Radiation Oncology News
FOR ADMINISTRATORS
2023 VOL 33 | No. 2

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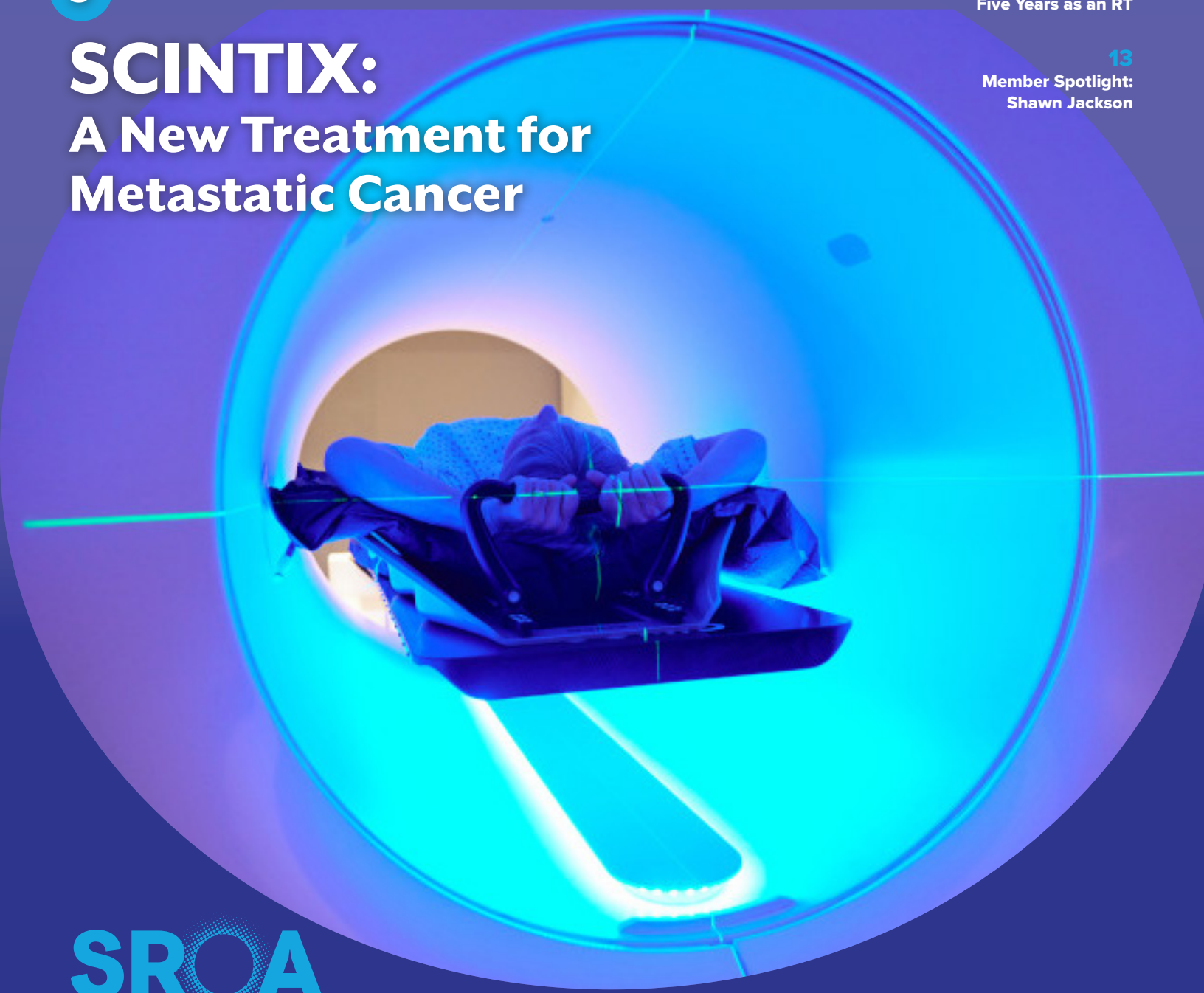

SROA
A Publication for The Society for Radiation Oncology Administrators
sroa.org

Radiation Oncology News
FOR ADMINISTRATORS

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About SROA News

The newsletter is published four times a year by the Society for Radiation Oncology Administrators as a member benefit. The views expressed in this publication are those of the individual contributors and do not necessarily represent official views or policies of the SROA.

Contributions are welcome. Write to info@sroa.org for specifications. The editor reserves the right of acceptance and final editing of all submitted materials. Subscription rates are included in membership dues.

To facilitate timely publication, material for issues must be received by the following dates:

Issue #1	February 1
Issue #2	April 1
Issue #3	July 1
Issue #4	October 1

E-mail info@sroa.org to notify SROA of an address change.

Photos courtesy of RefleXion Medical (cover, p3, p4); ©2023 University of Michigan at Ann Arbor Optical Imaging Laboratory (p9).

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SCINTIX : A New Treatment for Metastatic Cancer

By Tammy McCausland

In February, RefleXion Medical received clearance[a,b] from the U.S. Food and Drug Administration (FDA) for SCINTIX therapy to treat primary or metastatic cancers in the lung and bone. SCINTIX, the trade name for RefleXion's biology-guided radiotherapy, "detects emissions from an injected radiotracer and, in about half a second, delivers precise doses of radiation directly to destroy cancerous tumors while sparing healthy tissue."[1] The FDA approval is a culmination of a 15-year effort to translate founder and CTO Sam Mazin's idea of turning cancer on itself to being able to use the technology in clinical practice. Yet it also marks a new beginning of sorts for the company.

Sam Mazin

Dr. Sean Shirvani

"This marks the first time radiation therapy is acting autonomously, where a tumor is self-directing its own treatment. We're excited that we will be able to generate evidence[c] around the first treatments and patient outcomes," says Mazin. "The goal of SCINTIX therapy is to treat metastatic disease. We're going to be able to treat patients that were traditionally untreatable with radiotherapy before because of the ability to target multiple tumors in the same session."

RefleXion received approval for SCINTIX therapy for treating tumors in the lung and bone with the tracer fludeoxyglucose F18—commonly called FDG—a form of glucose that highlights metabolic activity in the body. Tumors consume much more glucose than healthy tissue, which is why FDG works so well for visualizing many solid tumor cancers. "We're excited about those first treatments happening this year with SCINTIX therapy. We're also focused on expanding our footprint in the United States, installing more machines and expanding our indications," says Mazin.

RefleXion plans to add indications with novel PET tracers such as those that target prostate-specific membrane antigen, which have already improved how prostate cancer is being detected,

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[a] The FDA clearance for SCINTIX therapy was a de novo clearance and is specifically for tumors in the lung and bone. These are the number one and two sites, respectively, of metastatic disease.

[b] In developing the technology, RefleXion was able to demonstrate how its technology works in phantoms/bench experiments, which was part of the data submitted to the FDA. Stanford University and University of Texas Southwestern, two of RefleXion's partners, conducted a clinical study to produce the clinical data that the FDA also needed to get the de novo clearance, which is a first of its kind for the industry.

[c] In the first 10 years, RefleXion published approximately 20 abstracts and papers. In the last few years, the company has published more than 100. RefleXion has formed an academic advisory board and opened a registry—the first pan-cancer registry because the technology is capable of treating any solid tumor at any stage of cancer. With its partners, RefleXion intends to continue to publish its evidence-based research.

Why it's called SCINTIX

Sam Mazin says biology-guided radiotherapy is a perfect descriptor of RefleXion's technology, because it's using the tumor's biology to guide the radiotherapy treatment. "Since this is really a paradigm-changing technology—the first autonomous radiotherapy system—we thought it deserved its own name," he says. The first part of SCINTIX comes from the concept of scintillation, because PET detectors have crystals on them that convert those signals from the radiotracer into light through a process called scintillation. "It's that scintillation that is unique to our technology in radiotherapy. We added an 'X,' not just because we love the 'X' at RefleXion, but 'X' also stands for X-rays and the way you're treating with radiotherapy. It's combining how we see with how we treat in one word," he says.

managed and staged. As Mazin explains, using PSMA-tracers instead of FDG can be added onto the RefleXion system via a software upgrade for use with SCINTIX therapy.

Sean Shirvani, MD, RefleXion's chief medical officer, says RefleXion's vision is to "create a platform for efficient and scalable treatment of multiple targets in a patient's body, much in the same way that the gamma knife technology allowed that for multiple lesions within the brain." Tumors in the brain have no motion, which makes the gamma knife an effective multi-ablation technology. By contrast, tumors elsewhere in the body have a larger range of sizes and shapes and different motion paths. "Some tumors in the bone are relatively still, some tumors in the lung move in periodic fashion with breathing, and tumors in the belly may move in random fashion with peristalsis—the bowel's contractions throughout the belly," he says. "The technical problem outside the brain is much harder, and that's why new technology is needed to conquer it."

RefleXion's X1 machine is also fully backwards compatible: cancer centers can turn the SCINTIX mode off and have a very good ring gantry system that can do traditional IMRT and SBRT cases. The X1 is designed to fit into a standard vault, does not require any major new infrastructure to fit into the department, and is made to fit into the current workflows that the department has. The PET imaging workflow does need to be added. "We've made the economics work for any type of center, and we have validation of that through the sites that we've sold machines to. This ranges from the big academic centers to small community practices," says Mazin. "Our key message is it's worth administrators at least taking a look at this technology and seeing if it could help them improve their practice and specifically add a new service line in metastatic disease."

> "We're going to be able to treat patients that were traditionally untreatable with radiotherapy before because of the ability to target multiple tumors in the same session."
>
> **–Sam Mazin**

"RefleXion realizes reimbursement codes matter to reflect the extra energy and effort put into a new technology. We've already undertaken the process to create those codes to support our centers," says Dr. Shirvani.

As the field of radiation oncology continues to evolve, cancer patients have new opportunities to access the best care and the latest technology. CT and MRI, which have traditionally guided radiotherapy, are now being used to assess how the therapy is progressing in real time. The advent of stereotactic treatments and hypofractionation, have, for several cancers, reduced radiotherapy treatments from 30–40 fractions to 5 or fewer.

The oncology field has just begun to explore the combination of systemic therapy and debulking of tumor mass to provide

optimal outcomes. “Insofar as RefleXion’s technology allows us to explore the same combination of local debulking and systemic therapy in later-stage cancers that we use in earlier stages of disease, I think it could start a conversation about durable remission in advanced cases that we haven’t been able to investigate previously,” says Dr. Shirvani.

Mazin envisions RefleXion becoming a big player in the radiotherapy space because of the type of patient the company’s trying to address—namely, metastatic cancer patients who are traditionally addressed by the pharmaceutical industry. “I think there’s a potential for this technology to be at the center of a new paradigm in the Stage IV setting, where it’s not really about one therapy or another therapy. We have a saying at RefleXion, that sometimes the best medicine is all of them,” he says. “With the advent of combination therapy, which is bringing medical oncology and radiation oncology closer together, the X1 machine really enables that.”

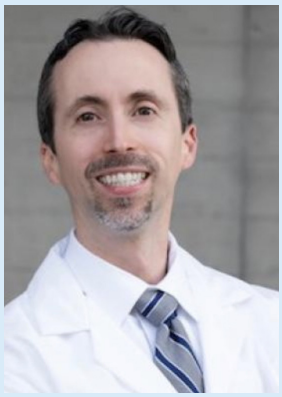
“Our goals include adding other radiotracers besides FDG and treating other anatomic areas. We also plan to pursue post-market studies within our approved indications, having to do with specific clinical scenarios. Those could be early-stage or late-stage cancers,” says Dr. Shirvani. “We will focus on where we think the core technology of tracking and treating tumors is likely to be beneficial over existing options.”

Reference

1. RefleXion Medical. Science fiction becomes reality, and a new day dawns for cancer care. March 20, 2023.

An Early Adopter of RefleXion’s X1

City of Hope was an early adopter of RefleXion’s X1 technology. It has treated patients using IMRT and SBRT, using the fan-beam sliced CT imaging that’s available on the unit to localize the target. They have treated palliative metastatic cases, as well as pelvic cancers, abdominal cancers, thoracic cancers, head-and-neck cancers and some extremities.



Dr. Terence Williams

Terence M. Williams, MD, professor and chair of City of Hope’s Department of Radiation Oncology, looks forward to treating patients with SCINTIX. “We’ll be able to use the biology of the tumor and specific parts of the tumor to recognize where it’s located and treat it in real time,” he says. “The usual exercises we do to manage motion, like breathing motion or organ motion, will become less of an issue. When the photon emissions from the PET come out, they’re detected by the PET array, and within a millisecond, the treatment radiation is shot back to the tumor and targets the tumor to effectively ablate it.”

SCINTIX is another form of precision radiotherapy, Dr. Williams explains, because it uses the tumor’s biology for more precise targeting. “RefleXion’s technology is delivering more biologic information about the tumor to the clinician, which can allow us to further personalize the treatment,” he says. “Sometimes we see all these CT changes like a big tumor mass, and sometimes there’s collapse in the lung or scarring or whatnot. It’s hard to figure what’s tumor and what’s not. SCINTIX could allow us to be a little bit more precise in that regard.”

City of Hope radiation oncologists will collaborate with the consortium of sites RefleXion has established to develop prospective evidence of the utility of the SCINTIX treatment. They will likely study cancer patients with oligometastatic disease for various indications such as lung cancer, prostate, breast, and gastrointestinal cancers. “We want to start to treat with SCINTIX for the first FDA indication and to capture a lot of that prospective evidence for clinical research so we can make some advances to understand how best the equipment is going to be used or what it should be used for,” says Dr. Williams.

Dr. Williams envisions treating the first patients with SCINTIX in the next several months. It will take a bit of time to get the upgrades to the equipment and the training needed to start the process. “Once the specifications are worked out and the SCINTIX therapy is optimized, it’s possible we could treat many, many lesions in the body in one course of treatment, which goes beyond our typical three or so lesions that we typically treat at once with our standard CT-guided radiation,” he says. “SCINTIX opens the door to being able to use imaging radiotracers to identify where the cancer is in the body and treat it accordingly. It’s a first-in-class technology. It’s very unique, innovative.”

RTs *Can* Work Remotely

By Lea Woods

At the beginning of the pandemic, we temporarily closed one of our two facilities and transferred our three radiation therapists (RTs) to our facility in Rock Hill, SC. We had 10 RTs on staff, which we divided into two teams. One team worked remotely for two weeks while the other team was hands-on in the clinic. During the pandemic, we had a condensed patient schedule so that our RTs could focus on getting patients in and out efficiently.

The remote team focused on all the paperwork, patient phone calls and scheduling so that we could make our processes as efficient as possible. The idea was that if an RT were to contract COVID-19, their entire team would go remote and the backup team would come into the clinic.

We used that model for about six weeks. As we learned more about COVID-19 and ways we could reduce the spread, we began to bring staff back to the clinic and have only a few RTs working remotely for two weeks at a time, then one week at a time. For almost two years now, we've had RTs working remotely two days per month. We've learned many wonderful things that benefit the clinic and the RTs, so remote work is now based on different necessities.

In our model, we usually have one remote RT a day. The remote RT is expected to be logged in and available as if they were in the clinic. In a typical day, the remote RT will perform the following tasks:

- Participate in the daily huddle at 8:00 a.m. virtually through Microsoft Teams.
- Relay any information pertinent to the treatment machines to the on-site RT.
- Complete items on their ARIA task pad. Tasks that show up in ARIA are based on our care path links related to where the patient is at in their course of treatment. After one link is completed, the next link will populate and that link, depending on who it goes to, will appear in the RT's task pad, whether it's to call that patient or to complete a chart check.
- Work on weekly chart checks (up to 20/day) and on initial chart checks (up to 10/day).
- Cover two machines at a time when they're doing the paperwork.
- Work on the machine schedule and on scheduling patients.
- Import AlignRT structures from physics.
- Assist in calling and rescheduling patients if a machine happens to be down.

Lea Woods

By having these tasks done remotely, in the clinic we can focus solely on taking care of the patients. We want all the RTs in the clinic to be as patient-focused as possible.

The remote RT takes care of any patient needs outside of what's happening on the treatment machine. For example, if we have a patient under treatment in the clinic who needs to reschedule an upcoming appointment, that information is passed on to the remote RT for them to coordinate.

Initially, we had to acclimate everyone to the expectation that they need to be as available at home as they would be in the clinic.

The remote RTs are logged in all day. And if we have a machine down or if someone calls out or needs to be out, a remote RT comes in to the clinic.

By having our RTs work remotely twice a month, we've been able to eliminate a lot of burnout, compassion fatigue and losing staff to The Great Resignation. Working remotely, in some ways, gives the RTs a mental health day; they look forward to their two days each month as they can plan their own personal appointments—like a medical or dental appointment—around their remote work. They may also have the flexibility of signing on a bit later or clocking out a bit earlier.

If an RT has a certain day they want to work remotely, we can discuss it. However, everyone is clear and understands that the department needs come first. If we can make a specific day work for everyone's benefit, then we try to accommodate these requests. A new RT coming on board must have been employed for at least three months and be in good standing before they're eligible for remote work.

Remote work has become more common in health care, especially due to the pandemic, and most of our clinic has the benefit of working remotely. Our physicists do remote rotations as do our dosimetrists. Our nurses also have been presented with remote work alternatives, but they prefer to be in the clinic. We have very supportive medical directors; management and the whole department has worked together as a very cohesive unit to provide this work accommodation.

At SROA's 2022 Annual Meeting, some administrators expressed their preference for in-office work, and many companies still prefer people being in the office rather than working remotely. For us, remote work came out of necessity, and it's hard to retract these remote work privileges when you realize it's absolutely feasible. Just as many companies within and beyond health care have shifted their entire staffing model, we have developed a remote work model that can work for RTs. It does for us!

> "Just as many companies within and beyond health care have shifted their entire staffing model, we have developed a remote work model that can work for RTs. It does for us!"
>
> **–Leah Woods**

The benefits of this model are amazing. I haven't had any RTs call out in two years unless they were sick with COVID-19. I get amazing feedback—our RTs say that it means the world to them to have that day to look forward to and to know that they can schedule around things. Who doesn't like working an entire day in their pajamas? They get to sleep in a little later. They can do a load of laundry while they're doing chart checks. It adds a nice element to the work-life balance we all seek and employers look to integrate into their operations.

I think our model can be applied elsewhere provided the center has adequate staffing—for example, we have two-and-a-half RTs per machine. We can rethink the way that we do things and many different people on our teams can benefit from remote work in some capacity. Morale is at an all-time high, and remote work also helps to mitigate overtime in our very busy clinic. We've demonstrated for more than three years now that it can be done without any safety concerns or issues while enhancing the retention of our valued staff and the increased in staff morale.

GET INVOLVED WITH SROA

Volunteers are important to SROA. They help plan programs, serve as mentors, lead groups interested in specific topics, oversee development of newsletter content, serve on the board of directors and give their time at the annual meeting.

If you would like to learn more about association leadership opportunities, visit the SROA website. To learn how you can volunteer, email info@sroa.org.

Tackling Payor Issues

By Aaron Brammer

In 2023, SROA and the American Society for Radiation Oncology (ASTRO) have teamed up to tackle payor challenges. Both societies are collecting examples of inappropriate denials and delays in care and identifying trends and themes. This partnership will bring radiation oncologists and practice administrators together with payors to discuss the resulting treatment delays and denials. We will meet with the payors to present patient cases and scenarios that demonstrate commonly experienced, inappropriate prior-authorization trends.

Recurrent issues have made it more difficult for providers to submit payment for services rendered. Payors may be slow either to accept or to reimburse legitimate, patient-specific, necessary services rendered on behalf of our cancer patients. Some overarching consistent issues include peer-to-peer review, backdated authorizations and payors' interpretations of certain billing codes.

The goal of this SROA-ASTRO partnership is to engage with different payors to gain a sense of payors' processes and to help payors understand our concerns and the challenges we're experiencing.

In the past, issues have arisen regarding specific types of treatments—typically the more technical or expensive ones. The current trend appears to be payors reviewing a broader range of services; whereas in the past, there was more leniency for approving commonly used treatments.

Some payors are large entities with multiple offices and locations, resulting in inconsistent interpretation of guidelines. Longer review times—up to 14 business days—slows the time to receive an approval before a patient's treatment can proceed.

The meetings scheduled this year are intended to be a channel for us to present our members' feedback to the payors. We have an opportunity to learn about respective challenges or pain points and gain a better understanding on both sides so that the reimbursement process can function more effectively. In addition, we're hoping to learn what we, the providers, can change to help expedite reimbursement. If we understand what payors want, we can take the information back to our members.

SROA and ASTRO had their first meeting with UnitedHealthcare (UHC) in April. The meeting was productive. The biggest issue discussed was peer-to-peer reviews. We learned about UHC's process, timelines, and how providers can prepare for peer-to-peer reviews. We shared with UHC what providers' expectations are and how they can make sure we know who should participate in the peer-to-peer review. We also discussed backdated authorizations. Providers have a responsibility to help payors understand their processes and what work we can do prior to treatment.

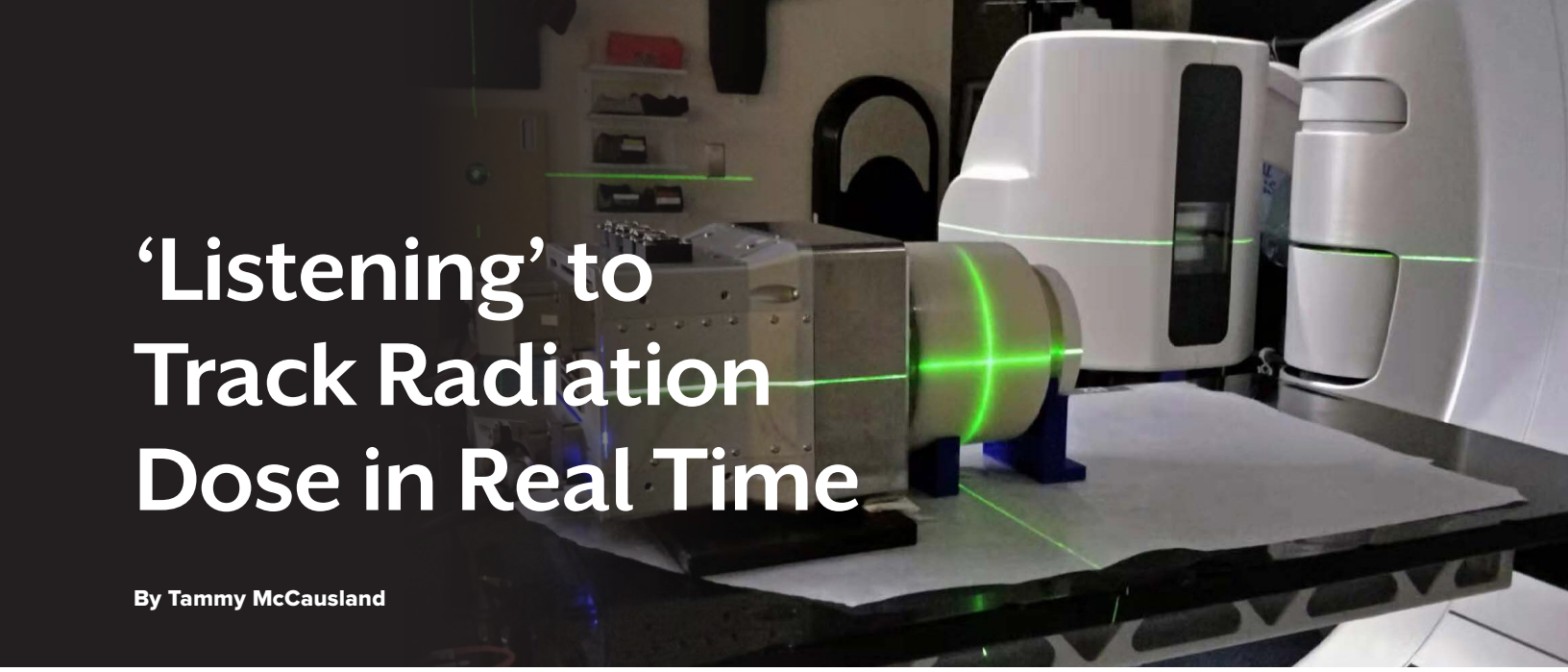
From an operational standpoint, administrators need extra resources, including staff to coordinate and ensure all required documents are complete and collated and any meetings are scheduled. If, for example, I must take an oncologist's time to tackle a payor issue, that's time and resources away from the clinic and patient care. Waiting for authorization from the payor can cause delays in payment for services as well as delays in starting treatment for a patient. Delays frustrate patients. Patients also worry if their treatment will be paid for or if they will have to pay out of pocket. Many patients have already accumulated expenses from a surgery and/or chemotherapy by the time they reach our offices.

This year we will be making connections, sharing our respective concerns and processes, learning from each other and collaborating on how to improve. We won't be able to solve all the issues this year, but we aim to have a better understanding and a level of agreement and trust established so that we can continue to work through issues as they arise. All parties want to work together to improve the approval process and, ultimately, serve our patients better.

Working with partner associations is a key component of SROA's strategic plan. Through these partnerships our goal is to make sure that we are able to address the challenges our members are facing and provide them with valuable resources. We are all in this together, experiencing the same challenges. Our efforts to gain insights, clarity and direction hopefully will provide value to our membership.

SUBMIT YOUR ISSUES

You may submit examples of inappropriate use of prior authorization policies that have resulted in treatment delays and denials. All examples should include de-identified patient information. **Email your examples to healthpolicy1@astro.org**. The SROA-ASTRO team will review your submission, follow up with any questions, and let you know the payor's response to your example once the meeting has taken place.



‘Listening’ to Track Radiation Dose in Real Time

By Tammy McCausland

Experimental setup for the iRAI system (metal box on left) using a lard “phantom” (cylinder at center) that approximates the human body.
(PHOTO CREDIT: UNIVERSITY OF MICHIGAN’S OPTICAL IMAGING LABORATORY © 2023)

Each year hundreds of thousands of cancer patients in the U.S. receive radiation therapy to kill or damage cancer cells to prevent them from spreading. While radiation therapy is effective, lack of precision can damage healthy tissue surrounding a tumor. Radiation also increases the risk of developing new cancers.[1,2]

Researchers at the University of Michigan in Ann Arbor have devised a way to measure radiation dose for the first time.[1,2] They have created a new 3-D imaging technology that precisely captures and amplifies tiny sound waves created when X-rays heat tissues in the body, enabling clinicians to “map the radiation dose within the body, giving them new data to guide treatments in real time.”[1,2] The results of a patient study using the new technology were published in *Nature Biotechnology*.[3]

“Once radiation treatment is started, it’s like a black box. We don’t know really what’s going on inside the body. We can predict what’s going on in the body based it on our simulations and modelings, but we never know how much dose is delivered actually in the tumor, because we cannot directly mirror it,” says Xueding Wang, Ph.D., the Jonathan Rubin Collegiate Professor of Biomedical Engineering, professor of radiology, and corresponding author of the study. Dr. Wang also leads the university’s Optical Imaging Laboratory.

With this ionizing radiation acoustic imaging system it’s possible to visualize the dose by “listening.” According to Dr. Wang, when X-rays are absorbed by tissues in the body, they are turned into thermal energy. That heating causes the tissue to expand rapidly, and that expansion creates a sound wave.”[1,2] His group is the first to achieve imaging on tissues, on animal models and in a patient study. In radiation therapy, the X-ray used is usually pulsed, and this energy is deposited in the tissue. “This balance of X-ray energy in the tissue also induces a temperature rise. It’s a very small but very quick temperature rise because the X-ray is pulsed—it’s not a continuous wave,” explains Dr. Wang. “It can generate sound because of what we call the thermal elastic expansion. The thermal elastic expansion will become an acoustic wave in the tissue, which is very similar to the acoustic wave in medical ultrasound imaging.”


Xueding-Wang

Acoustic waves are typically weak and undetectable. In medical ultrasound, the wave is sent to the tissue and then the reflected wave from the tissue is detected to generate an image—for example, the image of a baby. However, in this case, the goal is to have the X-ray-heated tissue generate an ultrasound. “We simply listen to the sound or detect the sound by using an array of acoustic transducers, not just a single element,” he says. An array of ultrasonic transducers positioned on the patient’s side enables the new ionizing radiation acoustic imaging system to detect the sound wave. The signal is amplified and then transferred to an ultrasound device that constructs images an oncology clinic may use to “alter the level or trajectory of radiation during the process to ensure safer and more effective treatments.”[1,2] They use the 2-D array in their research.

“When we receive the sound by all the transducers, we can do an image reconstruction. We can generate an image which shows the dose deposition in the tissue,” he says. “The difference here compared to medical ultrasound imaging is we don’t transmit ultrasound to tissue. Instead, we listen to the X-ray-induced ultrasound in the tissue. It’s a totally passive imaging technology.”

The signal intensity or signal amplitude is proportional to how much dose is delivered to the tissue or how much X-ray dose is

actually absorbed by the tissue. "The image can show the spatially distributed dose in the tissue. Where there is a stronger dose, we should see a stronger amplitude of the signal," he says. "The image is presenting directly the location of the dose and also the distribution of the dose. And that is exactly what we want to know in radiation oncology."

> "The difference here compared to medical ultrasound imaging is we don't transmit ultrasound to tissue. Instead, we listen to the X-ray-induced ultrasound in the tissue."
>
> **–Dr. Wang**

When a cancer patient visits the clinic, they have either a CT, MRI or PET scan so clinicians can ascertain the tumor's size and shape and whether it's next to very sensitive organs. The medical physicist and radiation oncologist work together to develop a treatment plan that will maximize the dose delivered to the tumor while minimizing the dose delivered to the surrounding tissue, especially the sensitive organs and the spine.

Software and algorithms are used to help create a treatment plan. As Dr. Wang explains, usually a multicolor simulation is done to simulate the patient's body as well as the tumor's location and size. But the treatment plan also assumes that the patient's body will not move during the treatment. "We understand the patient is not a phantom. We always move spontaneously. If the tumor is in the liver, for example, a patient's breath will move the whole liver and the tissue together," he says. To compensate for this movement, usually the dose is delivered to a bigger area than the tumor to make sure that the tumor is totally covered. Consequently, normal surrounding tissues will also be killed, which is not good for patients.

"When we have a technology that can image the exact location and distribution of dosing in the tissue, several things are possible," he says. "You can potentially guide the beam to the tumor and always just target the tumor because you know where the dose is. You can also use ultrasound to image the tissue anatomy and location and then compensate for this type of motion and the patient-to-patient difference when using the technology to map and quantify the dose," he says.

Other imaging technologies can mirror the dose delivered deep in the body, but they can only image the tumor, organ structures and any movement. "For some tumors that are close to sensitive organs, if you have an imaging technology that allows you to visualize the dose and map the dose, then you can always try to make adjustments because treatment is not a one-time deal," he says. If it's possible to minimize or avoid uncertainties (patient-to-patient differences and patient motion), the treatment is better controlled and thereby more precise.

Dr. Wang and his research team are now trying to repeat the study with more patients; so far they have recruited five. Their plan is to first repeat what they have done and improve upon it. "Although the paper we published shows very promising results, it is still a proof-of-concept, and a lot of clinical limitations need to be addressed," he says. "We want to further improve the sensitivity so that we can visualize the dose with better accuracy. We also want to image the location of the dose more precisely, which is what we call spatial resolution."

For instance, since a patient's ribs can block the sound waves and destroy image quality, Dr. Wang explains they are considering using a patient adaptive transducer to achieve higher image quality.

The research was supported by the National Cancer Institute and the Michigan Institute for Clinical and Health Research. The imaging information from the 3-D imaging system could help clinicians address uncertainties that stem from positioning, anatomical variation and organ motion and deliver the dose with "pinpoint accuracy."[1,2]

"We want to generate broader interest so that more scientists can work with us to promote the technology. Hopefully one day this technology can benefit patients," he says. "We have a pending patent that is still under review, and we hope to commercialize the technology." Medical devices can take three to five years to be approved by the U.S. Food and Drug Administration. They'd like to have a multiple center clinical study to demonstrate the visibility and to engage more clinical sites. They also hope to collaborate with ultrasound companies or radiation oncology companies to better integrate the system within radiation oncology treatment.

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Navigating Your First Five Years as a Radiation Therapist

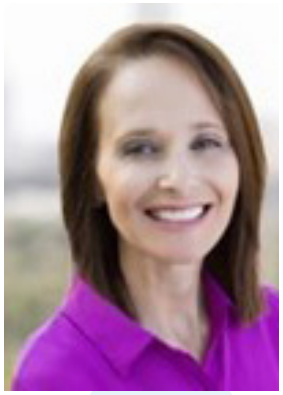
By Ron DiGiaimo, Cheryl Turner and Ben Adams

You're embarking on an exciting chapter in your career. As a radiation therapist (RT), you're in an important sector of health care, where patient care intersects with complex and constantly evolving technology.

You're likely excited, and also wondering, what's next? You may feel overwhelmed at times and wonder if you can manage all your responsibilities. The guidance provided in this article can help you to succeed and thrive.

Ron Di Giaimo

Ben Adams



Cheryl Turner

Go the Extra Mile

You can create opportunities by being the person who volunteers for extra assignments. For example, you can learn the most complex setups; shadow and assist the doctor while they do brachytherapy implants (HDR and LDR); and participate in every aspect of operations from patient care, to supply ordering, charge capture, compliance and expense management. Exposure and experience today will prepare you for future success. Attitude matters, always.

By learning every detail of complex patient setups (diagnosis, scheduling, organs at risk, etc.) you will become more knowledgeable about the "why, when and how" of your role in relation to your peers in other modalities. Small steps like these will help develop your competencies as well as your communication and collaboration skills.

Volunteering is a great way to get ahead and start building professional relationships with colleagues. Radiation oncology is a small field, so those connections will count tenfold throughout your career!

Invest in Yourself and Your Network

Since oncology care is multidisciplinary, communication and cooperation are key. Radiation therapy requires communication within the department as well as with colleagues in imaging, nuclear medicine and chemotherapy. Developing relationships with departmental and interdepartmental colleagues can help resolve any crossover issues and make you feel more at ease within a complex, fast-paced system. It can also help with career development and advancement.

Being able to grow, and potentially pivot, in your career can be key to ensuring you thrive as an RT. Some RTs end up feeling trapped by their niche expertise. Nowadays professional growth is accessible through continued education and networking. Connecting with your team, going the extra mile in your department and engaging in continuous learning can facilitate lateral and vertical career growth. All three are integral to self-development and job satisfaction.

Efficiency is important, but providing safe, quality care is the RT's ultimate priority.

Mentorship also helps with career development. Find a mentor, either at your workplace or at another cancer center, with whom you can share your thoughts and ideas, and who will give advice. A mentor-mentee relationship can be short term or long term, but it's important to develop these relationships early. As you gain experience, you can become a mentor yourself.

The Therapy-Technology Relationship: Technology in radiation therapy is evolving rapidly. New technologies have enabled the delivery of radiation therapy treatments that are faster, more precise and more efficient. These developments have improved patient care—for the most part. Technology and best practices change so quickly that continuous learning is required, but it can be hard to find time. Comprehensive training programs and mentorship will help you acclimate to these changes.

Education and Training: Make a commitment to invest in yourself through education and training. You can learn from colleagues as well as through online training and seminars. Seek out professional development and training opportunities and use professional development funds available to you through your job. Professional development can also come through attending and presenting at conferences.

Be "Patient-First"

When dealing with anxious, sick patients, being patient-first entails approaching every question and request with empathy, spending extra time to ensure all treatments are correct and that positioning is precise.

This patient-first philosophy can sometimes cause conflict, especially when fellow RTs or other colleagues feel pressure due to work tasks. They may not feel they have time to check and recheck minute details and ensure accuracy and precision. Some staff may be disengaged from the human side of patient care and be focused instead on the tasks they must accomplish.

Learning how to navigate these conflicts and stressors while keeping the "patient-first" mindset is essential. Never compromise patient care for a personal relationship with a coworker. Disagreements can be worked through later, but in the treatment room, the patient comes first.

Always keep the "what" and "why" foremost in mind with regard to patient setups and reproducibility. Don't take shortcuts that may compromise care—your careful work will enhance your experience, your reputation and, most importantly, your patients. Always keep your eyes on the patient. Look at their anatomy first, especially after they relax or re-position. As every healthcare worker knows, patient care comes first, always!

Being patient-first also includes becoming knowledgeable about the science and rationale behind standard acronyms and understanding the treatment goals and outcomes for each patient.

Focus on Safety and Quality

Balancing safe patient care with operational expectations can be challenging. Efficiency is important, but providing safe, quality care is the RT's ultimate priority. A higher patient volume can create added pressure, but take time to ensure each patient receives optimal, safe care.

In an environment of worker shortages, RTs can feel stretched thin. It's the employer's responsibility to ensure there is adequate staffing for the patient load and that RTs (and other staff) aren't overworked.

Enjoy the Journey

You achieved the milestones of graduating from your program and getting your first job. Your journey is just beginning. You will make mistakes along the way—hopefully not many—but being accountabie and recognizing these mistakes as chances to learn and grow will define your career and allow you to advance. You will gain the respect, trust and confidence of your peers, other colleagues and your patients. Stay engaged, continue to learn and evolve, and keep the patient foremost in your focus. We wish you great success over your first five years!

MEMBER SPOTLIGHT:

Shawn Jackson

For Shawn Jackson, being centered around his "why" (his purpose) has helped him achieve success personally and professionally. From an early age, he knew he wanted to make a positive impact in others' lives and that he aspired toward leadership.

The youngest of seven children, Shawn was born and raised in Forkland, Alabama, roughly an hour's drive from Tuscaloosa. Since his siblings were quite a bit older, he grew up with and helped take care of his siblings' children during the summer. "I'm really family oriented. I have close relationships with many of my nieces and nephews, and I'm a godfather to several of them," he says.

After high school he enrolled in the Allied Health Sciences program at the University of Alabama at Birmingham (UAB). Inspired by an older sister who had graduated from radiologic sciences at UAB and subsequently worked as an X-ray tech, Shawn planned to follow the same path. But he pivoted when he learned about radiation therapy. "I had never heard of a radiation therapist, but the more I read about the profession, it clicked," he says. "I've always had a passion for helping others. I felt that being a therapist would help me connect with patients more."

Shawn Jackson and his mother.

In December 2002, he graduated from UAB with a B.Sc. in radiation therapy and took his first job was as a radiation therapist at Southeast Physician Network in Tuscaloosa. He worked there for almost 15 years, progressing to lead therapist then chief therapist at freestanding cancer centers. As Shawn advanced, he assumed leadership duties in scheduling patients and working with physicians. He considered transitioning from radiation therapy to dosimetry or moving into management. He missed the opportunity to train on the job to be a dosimetrist and then take the boards, so he set his sights on management.

"I've always loved working with people. By moving into management, I felt I could make a bigger impact in patient care," he says. He earned a master's degree in healthcare administration from Capella University to help him build a strong foundation of leaderships skills rather than just relying on developing them through on-the-job experience.

Tuscaloosa has only one freestanding cancer center and one hospital-based cancer center. In 2017, Shawn moved to Atlanta to broaden his professional opportunities. The self-professed "foodie," was also drawn by the vast variety of restaurants and attractions the city has to offer. He plans to explore some of the state parks and national parks in Georgia and to travel and immerse himself in the culture of other cities and countries.

Shawn's first job in Atlanta was as program director at the Cambridge Institute of Allied Health, where he had managerial/strategic planning responsibilities and also taught courses in billing and coding, reimbursement≠ and radiation therapy. "I loved being a teacher. I'm a helper and a teacher by nature. In college, I was a youth leader and oversaw our youth group at church," he says.

In 2019, he joined WellStar Health System as manager of Oncology/Outpatient Infusion. "I missed the hospital setting and being involved directly in patient care," Shawn says. "Now, I have the best of both worlds. I help my team provide the best care, but I also have patient interaction. I go on the floor a lot to greet patients."

Reflecting on his career thus far, Shawn acknowledges that going from frontline clinical to administration was an adjustment. He wasn't sure of his impact initially as a manager, but when he sees patients satisfied with their care, he's reminded that he is making a difference through decisions he makes and processes that get implemented. Providing the best possible care starts with being warm and welcoming at the front door, being on time yet accommodating with scheduling, making treatments efficient and providing a quality care experience overall.

"I love hearing back from our patients. I monitor our patient satisfaction scores and feedback to see whether there are opportunities to improve," he says. Leading people and building a patient-first

culture can be challenging. “We try to hire for fit, but to have everyone understand our ‘why’ and rally around that can be challenging sometimes,” he says.

Throughout his professional journey, he’s remained grounded by his “why”—that is, “to provide our oncology patients with the best possible experience that we can.” And interacting with patients is a great reminder. He encourages new administrators to lead with compassion and to find and remember their “why.” He says, “Keeping focused on your ‘why’ helps when things get frustrating due to challenges like budgeting or making a case for improvements to upper administration.”

He also enourages administrators to get involved with SROA. Since he joined in 2019, he’s made a lot of connections, participated in the mentorship program as a mentee, and gained knowledge, tips and strategies from reading other administrators’ questions and responses on SROA Connect. He plans to be a mentor eventually. As for other advice, he shares what a former college instructor told him: “Don’t limit yourself.”

A staff member once told him, “We’re glad you’re here.” “It’s the nicest compliment I’ve ever received,” he says. “It’s nice to know that I’m making a difference and people appreciate the value that I bring.”

SROA Connect

Use SROA Connect to network, exchange ideas and curate content faster and easier. Members can:

- Join a Special Interest Group;
- Post questions and respond to other members’ posts;
- Use the online directory to connect with members;
- See open positions in the Career Center; and
- Read the SROA blog.

SROA Connect is an invaluable member benefit. Sign up!

Member Communications

SROA’s quarterly newsletter, monthly eNews and other email communications are designed to keep members up to date on industry and society news and provide helpful information to use at work. If you have an idea for an article or would like to write one, email SROA Editor.

Get Involved with SROA

Volunteers are important to SROA. They help plan programs, serve as mentors, lead groups interested in specific topics, oversee development of newsletter content, serve on the board of directors and give their time at the annual meeting. To learn how you can volunteer, email info@sroa.org.

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