provider certificate authorities. Administrators register device identities and issue activation codes through the gateway. During enrollment, devices submit certificate requests using EST, which are validated against the registered device information before certificates are issued by the underlying PKI. Once enrolled, systems can renew certificates automatically through the same standardized EST interface.

By providing a common enrollment workflow independent of the underlying certificate authority technology, the approach reduces the complexity of integrating individual systems with diverse healthcare PKI environments.

The Trento hackathon used the Kryptonian Gateway as the reference implementation to define and implement interoperable certificate enrollment and renewal workflows. Three participating vendors implemented the workflows in their own products' development environments and successfully demonstrated automated certificate enrollment and renewal across vendor boundaries. The exercise confirmed that standards-based certificate lifecycle management is achievable in practice and can be added to existing radiation oncology systems without redesigning their architectures or modifying existing DICOM or DICOMweb communication implementations.

The hackathon also demonstrated a high-performance reference implementation of a DICOM-to-DICOMweb gateway developed in Rust, showing that DICOMweb could be introduced into existing radiation oncology environments without requiring systems to replace their existing DICOM communication implementations.

The successful prototype and interoperability testing provided the foundation for RTSEC to bring the topic to the IHE Radiation Oncology (IHE-RO) Technical Committee (TC) and propose further standardization work.

The discussions within IHE-RO TC quickly concluded that the identified gap was not specific to radiation oncology. Certificate enrollment and lifecycle management are common challenges across healthcare interoperability ecosystems, including medical imaging systems, healthcare IT systems, and networked medical devices.

As the discussion expanded beyond the scope of the RO domain, interactions with other IHE stakeholders revealed parallel activities within the medical device interoperability community. In particular, RTSEC became aware of the OR.NET initiative and the IEEE 11073 Service-oriented Device Connectivity (SDC) ecosystem, which focuses on secure interoperability between medical devices such as patient monitors, infusion pumps, ventilators, anesthesia workstations, and other point-of-care systems.

This connection revealed a remarkable development. A dedicated OR.NET certificate infrastructure working group, established independently and around the same time as RTSEC, had been investigating essentially the same problem. Despite approaching the issue from different perspectives, both groups identified certificate lifecycle management as the primary barrier to the deployment of secure communications and independently converged on EST as the preferred enrollment protocol.

Given this convergence and the cross-domain nature of the problem, the topic was subsequently brought to the IHE IT Infrastructure (ITI) Planning Committee. Discussions confirmed that certificate lifecycle management is not specific to radiation oncology or medical devices, but affects any healthcare system relying on secure communications, including DICOM TLS, DICOMweb, HL7 FHIR services, HL7 v2 MLLP/TLS integrations, ATNA-secured systems, software services, gateways, and networked medical devices.

As a result, the IHE ITI Planning Committee encouraged the development of a joint profile proposal involving RTSEC and OR.NET cybersecurity experts. The goal is to define a reusable infrastructure profile for certificate enrollment and lifecycle management that can be leveraged across healthcare domains, while allowing domain-specific requirements and deployment models to be addressed by domain profiles where needed.

What began as a practical hackathon exercise in Trento

has therefore evolved into a broader interoperability initiative spanning radiation oncology, medical imaging, healthcare IT, and medical device ecosystems. RTSEC looks forward to continuing this collaboration with IHE, OR.NET, and other stakeholders to help make secure interoperability easier to deploy and maintain across healthcare. ■

References and Additional Information

1. Swerdoff S PhD, Cardan R PhD. The Formation of the RT Systems Engineering Council: Bridging Gaps in Radiation Therapy System Integration. *AAPM Newsletter*. March/April 2026; 51(2):53-54.
2. Dippel A. Security Review of IEEE 11073 SDC Medical Device Standards. https://alexdippel.de/2026/04/security-review-of-ieee-11073-sdc-medical-device-standards/
3. Kryptonian Gateway: A Reference Implementation and Test Environment for Certificate Enrollment and Renewal Using EST. https://github.com/AAPM-RT-SEC/RTSec.Kryptonian



Daniel Low receives ASTRO Gold Medal Award

PERSON IN THE NEWS



Daniel Low, PhD

The AAPM congratulates **Daniel Low, PhD**, FAAPM, FASTRO, on being one of four recipients of the 2026 ASTRO Gold Medal Award! Dr. Low obtained a PhD in Nuclear Physics at Indiana University and learned about the field of medical physics after graduation. He joined Washington University in St. Louis as a junior medical physicist, and he considers achieving tenure there as one of his greatest accomplishments. He is now a Professor and Vice Chair of Medical Physics Research and Innovation at the University of California, Los Angeles. Another accomplishment he is proud of is authoring the "Gamma paper," the paper which defined the criteria commonly used to compare dose distributions, and the most highly cited paper in the history of the journal Medical Physics.1 More recently, Dr. Low has been developing the idea and clinical implementation of five-dimensional CT (5DCT), which uses a motion model during reconstruction to create an artifact-free 4DCT.2 In recognition of his many contributions to the field, he was awarded the ASTRO Gold Medal.

Dr. Low and the three other Gold Medal award winners were honored during the inaugural Gold Medal Gala held on Tues, Sept 29, 2026, during the ASTRO Annual Meeting in Boston, Massachusetts. Proceeds from the Gala benefited Speed of Light – The ASTRO Foundation. AAPM congratulates Dr. Low on this well-deserved award!

References

1. Low DA, Harms WB, Mutic S, Purdy JA. A technique for the quantitative evaluation of dose distributions. Med Phys. 1998 May;25(5):656-61.
2. Lauria M, Kim M, O'Connell D, Lao Y, Miller CR, Naumann L, Boyle P, Raldow A, Lee A, Savjani RR, et al. A Retrospective Analysis of the First Clinical 5DCT Workflow. Cancers. 2025; 17(3):531. ■



Jennifer Pursley, PhD
Mayo Clinic



1631 Prince Street, Alexandria, VA 22314 | p. 571-298-1300 • f. 571-298-1301 | **aapm.org**