

A Publication for Registered Technologists



THE AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGISTS®

table of contents

03 CEO LIANA WATSON LOOKS AHEAD 04 50 YEARS AS AN R.T. 05 CALMING KIDS **06** LUANN DANIEL: A CAREER SHIFT HELPS CLIENTS FIGHT CANCER 07 DIANE FORBES: EMBRACING IR AROUND THE WORLD **08** FELIX ZUNIGA INFANTE III: A RECORD OF SERVICE **09** JENNIFER THOMPSON: EXTRACURRICULAR ADVOCACY **10-11** ARRT AT A GLANCE **12** I AM THE GOLD STANDARD FINALISTS

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As ARRT CEO, I welcome you to our 2023 issue of Stories. I love reading about the contributions of so many Registered Technologists (R.T.s), and I hope you will, too.

As someone who's held an ARRT credential for more than 35 years—and who spent 22 years as a clinician in the field—I'm honored to be leading our organization. My vision is to build on ARRT's century of excellence as we anticipate and meet the expectations of R.T.s, health care facilities, and patients-for tomorrow and for the next 100 years.

A BIT ABOUT ME

In high school, I wanted to do something related to health care, and sonography intrigued me. I loved working as a sonographer! Then I had the opportunity to learn mammography and discovered that I really, really liked breast imaging. I eventually became supervisor of a breast health center in a rural regional referral center in western Nebraska, where I continued to expand my experience in many areas of the health care system. If you're interested, you can see my overall work history by visiting our website, arrt.org, and searching for my name.

Over the years, I've learned how important it is for leaders to recognize the things we do well and the things that we don't do well. I've tried to be a servant leader—and I hope that's what you see in me.

FOCUSING ON HELPING YOU

One of my first goals is to help ARRT become a technologically advanced organization. R.T.s work with some of the most sophisticated technological equipment in the world, but ARRT hasn't kept up with technology in how we interact with you.

We know phone calls are time-consuming, and you shouldn't have to mail or fax us information. And wouldn't it be cool if R.T.s received a text message that let us know when to renew our ARRT credential? As ARRT improves our technology and simplifies our business processes, we're looking for ways to make it easier for you to find the answers you need and take care of obtaining or maintaining your ARRT credential.

We also need to hear how we can help you do your work better. We've been doing user experience testing—asking for feedback from R.T.s who use our website to help us develop sites that make sense. We show them screens, ask what they like and what they wish were different, and make changes based on that feedback. If you get a request to participate in user testing or complete a survey, please provide feedback. We take your ideas seriously.







at **ARRT**

PREPARING FOR THE PROFESSION'S FUTURE

I'm very, very proud of our staff and the ARRT Board of Trustees. We have a great group of people leading our Board and doing work on behalf of you. They make thoughtful recommendations, helping guide me and our staff into considering what our profession should look like in the future.

ARRT's programs haven't changed much in the past 100 years. It's time to take a hard look at how we administer our credentialing programs, how we administer maintenance of your credential, all while staying within the parameters required by the agency that accredits our credentialing programs. In the next year, we'll be talking a lot about what the future ARRT credentialing programs could and should be. We'll collaborate with you and our industry partners to explore possibilities for medical imaging, interventional procedures, and radiation therapy professionals.

It's an exciting time for all of us. We look forward to getting feedback from you as we move forward. Thank you all for the care you provide to patients every day!





MEET

4 | STORIES 2023

Maria **CHRISTINA ISDELL**

From the midwestern plains, to an Alaskan town so remote you can reach it only by air. From single parent of a 3-year-old to grandmother of five. From radiography to ultrasound to mammography. Over half a century, Maria Christina Isdell, R.T.(R)(M) (ARRT), has worked in seven states and held numerous technologist and management titles. And she isn't done yet. "I've enjoyed my life with X-ray," she says, "and I hope I have another 10 years in it."

WHAT DREW YOU TO THE PROFESSION?

I grew up in Kansas City, Kansas, the oldest of 12 children. After taking as many science and math classes as I could in high school, I wanted to go to college, but we didn't have any college funds. My family doctor recommended the X-ray program at Providence Hospital. During my interview, they sent me down to the morgue with one of the techs to take some images. I was hooked

WHAT STANDS OUT WHEN YOU THINK BACK ON YOUR CAREER?

The variety of patients I've seen. I've done images for homeless people with gangrene and advanced cancers; I've seen patients who traveled by dogsled or snowmobile to get to a hospital when they were injured or having a baby. I've flown to clinics where no X-ray technologists were available, and patients lined up for blocks when the clinic opened.

WHAT TECHNOLOGICAL CHANGES **HAVE SURPRISED YOU?**

I never thought I'd see a 3D reconstruction of an image. When we first started doing ultrasounds for OB/GYN, the ovaries looked like a blob; now you can count how many ripe eggs there are. It's amazing that I can see images in the room before a radiologist does—and that I can send those images to

India or Australia if necessary. I tell other R.T.s that sometimes I feel like a dinosaurand other times I feel so privileged to have seen all these changes.

AFTER 50 YEARS, WHAT KEEPS YOU INTERESTED IN THE PROFESSION?

I still get a kick out of doing that perfect image. Each day, I say, 'What type of person am I going to X-ray today?' Will it be a 12-year-old with asthma? A gentleman with an abdominal abscess?

I enjoy working with a team of providers. In urgent care, X-ray isn't separate anymore. I'm sitting next to one of the clinic nurses, and the provider who's dictating behind me is looking at the same screen I'm looking at. We're all working together.

I'll keep working as long as I enjoy getting up in the morning and coming home tired at night. I love the patients who make you go home with tired legs, and a tired back, but saying,"I was glad to be working today."

WHAT ADVICE WOULD YOU **GIVE NEW R.T.s?**

Learn as many areas as you can. Don't shut the door on a particular type of procedure because you never know-that might be the one you excel at. Medicine is always changing, so keep your options open. And never stop learning!



Calming KIDS

Although Embler and Shanmugabaskaran have never met, the two R.T.s share a mission. Using their artistic and crafting talents, they've created welcoming environments for youngsters who need care.

"Children were often frightened by the big equipment in the X-ray room," says Embler, formerly of Premier Medical Group in Clarksville, Tennessee (she recently moved to Phoenix Children's Hospital in Arizona). "I wanted to take their focus off the equipment and give them a better experience."

Meanwhile, at Milwaukee's Froedtert Hospital where Shanmugabaskaran works, patients might need to lie motionless for 20 minutes while receiving 10 to 30 rounds of cancer treatments. Thermoplastic masks hold patients in place, and some kids need anesthesia to tolerate the procedures. "If the masks aren't decorated, they are scary looking," Shanmugabaskaran explains. "And the environment can be pretty intimidating."

INSPIRED BY NATURE

In Tennessee, Embler obtained permission to paint murals on the walls of the imaging room. A family hike to Anna Ruby Falls in Georgia inspired the graphics. "My daughter spotted some bright orange mushrooms growing on the side of a tree," recalls Embler. "We took pictures of them and the other plants, insects, and waterfalls. I cartoonized the images, and they became my inspiration for the mural."

She says she has a natural affinity for art. "In college, I scheduled art classes around my math and science classes, so I could feel more balanced," she says. "My two daughters are naturally artistic also, and they helped paint the murals." The family volunteered on evenings and weekends, taking about a year to complete the project. "It was all freehand, layer by layer," Embler explains.

A PARENT'S IDEA

Shanmugabaskaran calls herself a self-taught crafter. "Our basement is full of materials for things like crocheting, cake decorating, and sewing," she says. "Painting was probably one of the few things I hadn't dabbled in."

That changed when a patient's parent, working with her child's doctor, created a Spiderman mask for her son to wear during his treatments. Shanmugabaskaran soon offered to make more masks in her off hours. To date, she's created nearly 50 masks; each one takes two to six hours.

She says that most patients arrive with ideas for what they want. "Every mask request is a new challenge," she says. "I've made a few unicorns and a few Spidermans, but sometimes I'm not familiar with the ideas. Then I begin by researching imagesand I love it!"

Health care can be scary—especially for kids. Angela Embler, R.T.(R)(ARRT), above left, and Courtney Shanmugabaskaran, R.T.(T)(ARRT), above right, have taken two routes to the same goal: soothing children during imaging scans and radiation treatments.

EVIDENT RESULTS

Both R.T.s say they've seen significant differences since they embarked on their projects. For example, Embler says her patients immediately began talking about the images. "The murals give them something to focus on," she explains. "For my more challenging kiddos, I turned off the lights while mom or dad held them, and the moon, the moth, and parts of the waterfall would glow. They were wowed every time, and would ask, 'When do I get to come back?'"

Shanmugabaskaran says the masks help children feel more in control of their experiences. "Once they see their mask transformed into something familiar, it brings them joy," she says. "In some patients, the masks ease their anxieties enough that they no longer need sedation for their treatments."

Embler says she appreciates the way art helps her calm patients and obtain better images. "Art is therapeutic," she says, "and it's something most places can incorporate to improve care."



A CAREER SHIFT HELPS CLIENTS Fight Cancer

In 2017, LuAnn Daniel had a decision to make. Should she keep working as a radiology director—in a field she'd enjoyed for 35 years or jump full-time into running Women Rock, the nonprofit charitable organization she'd founded seven years earlier?

"The nonprofit had gotten so busy," Daniel recalls."I had to either hire someone or leave my clinic. So, I followed my heart."



lııΔnr DANIEL R.T.(R)(M)(CT)(ARRT)

Gold Standard 2023 Winner

6 | STORIES 2023

KICKING OFF WOMEN ROCK

Based in Sherman, Texas, Women Rock provides education and resources to help underinsured and underprivileged women prevent, detect, or treat breast cancer. The organization pays for mammograms, helps offset treatment costs, raises community awareness, and offers survivor support through its "Breast Friends" programs.

Daniel launched Women Rock in 2010 with \$1,200 from her own pocket. Her efforts were largely inspired by two people: a dear friend who'd recently died of breast cancer, and a patient she met around that same time. The young Hispanic woman came to Daniel's mammogram clinic with a lump that was clearly detectable by touch during positioning for her exam. She'd waited a year to get it checked out.

"She had to save up the money," Daniel explains. The encounter reflected what the longtime R.T. had routinely witnessed on the job. "I saw our most vulnerable women diagnosed with late-stage breast cancer simply because they couldn't afford a mammogram," she continues. "We're talking about a cancer that has a 99% survival rate when detected early."

INCREASING IMPACT

Daniel has now been at the helm of Women Rock, full-time, for six years. Since its inception, the nonprofit has expanded its service area from two to 18 counties in Texas and Oklahoma. Daniel's initial \$1,200 contribution has grown into an annual budget of more than \$700,000. That's helped provide more than 20,000 services to clients in her community.

"A lot of women we serve are struggling financially," Daniel says. "After they reach out to us for a mammogram, if they get diagnosed, they need rent. They need their electric bill paid. We try to get them through six to nine months, so they can concentrate on treatment and recovery."

THE IMPORTANCE OF IMAGING EXPERTISE

Daniel worked as a hospital radiology aide while still in high school. Four decades later, she maintains her credentials in Radiography, Mammography, and CT. "This is the only career I've ever had," she says, noting that even as a nonprofit CEO, her imaging expertise remains vital to her clients.

"Laypeople can get so confused by mammogram and pathology reports," Daniel says. "Without my radiology background, I couldn't speak to them one-on-one and know what I'm talking about."

The results of those conversations-and the rest of Women Rock's work-are clear, says Mark Daniel, LuAnn's husband, who nominated her for the I Am the Gold Standard Award. "So many lives have been changed—and saved—through LuAnn's work," he says. "Her commitment and passion are unmatched."

"So many lives have been changed—and saved through LuAnn's work."



When Diane Forbes finished X-ray school in Newport News, Virginia, she started down a career path she never could have predicted. Twenty years later, she was half a world away, training the first interventional radiology (IR) technologists in Tanzania.

A LOVE FOR IR

Forbes focused on ultrasound procedures for a dozen years while she completed associate, bachelor's, and master's degree programs. In 2014, she earned her Registered Radiologist Assistant (R.R.A.) credential. By then, she says, "I had fallen in love with IR." Forbes was enthralled with how the discipline required her to employ varied modalities and outsidethe-box thinking. "We use fluoroscopy, X-ray, CT, and ultrasound to reach all parts of the body through a small nick in the skin," she explains. "If a patient isn't a candidate for surgery, we might do an intervention that saves their life. Sometimes, IR helps patients when nothing else can."

Over the past decade, Forbes has become an enthusiastic IR expert and advocate. She earned her Vascular Interventional Radiography (VI) credential, joined the Association of Vascular and Interventional Radiographers (AVIR) national board of directors, and served for three years as president of AVIR's Atlanta chapter.

TRAINING IN TANZANIA

Forbes' passion also prompted her to volunteer with Road2IR, a nonprofit that launches self-sustaining IR training programs in East Africa. In 2019, Forbes spent two weeks in Tanzania teaching local technologists to perform procedures that were previously unavailable at their hospital—or anywhere else in the country.

"Patients were dying because procedures we take for granted in the United States weren't available there," she says. Forbes led her trainees through many aspects of IR work, from setting up sterile trays to scrubbing in for surgical procedures. Part of the challengeand reward—of the experience was contending with limited resources and equipment inventory.

"We depended on people sending whatever excess supplies they could get their hands on," Forbes says. "It may not have been what we'd normally use for that particular procedure, but we made it work."

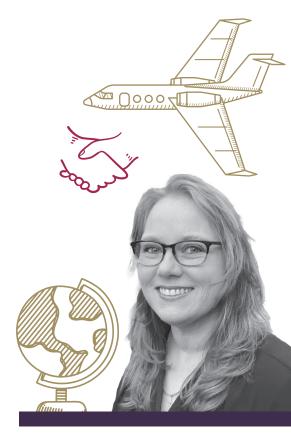
Today at Muhimbili National Hospital in Dar es Salaam, where Forbes volunteered, the people she trained now teach new technologists about IR. Forbes continues to support their efforts by offering education sessions via Zoom, two Saturdays a month.

CLOSER TO HOME

Meanwhile, Forbes works full-time as an R.R.A. at Virginia Commonwealth University in Richmond, Virginia. She also serves on an ARRT committee developing VI exam questions, and she frequently presents posters and lectures at regional, national, and international conferences.

Whenever-and wherever-she shares her knowledge about IR, Forbes likes to stress that excelling in the field extends beyond mastering tools and technical processes. "Often, our job is taking care of people at their worst moments," she points out. "Sometimes, a patient just needs to know that somebody cares and will hold their hand and talk to them when they're scared. That might be more important than anything else we do."

EMBRACING IR Around the World



Diane FORBES R.R.A., R.T.(R)(VI) (ARRT), RDMS

> **Gold Standard** 2023 Winner



A RECORD Service

Growing up in the 1980s, Felix Zuniga Infante III set his sights on the military. "My goal was to be an infantryman," he reports. "I wanted to jump out of airplanes."

Before Infante enlisted, his dad—a career soldier—convinced him to shadow employees at a nearby hospital. The point was to target an occupation he could pursue in the service and continue as a civilian. Infante noticed that a radiologic technologist used interesting equipment, worked independently, and was regarded by doctors as part of their team. The teen was hooked. "That was the field I wanted to go into," he says.



Felix ZUNIGA || INFANTE || R.T.(R)(ARRT)

Gold Standard 2023 Winner

REPORTING FOR DUTY

In the Army, Infante trained as a medic and radiologic technologist. He got to live out his earlier dream, too. His first duty assignment was in Italy, supporting an airborne combat team.

"I jumped out of aircraft," he confirms. "My equipment followed."

Soon after, Infante earned his ARRT credential in radiography and started overseeing staff at medical facilities in the U.S. and Germany. Twice—in 2006 and 2011—deployments took him into combat zones. His work there included time at the Abu Ghraib prison in Iraq, treating U.S. service personnel, local residents, and enemy combatants. Once, Infante's team received several survivors of a suicide bombing—including someone who'd set off the explosives.

"It can be hard for people to wrap their heads around that," Infante acknowledges. "As always, we triaged the patients by their injuries, not by what uniform they wore or what role they had in the blast. We tried to save everybody's lives."

EDUCATING ENLISTEES

Over the years, Infante was frequently responsible for educating novices in his field. "Mentoring technologists who are just starting out is a privilege—and extremely rewarding," he says. Infante routinely encouraged subordinates to obtain ARRT credentials during their service. He even arranged to pay application fees and provide flights to testing centers. "It wasn't required by the military," Infante notes, "but it was

As Radiology Director for Brooke Army Medical Center in San Antonio, Texas, Infante also offered soldiers new ways to advance their careers. He forged partnerships with area colleges and health systems, creating opportunities for technologists to earn associate degrees and train in interventional radiology (IR) while enlisted. The programs bolstered participants' resumes for postmilitary job searches-while also enabling Brooke to provide IR "in house" and save the Army \$1.5 million in outsourcing expenses.

STILL SERVING

Like his father, Infante stayed in the Army for 30 years. After retiring in 2019, he landed in familiar-feeling territory: the Department of Veterans Affairs (VA) Medical Center in Wilmington, Delaware. Today, as a diagnostic radiology technologist there, Infante has much in common with his patients, some of whom served in Vietnam, Korea, and even World War II. "It's an honor to work with my fellow veterans," he declares. "They served their country. Now it's our responsibility to provide them with the treatment they deserve."

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EXTRACURRICULAR Advocacy



In 2019, Gov. Bill Lee appointed Thompson

to Tennessee's Board of Radiologic Imaging

and Radiation Therapy, a body created to

for radiologic technologists. Before the

new standards could take effect, however,

lawmakers introduced a bill that would scrap

them-along with the regulatory board itself.

licenses. Thompson recognized that if the

bill passed, technologists with limited scope

licenses would be able to perform an array

of imaging modalities in hospital settings with

"You can get a limited scope license by taking

a weekend class on something my students

"There's no way competency comes from

So, Thompson took action. She launched

a social media campaign alerting R.T.s and

affect radiography standards in her state.

Thousands read and reacted to her posts.

Thompson also called hospital radiography

pushing the bill. Within 24 hours of that

Thompson also testified multiple times

before the Tennessee Senate and House

managers in districts represented by legislators

effort, one of the bill's sponsors backed out.

Next on her agenda? Face-to-face meetings

Thompson brought several of her students

to a public meeting about the changes

with lawmakers. Seeing a teaching opportunity,

others about how the proposed law would

study for an entire semester," she says.

that. Full scope licensure protects the

citizens of Tennessee."

of Representatives.

under consideration.

minimal schooling-and no credential.

Tennessee accepts both full and limited scope

develop stricter state licensing requirements

LICENSING FIGHT



Jennifer Thompson is a career educator. But recently, the Radiography Program Director at Austin Peay State University in Clarksville, Tennessee, has been active outside the classroom—at the Tennessee State Capitol.

SCHOOL SIMULATIONS

Placing students in unfamiliar environments comes naturally to Thompson, now in her 15th year at Austin Peay. In 2021, she helped launch interdisciplinary simulation exercises for the university's radiography and nursing programs. Inside a lab, fictional medical scenarios play out, and students must respond to whatever occurs. The "patients" in the room are either actors or sophisticated mannequins that can breathe, blink, and even scream.

The exercises highlight the value of collaboration, Thompson explains. When one patient appeared to be in distress, for example, radiography students' X-rays helped nursing students spot and adjust an improperly placed chest tube. "They learned about each other's scope of practice," Thompson says. "The nursing students had no idea they needed that X-ray. They were blown away by what our students knew."

LASTING IMPACTS

Ultimately, Thompson's recent government advocacy work didn't prevail. The bill she opposed passed in April. Still, local and national media reported on Thompson's efforts, and she's accepted invitations to assist people fighting similar battles in other states.

8 | STORIES 2023

"The students were furious," Thompson says. "They were in the middle of getting a degree in this field, so they understood the threat to patient safety." The group marched to a FedEx Office store, printed flyers, and headed for the state legislative offices. Thompson encouraged them to approach people who looked influential,"and just talk and talk," she says. "The students loved every second of it."

"I think I figured out how to get through to legislators," she says. "It didn't work in Tennessee, but hopefully it'll work somewhere else. We learned that technologists can have a voice."

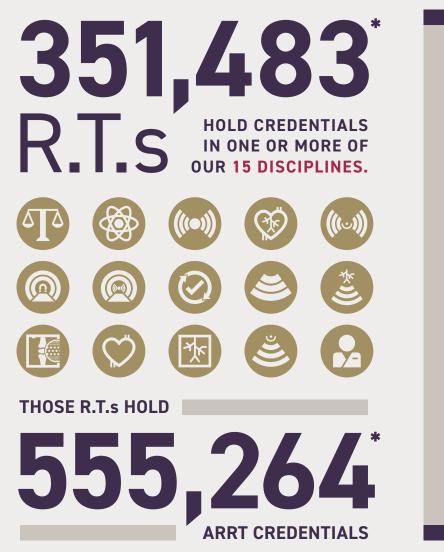


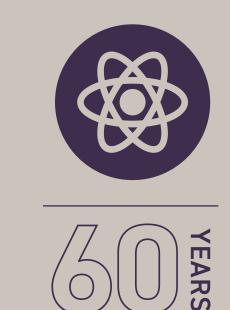
Jennifer **THOMPSON** Ed.D., R.T.(R)(QM)(ARRT)

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CREDENTIALS





2023 marked our 60th year offering a credential in Nuclear Medicine Technology.

*Statistics accurate as of August 2023.

EXAMS

23,060 candidates took their first ARRT exams in 2022.

In the past year, 330 volunteers logged more than 4,220 hours serving on our committees and writing potential questions for ARRT exams.



GIVING BACK



ENGAGEMENT



WE FEATURED 34* R.T.s **IN OUR RTsAreMore SOCIAL MEDIA** CAMPAIGN.



ON AVERAGE, 12,000 PEOPLE VIEW OUR WEBSITE EACH DAY.

Since July 1, 2022, ARRT contributed more than \$76,500 to fund scholarships and grants for students and R.T.s seeking education in the profession.





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ASHLEIGH CREGAN R.T.(N)(CT)(ARRT) Boston Children's Hospital, Massachusetts

ANGELA EMBLER R.T.(R)(ARRT) Premier Medical Group, Tennessee

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HALEY MICHELLE RAMIREZ R.T.(R)(CT)(ARRT) Siemens Healthineers, Texas

CHRISTINA STEIER R.T.(T)(ARRT) Center for Allied Health Education, **New York**



If you'd like to nominate someone next year, watch your email for an are open. Or check IAmTheGoldStandard.com beginning in January.