



SCHOOL OF MEDICINE

Radiology

ANNUAL REPORT

2023

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January - December 2023

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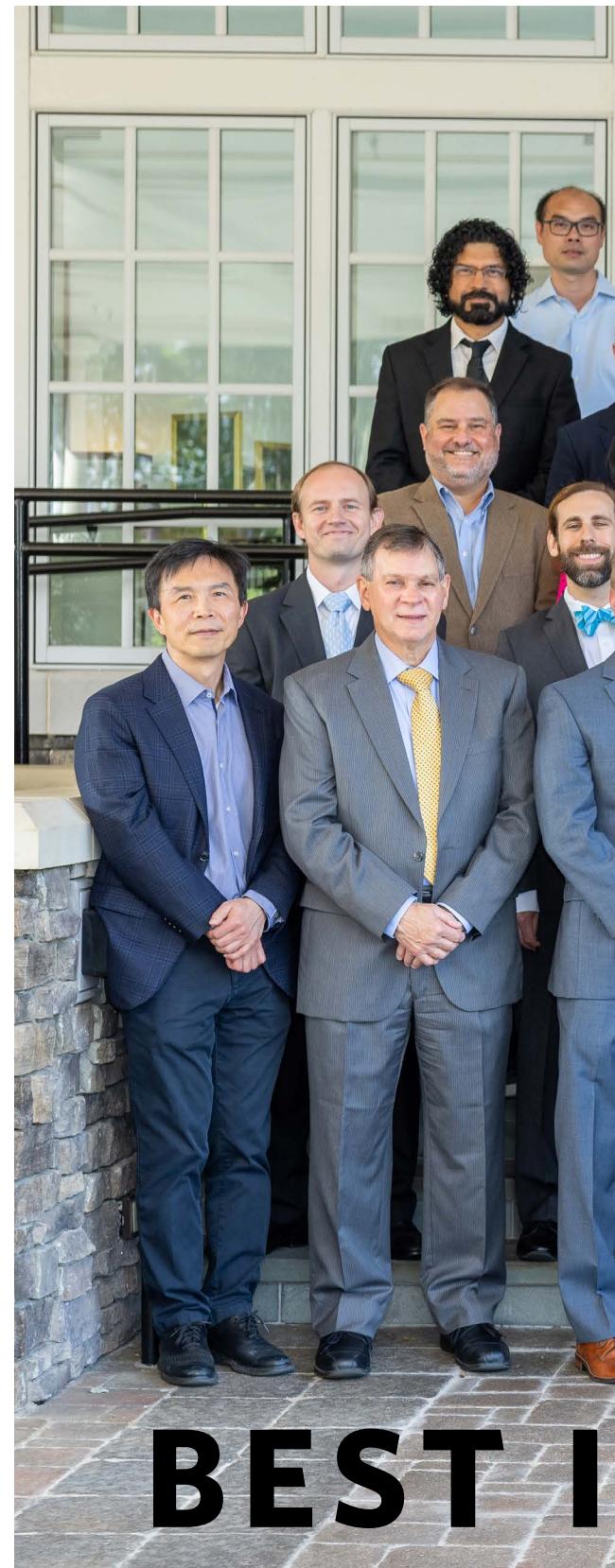
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Cover image: AI stock image of the lungs.



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Message From the Chair

As I look back at 2023, I am so proud of the wonderful accomplishments and advancements of our faculty, staff, and trainees. I look at 2023 as a year of significant investment to achieve our vision of being the premier Department of Radiology in the Southeast.

We've put tremendous energy and effort into completing our Strategic Plan and mapping out the next five years. The plan aims to renew and advance the Department's mission to deliver compassionate clinical care, advance healthcare through innovative research, and train future radiologists and scientists. Throughout this newsletter, you will see the outstanding accomplishments of honors, awards, publications, and grants received over the last year by our clinical and radiological sciences faculty, staff, and trainees.

To support our three pillars of patient care, education, and research, we have invested in building and expanding our phenomenal staff team, clinical faculty, radiological sciences faculty, and trainees. Our team is the backbone of the Department and is critical to accomplishing our goals in each of our pillars.

We've experienced significant improvements to our education programming that have impacted the satisfaction of our trainees. The latest ACGME survey reflected our residency as one of the most highly ranked programs. Our education team has also added a research track to the residency program and allotted specific slots for potential trainees.

We are proud to rank 19 in the NIH ranking for research and #8 for public Departments of Radiology. We've received over \$8.3 million in research dollars in fiscal year 2023 and over \$47 million since 2019. We hosted yet another successful Radiology Departmental Research Symposium. It was a fantastic showcase of the breadth of the groundbreaking research from our faculty and trainees.

Our work with patients and the impact on their care throughout the health system is well recognized. Our patients and colleagues routinely reach out to share personal notes and words of thanks to our faculty, staff, and trainees. You can see some of those notes on page 7. We

are also excited to announce that we have rebranded our VIR office-based lab as UNC Health Endovascular Center. We also shared fun moments among our team throughout the year, from happy hours and Fridays on the porch to the resident retreat and Halloween hijinks.

I would be remiss if I didn't mention the tragic shooting on campus in August. Like so many, I will never forget where I was and who I was with as events unfolded, sending and receiving texts of love from family and friends as we sheltered in place. I am proud of how quickly we mobilized as a Department during the lockdown and followed protocols to ensure our team's safety. We have a fantastic community of faculty, staff, and trainees who care deeply about each other and check in with one another, offering personal support.

I am so proud of our team, their hard work, and their continued dedication to our vision of making UNC Radiology the Best in the Southeast!



Maureen Kohi

Maureen P. Kohi, MD, FSIR, FCIRSE, FAHA

Ernest H. Wood Distinguished Professor and Chair

Compassionate Care Recognized

Dear Dr. Genevieve Woodard,
I can't thank you enough for your kindness and compassion during my stereotactic guided needle biopsy this week. Despite my anxiety and fear from past experiences, the procedure was painless, and I am so grateful. You are an incredible doctor, and I thank you for your excellent care (and for dispensing the excellent local anesthesia).
When my husband and I received your benign report, we were so thankful and relieved!
Now to stay healthy! See you in six months.

Dear John Monge,
I am writing to thank you for the care, diligence and empathy that you gave to my wife Ruth during the recent exploratory procedures you performed during the diagnosis of her breast cancer. I am also pleased to let you know that the cancer had not spread to her liver and the biopsy we discussed was clear. The advice you gave to me prior to her test results gave some comfort at a time of high stress, and I cannot thank you enough for the way in which you have cared for my wife.

"Where 2 lines intersect is finite and unarguable. That a biopsy decisively confirming breast cancer through the esteemed care of Dr. Rachel Hitt was Divine. Science/Medicine based but our paths like 2 lines that intersect was ordered by the Divine. My consultation prior to the biopsy was more critical than the pathology report as reported. I received a gift if you will and despite darkened moments of sorrow and fear... what brought me back to encouragement with knowledge and understanding was Dr. Hitt. Her soft spoken, straight shooting words telling me on the continuum of breast cancer... this is as favorable as one sees through imaging."

Dear Dr. Kohi and Procedure staff,
Thank you all for your professionalism and helpful demeanors before, during, and after my embolization on February 20th. While it is scary to undergo such a procedure, you all explained everything well and acted compassionately. I am so happy to say that the relief was nearly instantaneous. It was really quite incredible. The pain and fatigue disappeared. I had no idea how much my appetite had been affected. And work outs are becoming much less frustrating, as I teach myself form again. May God continue to bless your healing work.



2023 Strategic Plan Launch

The Radiology Department's strategic plan encompasses visionary initiatives designed to revolutionize patient-centered care throughout North Carolina.

After overcoming the challenges of the COVID-19 pandemic, Departmental leadership felt the timing was ideal to look ahead and create the Department's 5-year strategic plan. New leadership, faculty, and promise set the stage for a new future. Following a discussion with a few consulting organizations, Ascendient, a top healthcare strategy, planning, and feasibility consulting firm, was selected as the Department's partner to facilitate the strategic planning process.

The strategic planning process aimed to elevate the already excellent clinical enterprise, research infrastructure, educational programs, and culture of UNC Radiology further to new heights. Shifting industry and system trends towards further integration required reevaluating the Department's role in the broader UNC Health community. Increased

local and statewide competition demanded new approaches to best serve our patients while remaining financially solvent in the modern era of healthcare. Looking forward, as the UNC Health system continues to grow, the Department of Radiology must expand and grow with it, understanding the needs of patients and referring providers as those needs continue to evolve in the 21st century.

The goal of this plan is to renew and advance the Department's mission. To that end, we aspire to encourage multidisciplinary and strategic thinking, align leadership towards a shared vision, set strategic focus areas for the next five years, and implement priority initiatives to become a leading institution.

The UNC Radiology Department has built a solid foundation in our four main pillars that are the core of our mission, vision, and values. Our pillars are clinical excellence, collaborative culture, educational

brilliance, and innovative research.

For clinical excellence, we focus on advanced imaging techniques and streamlined processes, enhancing diagnostic accuracy and patient outcomes. The plan fosters a culture of collaboration, diversity, and respect, ensuring a supportive and innovative environment for patients, trainees, staff, and patients. Through ongoing education and training, we empower our team to stay current with evolving medical practices and technologies. Research is prominent, with dedicated initiatives driving innovation and contributing to medical advancements. These strategic initiatives harmonize seamlessly with our pillars, propelling us toward superior patient care, a positive workplace culture, continuous learning, and groundbreaking contributions to radiology and healthcare.



UNC Radiology Chosen as the American College of Radiology 2022 Case in Point Winner of the Year



In medicine, a diagnosis is not always straightforward. Many diseases or conditions can present in various ways, depending on the circumstances. So how do you train for the uncommon presentations?

Case in Point allows radiologists to evaluate common findings as well as diseases and conditions that can present in interesting ways. The 2022 Case in Point Case of the Year, "Collateral vertebral enhancement mimicking metastases in a patient with a superior vena cava obstruction," is an example of the latter.

Read on to learn more about the Case of the Year with questions answered by Israel Saramago, MD, former UNC Radiology Resident and Neuroradiology Fellow.

Why did you select this case for submission?

I selected this case because we were going to biopsy a lesion but it had disappeared. At that time, Joshua Wallace was our MSK fellow and Fangbai Wu was our MSK attending. When we saw nothing to biopsy, we were stumped. Our MSK team was able to arrange same-day MRI thoracic spine with and without contrast to confirm our suspicion. No evidence of osseous metastasis was found on the MRI and our final diagnosis came to be collateral vertebral body enhancement mimicking metastases in a patient with superior vena cava obstruction - "vanishing bone mets."

Sometimes you have to stop, think, and reflect about what is presented to you at the time of interpreting images and assess during a procedure. If what you thought beforehand does not fit with what is right in front of you, revisit the drawing board and rethink your differential. Working on this skillset is what makes us better radiologists. If our team did not stop and shift our thinking, this patient would have gotten an unnecessary bone biopsy. "First, do no harm" - Hippocrates.

What did you learn from working on the case?

Collaboration is key. Putting our minds together, searching the literature, and having an open discussion about the case

with several different attendings ultimately led us down the right path to the correct diagnosis.

How did guidance from senior staff at your institution impact your learning and case development?

Senior staff served as role models, helped think through the differential, and provided guidance on how to arrive at the final diagnosis.

Josh and I were the ones who thought something was not right. Fangbai Wu showed us how to think in this situation, ask for a second opinion, and cancel the biopsy. Daniel Nissman has always been a pragmatist and considered other differentials. Carlos Zamora helped bring clarity to the diagnosis once it was confirmed on MRI. Together we worked well as a team.

Special shoutout to Carlos Zamora: I found a lifelong friend and mentor who has helped cultivate a thirst for knowledge and instilled a fire in me to be better every day as a radiologist. He even had to deal with me for another year during neuroradiology fellowship - he must have been thinking why is Izzy torturing me, haha! Hopefully it was not too bad.

Why did you choose Case in Point for submission of your

case?

Case in Point has been a gold mine of fantastic cases from all over the country. I just thought that many in the ACR community would appreciate this case from the resident to the attending level - I like learning from the new daily cases that arrive in my inbox.

Are you a regular reader of Case in Point? What are your favorite types of cases?

Yes. My favorite type of cases are the ones that make you think of a certain diagnosis but as you are doing the questions you are learning something new along the way.

What else should we know about the case that you'd like to share?

Take each clue given to you and put the pieces of the puzzle together. Vascular lesions are something to include within the differential of an enhancing bone lesion. Not everything is mets, look for reasons that support your final diagnosis, and be humble.

Note: At the time of the case presented at UNC Israel Saramago, MD was a resident at UNC and then neuroradiology fellow; Joshua Wallace, MD was a UNC resident and then MSK fellow; Fangbai Wu, MD was a UNC MSK attending; and Daniel Nissman was MSK division chief. An amazing team of collaborators.



ISRAEL SARAMAGO, MD
Diagnostic Radiologist
Department of Radiology,
Neuroradiology
Progressive Physician
Associates
Bethlehem, PA

UNC Neuroradiology Fellow,
Class of 2021



JOSHUA WALLACE, MD, MPH
Affiliate Associate Professor of Radiology, Brody School of Medicine at East Carolina University
Department of Radiology, Musculoskeletal Imaging Eastern Radiologists Inc Greenville, NC
UNC Diagnostic Radiology Resident and MSK Fellow, Class of 2019 and 2020



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Associate Staff Radiologist
Diagnostic Radiology,
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Cleveland Clinic
Foundation
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Pediatric Epilepsy Patient Enjoys Seizure-Free Life After Epilepsy Surgery at UNC Health

Original article appeared in Vital Signs: March 26, 2023. The below article has been updated to include additional Radiology details.

Coryzma experienced seizures for years before receiving a diagnosis. She described her seizures as feeling like *déjà vu* and at one point, Coryzma was having about five seizures a day, many times blacking out completely. Finally in seventh grade, Coryzma was diagnosed with epilepsy.

Coryzma's mother, Christina, chose to go to the UNC Epilepsy Center for treatment. The most common treatment method for epilepsy is medication, which can effectively control seizures for many patients. Unfortunately, the medications did little to control the frequency of Coryzma's seizures. "I had to switch medications a lot," recalled Coryzma. After Coryzma tried several medications, which caused frustrating side effects without success, her doctors at the UNC Epilepsy Center began evaluating her for epilepsy surgery.

With stereotactic encephalography (sEEG) and specialized brain imaging, the team identified that the seizures were coming from the left temporal lobe, an area of the brain where language and memory lives. "For epilepsy surgery, it's weighing the benefits and risks - of seizure freedom versus the risk of creating a new functional deficit due to surgery," said UNC pediatric neurosurgeon Dr. Scott Elton. "All of this is discussed with the family."

"She had no energy or drive to do anything else. Appointments were exhausting for her. She didn't want to participate with the family, go out, or partake in activities."

Since the seizures were coming from a sensitive area of the brain, the team recommended implanting a neuro-modulation device to try and control Coryzma's seizures. During her first consultation with Dr. Elton, Coryzma felt at ease about the surgery. "He is really easy to talk to," said Coryzma. "He is very reassuring."

Coryzma's first surgery took place in January 2019. However, after surgery, Coryzma's seizures came back and the device had to be removed due to infection. At this point, Coryzma was still taking seizure medications and experiencing many side effects. This made it impossible for Coryzma to drive or get a job. Day to day life was becoming difficult as she struggled with anxiety and depression caused by her frequent seizures and medications. "She slept literally all day," said Coryzma's mother, Christina. "She had no energy or drive to do anything else. Appointments were exhausting for her. She didn't want to participate with the family, go out, or partake in activities."

It was back to the drawing board for the UNC Epilepsy Center team. "Epilepsy treatment is really a team sport," said Dr. Elton. In 2021, Coryzma consulted with pediatric epileptologist Dr. Qian-Zhou (JoJo) Yang. "Coryzma had a thorough evaluation with intracranial EEG in 2018 to locate the seizures," said Dr. Yang, Director of the UNC Pediatric Epilepsy Monitoring Unit. "We were able to look back at these EEGs and see that the seizures were in fact coming from a very small part at the bottom of the left temporal lobe. This area was not close to language or memory functions."

In cases with drug-resistant epilepsy, a multidisciplinary epilepsy surgery team, comprising neurosurgeons, neurologists, neuroradiologists, and other specialists, meets regularly to review these cases. The goal is to assess the suitability of surgical intervention and to plan the surgical approaches when deemed appropriate. The roles of neuroradiologists in the context of epilepsy management include:

1. Reviewing all of the patient's imaging studies, such as PET and MRI, to identify potential causes of epilepsy.
2. Utilizing imaging data to assist in the planning and guidance of invasive stereotactic intracranial EEG monitoring.

3. Employing images and intraoperative navigation systems to guide surgical resection procedures.
4. Reviewing postoperative images to assess the outcomes of surgical interventions and ensure the successful achievement of treatment goals.

After reviewing all of Coryzma's MRI and PET exams from the past three years, pediatric neuroradiologist Dr. Sheng-Che (Alex) Hung identified the abnormal brain region that matched the EEG abnormality. "I identified a subtle brain lesion, which was compatible with EEG findings," says Dr. Hung. "This finding was utilized to guide the surgeon's resection during a subsequent surgery using the navigation system."

After thorough consideration, the multidisciplinary team recommended a surgical removal of this small area of the left inferior temporal lobe, which would minimize the risk of any deficit to language or memory.

After years of seizures and dealing with debilitating anxiety and depression caused by medications, Coryzma was ready to try the surgery. "They told us the possible outcomes, possible therapies that may be needed after surgery," recalled Christina. "We had to take time to process the information. It was very overwhelming. Coryzma was mostly on board just for the hope of being seizure-free."

Coryzma's resection surgery took place in December 2021.



Dr. Elton also performed a cranioplasty to replace the part of the skull that was lost due to infection. The surgery went extremely well without any complications. Coryzma stayed in the hospital for less than a week before being discharged. Following the procedure, the patient experienced an immediate and complete cessation of seizures, achieving seizure freedom.

"Things could not have been more perfect," said Christina. "Her recovery was smooth and relatively quick considering what she had been through. No therapies were needed. We came off one of her meds, which was when we saw the big change."

During Coryzma's last appointment with Dr. Yang, she was cleared to drive. Now that she is over one year seizure free, she has her first job. "We've got our girl back," said Christina. "She has drive, energy, sassiness. She wants to go back to school, work, and start being part of the family again. She's back to being an active teenager. Of all the possible outcomes, we couldn't have asked for a better one."

Due to the hard work of the UNC Epilepsy team and the expertise of Dr. Hung, Coryzma has a bright seizure free future ahead.



ALEX HUNG, MD
Assistant Professor,
Neuroradiology and a
member of the UNC
Epilepsy Center

2023 Resident and Fellow Graduation Ceremony

On Saturday June 10th UNC Radiology hosted the 2023 Residency and Fellow Graduation at the Chapel Hill Country Club.

The event brought together graduates, their families, and faculty for an evening that encompassed a cocktail hour, awards, and dinner. It was a heartfelt gathering to celebrate and pay tribute to the remarkable accomplishments of our graduating residents and fellows.

Here are the distinguished individuals who have successfully completed their respective programs:

****Graduating Diagnostic Residents: ****

Dr. Caleb Epps
Dr. Jordan Fenner
Dr. Taylor Gunnell
Dr. Joshua Harford
Dr. Dean Homen
Dr. Elise Maggioncalda
Dr. Akansha Mohan
Dr. Jacob Nelson

****Graduating Vascular and Interventional Resident - Integrated: ****

Dr. Rachel Brader

****Graduating Vascular and Interventional Resident - Independent: ****

Dr. Jacob Beltz
Dr. Mark Mikhitaian

****Neuroradiology Fellows: ****

Dr. Kalind Parashar
Dr. Jonathan Rindner

Dr. Parth D. Patel
Dr. William Jacob Thomas

****Abdominal Imaging Fellows: ****

Dr. Elizabeth Deans
Dr. Berry Keane
Dr. Dustin Rea
Dr. Sean Wagner

****Breast Imaging Fellow: ****

Dr. Alex Calvert

****Musculoskeletal Imaging Fellow: ****

Dr. Matthew Morgan

The highlight of the evening was the award ceremony, where several outstanding individuals were recognized for their exceptional contributions:

Dr. Jacob Nelson received the Teaching Award, a well-deserved honor for his dedication to education, including engaging and teaching junior residents and medical students, as recognized by the faculty.

Dr. Jordan Fenner was presented with the Service Award in acknowledgment of her consistent commitment to going above and beyond her expected responsibilities, serving as a role model and department ambassador to advance the department's missions, as noted by the faculty.

Dr. Elise Maggioncalda was the recipient of the Clinical Excellence Award, commended by the faculty for her outstanding clinical knowledge, diagnostic

and interventional skills, and mastery across the field of Radiology.

The evening also featured the recognition of two exceptional faculty members:

Kristin Olinger was the proud winner of the Charles Bream Award, a distinction nominated and selected by residents in recognition of her teaching excellence, having received the most nominations.

J. Keith Smith was honored with the inaugural Faculty Mentoring and Development Award, recognizing his outstanding commitment to mentoring and developing the next generation of medical professionals.

Residents also honored the education staff with a special surprise. The chief residents shared a few words and gifts for the program coordinators Allison Speagle and Arlin Will.

Congratulations to all our graduates! Your hard work and dedication have led you to this moment, and we are immensely proud of your accomplishments. As you embark on the next phase of your career, we wish you the very best.



DIAGNOSTIC RADIOLOGY

New Residents



RACHEL BRIGHT, MD
Medical School: Stony Brook University School of Medicine



TIMOTHY BROWN, MD
Medical School: Texas Tech University Health Sciences Center School of Medicine



CHRIS CHILDERS, MD
Medical School: Virginia Tech Carilion School of Medicine



FRANCO GODOY, MD
Medical School: Medical University of SC College of Medicine



ATIMA HURIA, MD
Medical School: The Brody School of Medicine at East Carolina University



BIANCA MARTINEZ, MD
Medical School: The University of Miami Leonard M. Miller School of Medicine



HUNTER MCLELLAN, MD
Medical School: University of South Carolina School of Medicine Columbia



JAMES MORGAN, MD
Medical School: University of Tennessee Health Science Center College of Medicine



NISHA PRADHAN, MD
Medical School: University of Colorado School of Medicine

INTEGRATED VASCULAR & IR



MATT PATETTA, MD
Medical School & Intern: University of North Carolina School of Medicine

INDEPENDENT VASCULAR & IR



JOSH HARFORD, MD
Diagnostic Residency: University of North Carolina Chapel Hill



New Fellows

ABDOMINAL IMAGING



TAYLOR GUNNELL, MD
DR Residency: University of North Carolina



ELISE MAGGIONCALDA, MD
DR Residency: University of North Carolina



JACOB NELSON, MD
DR Residency: University of North Carolina



MARCELO TAKAHASHI, MD
DR Residency: Hospital das Clínicas of the Faculty of Medicine of the University of São Paulo

BREAST IMAGING



CHRIS BURNS, MD
DR Residency: Memorial Health Radiology Residency in Savannah GA



HIEU DIEP, MD
DR Residency: Advent-Health Radiology Residency in Orlando

MUSCULOSKELETAL IMAGING



ANDREW ISBELL, MD
DR Residency: University of Louisville



SHWETA KATERIA, MD
DR Residency: Yashoda Hospitals Malakpet, Hyderabad, Indi

NEURORADIOLOGY



DEAN HOMAN, MD
DR Residency: University of North Carolina



NOMAN KHAN, MD
DR Residency: Aga Khan University



FERNANDO RINCON, MD
DR Residency: Nassau University Medical Center



ZAFIR SYED, MD
DR Residency: Schulich School of Medicine & Dentistry

CARDIOTHORACIC



SELIMA SIALA, MD
DR Residency: Public Hospital of Tunisia

2023 Radiology Departmental Research Symposium

On Thursday, October 12th UNC Radiology hosted its annual Research Symposium.

The highly successful event would not have been possible without the organizational efforts of Desma Jones, CCRC, Interim Administrative Director, Clinical Research; co-chairs Sarah J. Nyante, PhD, Assistant Professor; Nima Kokabi, MD, Associate Professor and Vice Chair of Basic Science Research; and Yueh Lee, MD, PhD, Professor and Vice Chair of Translational Research.

Guest Speakers

The event showcased multiple speakers, all of whom spoke in Kirkland Auditorium. The first speaker was Dr. Andrea Carnegie, PhD, from UNC School of Medicine NCTraCS. The event continued with an update on the state of Radiology Research by BRIC Director and Vice Chair of Basic Science Research Dr. Weili Lin, with additional speakers including Dr. Louise Henderson, focusing on epidemiology research, and Dr. Craig Fletcher, discussing animal research.

Keynote Speaker Dr. Rahmi Oklu took the stage next. He provided an engaging presentation entitled "Novel Tumor Interventions: Bench to Bedside."

Oral and Poster Presentations

The event also consisted of two oral presentation sessions which included a total of thirteen oral abstract presenters,

including Eric Assid, MD, PGY1; Matthew Patetta, MD, PGY1; Lindsay Lane, MPH; Katherine Li, MS2; Emery Price, Graduate Student; Khoi Huynh, PhD; Xinrui Ma, MPH, Graduate student; Alex Billingsley, PhD; Nathan Shaul, Graduate Student; Weiyan Yin, PhD; Kangfu Han, Visiting Scholar; Hao Guan, PhD; and Xiaomei Yue, Graduate Student

The poster presentations were attended as students, residents, and faculty reviewed the displays. Forty posters lined the lobby ranging in a variety of topics from "Utilization of Uterine Artery Embolization for Adenomyosis" to "Improve Imaging Reconstruction in Novel Stationary CT Scanner."

Award Winners

Poster Presentation Winners

Fibroblast Activation Protein Based Theranostic Probe for Managing Triple Negative Breast Cancer by Spencer V. Thompson, Undergraduate Student.

Evaluating the Effectiveness of the ACR TI-RADS Criteria at UNC by Tony L. Dyer, MD, PGY5.

Oral Presentation Winners
Microstructural Atlases of the Developing Brain by Khoi

Huynh, PhD.

Utilizing Near-Infrared Light to Shield Normal Organs from Radiation in Psma-Targeted Radiotherapy by Xinrui Ma, MPH, Graduate Student.

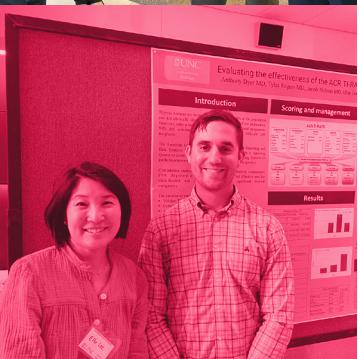
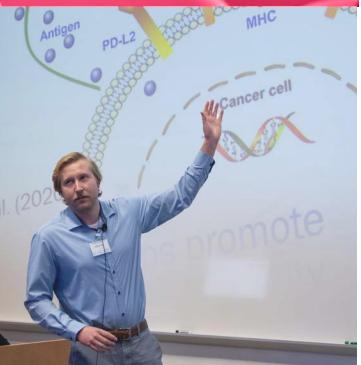
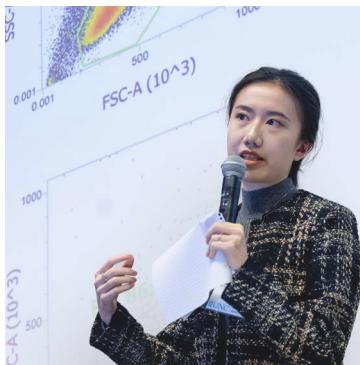
Congratulations to all presenters and winners. Thank you to all the students, faculty and staff of the UNC Department of Radiology and UNC-CH campus for participating and contributing to the 2023 Radiology Departmental Research Symposium.

Thank You

Thanks to the planning committee members: Sheerah Coe; Nicole Keefe, MD; Zibo Li, PhD; Weili Lin, PhD; Katrina McGinty, MD; Jacob Nelson, MD; Jorge Oldan, MD; Venkateswaran Ramakrishnan, MD; Cody Schwartz, MD; Karla Spears; and Pew-Thian Yap, PhD. We would also like to thank judges Eric Muir, PhD; Steven Rowe, MD, PhD; and Eran Dayan, PhD; and abstract reviewers Sahar Ahmad, PhD; Taylor Gunnell, MD; Nicole Keefe, MD; John Monge, MD; John Tobben, MD; Jordan Taylor, MD. A very special thanks to Nicole Clayton and Anna Byars for their tremendous administrative support.



SCHOOL OF MEDICINE
Radiology
RADIOLOGY RESEARCH
SYMPOSIUM



Tiny robot capable of navigating live tissue could boost fight against lung cancer, UNC researchers report

Original article appeared on WRAL TechWire on September 25, 2023
<https://wraltechwire.com/2023/09/25/tiny-robot-capable-of-navigating-live-tissue-could-boost-fight-against-lung-cancer-unc-researchers-report/>

CHAPEL HILL - Lung cancer is the leading cause of cancer-related deaths in the United States. Some tumors are extremely small and hide deep within lung tissue, making it difficult for surgeons to reach them. To address this challenge, UNC -Chapel Hill and Vanderbilt University researchers have been working on an extremely bendy but sturdy robot capable of traversing lung tissue.

Their research has reached a new milestone. In a new paper, published in *Science Robotics*, Ron Alterovitz, PhD, in the UNC Department of Computer Science, and Jason Akulian, MD MPH, in the UNC Department of Medicine, have proven that their robot can autonomously go from "Point A" to "Point B" while avoiding important structures, such as tiny airways and blood vessels, in a living laboratory model.

"This technology allows us to reach targets we can't otherwise reach with a standard or even robotic bronchoscope," said Dr. Akulian, co-author on the paper and Section Chief of Interventional Pulmonology and Pulmonary Oncology in the UNC Division of Pulmonary Disease and Critical Care Medicine. "It gives you that extra few centimeters or few millimeters even, which would help immensely with pursuing small targets in the lungs."

The development of the autonomous steerable needle robot leveraged UNC's highly collaborative culture by blending medicine, computer science, and engineering expertise. In addition to Alterovitz and Akulian, the development effort included Robert J. Webster III at Vanderbilt University, Alan Kuntz at the University of Utah



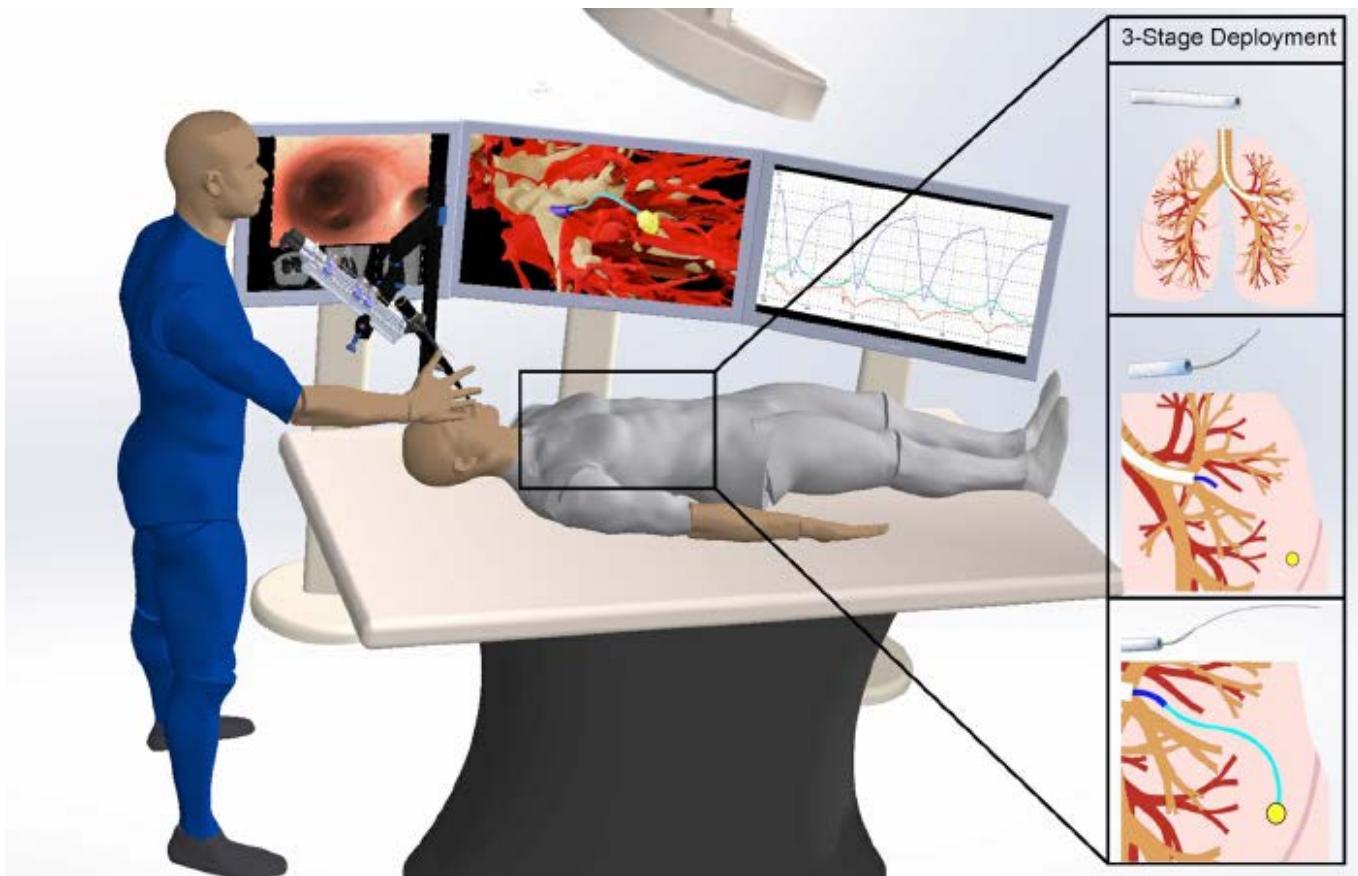
Yueh Lee, MD, PhD
Associate Professor
Vice Chair of
Translational Research

and Yueh Z. Lee, MD, PhD, at the UNC Department of Radiology. **Dr. Lee and the BRIC hardware provided image guidance for the robot system. The team provided both the high resolution preprocedural imaging and image guidance during the procedure. Dr. Lee's role was also to provide the expertise on large animal imaging and procedures, as well as the imaging physics.**

The robot is made of several separate components. A mechanical control provides controlled thrust of the needle to go forward and backward and the needle design allows for steering along curved paths. The needle is made from a nickel-titanium alloy and has been laser etched to increase its flexibility, allowing it to move effortlessly through tissue.

As it moves forward, the etching on the needle allows it to steer around obstacles with ease. Other attachments, such as catheters, could be used together with the needle to perform procedures such as lung biopsies.

To drive through tissue, the needle needs to know where it



is going. The research team used CT scans of the subject's thoracic cavity and artificial intelligence to create three-dimensional models of the lung, including the airways, blood vessels, and the chosen target. Using this 3-D model and once the needle has been positioned for launch, their AI-driven software instructs it to automatically travel from "Point A" to "Point B" while avoiding important structures.

"The autonomous steerable needle we've developed is highly compact, but the system is packed with a suite of technologies that allow the needle to navigate autonomously in real-time," said Alterovitz, the principal investigator on the project and senior author on the paper. "It's akin to a self-driving car, but it navigates through lung tissue, avoiding obstacles like significant blood vessels as it travels to its destination."

The needle can also account for respiratory motion. Unlike other organs, the lungs are constantly expanding and contracting in the chest cavity. This can make targeting especially difficult in a living, breathing subject. According to Akulian, it's like shooting at a moving target.

The researchers tested their robot while the laboratory model performed intermittent breath holding. Every time the subject's breath is held, the robot is programmed to move forward.

"There remain some nuances in terms of the robot's ability to acquire targets and then actually get to them effectively," said Akulian, who is also a member of the UNC Lineberger Comprehensive Cancer Center, "and while there's still a lot of work to be done, I'm very excited about continuing to push the boundaries of what we can do for patients with the world-class experts that are here."

"We plan to continue creating new autonomous medical robots that combine the strengths of robotics and AI to improve medical outcomes for patients facing a variety of health challenges while providing guarantees on patient safety," added Alterovitz.

Congratulations to Dr. Lee and the entire team on reaching such an important and exciting milestone.

Publications | January - December 2023

ABDOMINAL IMAGING

Society of Abdominal Radiology Survey of Practice Patterns in using LI-RADS Treatment Response Criteria in the Evaluation of Post-treatment HCC.

Kamapath R, Mendiratta-Lala M, Jacoub J, Burke LMB, *Abdominal Radiology*. 2023 Sep 2:1-7

Use of cine images in standard ultrasound imaging: a survey of sonologists.

Thomas K, Burke LMB, McGettigan M. *Abdominal Radiology*. 2023 Aug. PMID 37552240

Applications of artificial intelligence in magnetic resonance imaging of primary pediatric cancers: a scoping review and CLAIM score assessment.

Tsang B, Gupta A, Takahashi MS, Baffi H, Ola T, Doria AS. *Jpn J Radiol*. 2023 Oct;41(10):1127-1147. Epub 2023 Jul 3. PMID: 37395982.

Thermal Ablation Compared to Stereotactic Body Radiation Therapy for Hepatocellular Carcinoma: A Multi-Center Retrospective Comparative Study.

Moon AM, Kim HP, Singal AG, Owen D, Mendiratta-Lala M, Parikh ND, Rose SC, McGinty KA, Agala CB, Burke LM, et al. *Hepatology Communications*. 2023 Jun 14;7(7). PMID: 37314737

Updates on LI-RADS Treatment Response Criteria for Hepatocellular Carcinoma: Focusing on MRI.

Lala K, Conner JF, Khaykin V, Bashir M, Do RKG, Burke LMB, et al. *J Magn Reson Imaging*. 2023 Jun; 57(6):1641-54. PMID: 36872608

Comparing Survival Outcomes of Patients with LI-RADS-M Hepatocellular Carcinomas and Intrahepatic Cholangiocarcinomas.

Kierans AS, Lafata KJ, Ludwig DR, Burke LMB, Chernyak V, et al. *J Magn Reson Imaging*. 2023 Jan; 57(1):308-17. PMID: 35512243

Mimics of cancer in pregnancy.

Olinger K, Maheshwari E, Shenoy-Bhangle AS, Adejolu M, McGettigan M, Mathew H, Lee KS, Nicola R. *Abdom Radiol (NY)*. 2023 May;48(5):1752-1773. Epub 2022 Dec 29. PMID: 36577923.

The 2021 SIIM-FISABIO-RSNA Machine Learning COVID-19 Challenge: Annotation and Standard Exam Classification of COVID-19 Chest Radiographs.

Lakhani P, Mongan J, Singhal C, Zhou Q, Andriole KP, Auffermann WF, Prasanna PM, Pham TX, Peterson M, Bergquist PJ, Cook TS, Ferraciolli SF, Corradi GCA, Takahashi MS, Workman CS, Parekh M, Kamel SI, Galant J, Mas-Sanchez A, Benítez EC, Sánchez-Valverde M, Jaques L, Panadero M, Vidal M, Culiañez-Casas M, Angulo-Gonzalez D, Langer SG, de la Iglesia-Vayá M, Shih G. *J Digit Imaging*. 2023 Feb;36(1):365-372. Epub 2022 Sep 28. PMID: 36171520.

BREAST IMAGING

Analysis of Specimen Mammography with Artificial Intelligence to Predict Margin Status.

Chen KA, Kirchoff KE, Butler LR, Holloway AD, Kapadia MR, Kuzmiak CM, Downs-Canner SM, Spanheimer PM, Gallagher KK, Gomez SM. *Ann Surg Oncol*. 2023 Aug 10. PMID: 37563337.

Breast Cancer Screening Recommendations for Transgender and Gender Diverse Patients: A Knowledge and Familiarity Assessment of Primary Care Practitioners.

Carroll EF, Woodard GA, St. Amand, CM, and Davidge-Pitts C. *Journal of Community Health*. May 2023. PMID: 37219789.

Breast exam use during the protracted COVID-19 pandemic, by age, race, and geography,

Butler EB, Benefield T, Henderson L, Kuzmiak CM, Pritchard M, Nyante S. *JNCI Cancer Spectrum*. March 2023. pkad025 <https://doi.org/10.1093/jncics/pkad025>.

The Role of Implementation Science in Harnessing the Potential of Automated Outcomes Feedback for Radiologists.

Sippo DA, Brandt C, Leeman J. *J Am Coll Radiol*. 2023 Mar;20(3):361-363.

Pure Mucinous Carcinoma of the Breast: Radiologic-Pathologic Correlation

Kuzmiak CM, Calhoun BC. *Journal of Breast Imaging*. Epub Jan 2023. DOI: 10.1093/jbi/wbac084.

CARDIOTHORACIC IMAGING

Clinical Characteristics of SARS-CoV-2 Acute Pulmonary Embolism and Adjusted D-dimer for Emergency Department Patients

Husain, Iltifat; O'Neill, James C.; Schoeneck, Jacob H.; Soltany, K. Alexander; Clark, Hollins; Rice, Erika Weidman; Gross, Alex; Redding, Jonathan; Cline, David M. *Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health.*. Epub October 25, 2023. PMID: 38165185

Bridging the Communication Gaps: A Prospective Single-Arm Pilot Study Testing the Feasibility of Interdisciplinary Radiotherapy Planning in Locally Advanced Lung Cancer.

Farris MK, Razavian NB, Hughes RT, Ververs JD, Snavely AC, Leyrer CM, Tye KE, Allen LF, Pacholke HD, Weaver KE, Bunch PM, Chan MD, Clark H, Puthoff G, Farris JC, Steber CR, Wentworth S, Levine BJ, Nightingale CL, Ponnatapura J. *Acad Radiol.* 2023 Nov;30(11):2566-2573. Epub 2023 Feb 8. PMID: 36759296

MOLECULAR IMAGING AND THERAPEUTICS

One Hundred Years of the Tracer Principle.

Hoherück S, Zöphel K, Pomper MG, Rowe SP, Gafita A. *J Nucl Med.* 2023 Dec 1;64(12):1998-2000. PMID: 37884328 No abstract available.

AI for Humanity: Perspectives from Outside of Medicine.

Bristol SJ, Fishman EK, Chu LC, Weisberg EM, Rowe SP, Lugo-Fagundo E. *J Am Coll Radiol.* 2023 Nov 22;S1546-1440(23)00943-2. Online ahead of print. PMID: 38000490.

Cinematic Rendering of Gastrointestinal Stromal Tumors: A Review of Current Possibilities and Future Developments.

Barat M, Pellat A, Terris B, Dohan A, Coriat R, Fishman EK, Rowe SP, Chu L, Soyer P. *Can Assoc Radiol J.* 2023 Nov 20;8465371231211278. Online ahead of print. PMID: 37982314.

A Practical Guide to the Pearls and Pitfalls of PSMA PET Imaging.

Voter AF, Werner RA, Savas H, Gafita A, Ross AE, Gorin MA, Solnes LB, Pomper MG, Rowe SP, Sheikhbahaei S. *Semin Nucl Med.* 2023 Nov 16;S0001-2998(23)00088-0. Online ahead of print. PMID: 37980186.

Cinematic rendering in the evaluation of complex vascular injury of the lower extremities: how we do it.

Lugo-Fagundo C, Lugo-Fagundo E, Chu LC, Fishman EK, Rowe SP. *Emerg Radiol.* 2023 Oct 28. Online ahead of print. PMID: 37897550

How Tech Can Help Us Improve Health Care While Still Putting Patients First.

Lynch AH, Fishman EK, Rowe SP, Weisberg EM, Chu LC, Lugo-Fagundo E. *J Am Coll Radiol.* 2023 Oct 12;S1546-1440(23)00744-5. Online ahead of print. PMID: 37832624.

Web3 101: Humanizing What Web3, Cryptocurrency, Non-Fungible Tokens, and the Metaverse Mean for the Future of Connectivity, Community, and the Field of Medicine.

Zember WF, Fishman EK, Chu LC, Rowe SP. *J Am Coll Radiol.*

2023 Oct 9;S1546-1440(23)00748-2. Online ahead of print. PMID: 37813229.

The Current State of Artificial Intelligence and Its Intersection with Radiology.

Benaich N, Fishman EK, Rowe SP, Chu LC, Lugo-Fagundo E. *J Am Coll Radiol.* 2023 Oct 7;S1546-1440(23)00757-3. Online ahead of print. PMID: 37813225.

Three-dimensional CT cinematic rendering of adrenal masses: Role in tumor analysis and management.

Ahmed TM, Rowe SP, Fishman EK, Soyer P, Chu LC. *Diagn Interv Imaging.* 2023 Oct 3;S2211-5684(23)00178-X. Online ahead of print. PMID: 37798191.

Non-invasive PD-L1 quantification using [18F]DK222-PET imaging in cancer immunotherapy.

Mishra A, Gupta K, Kumar D, Lofland G, Sharma AK, Solnes LB, Rowe SP, Forde PM, Pomper MG, Gabrielson EW, Nimmagadda S. *J Immunother Cancer.* 2023 Oct;11(10):e007535. PMID: 37793856

Molecular Imaging of Infections: Emerging Techniques for Pathogen-Specific Diagnosis and Guided Therapy.

Rowe SP, Auwaerter PG, Sheikhbahaei S, Solnes LB, Wright WF. *J Infect Dis.* 2023 Oct 3;228(Suppl 4):S241-S248. PMID: 37788504

Imaging Brain Injury in Former National Football League Players.

Rubin LH, Du Y, Sweeney SE, O'Toole R, Thomas CL, Zandi AG, Shinehouse LK, Brosnan MK, Nam H, Burke ME, Bureau SC, Kilgore JJ, Yoon M, Soule AR, Lesniak WG, Minn I, Rowe SP, Holt DP, Hall AW, Mathews WB, Smith GS, Nowinski CJ, Kassiou M, Dannals RF, Pomper MG, Coughlin JM. *JAMA Netw Open.* 2023 Oct 2;6(10):e2340580. PMID: 37902750

The AI "Grid": A French national initiative as a product of radiology and industry collaboration.

MOLECULAR IMAGING AND THERAPEUTICS CONTINUED

Gong B, Rowe SP, Duron L. *Diagn Interv Imaging*. 2023 Oct 23;S2211-5684(23)00199-7. Online ahead of print. PMID: 37880006.

A Review of the Psychology That Underpins the Creation of a Diversity, Equity, and Inclusion Committee.

Schroeder JA, Durrani RJ, Opollo J, Latham-Sadler BA, Scoggan SN. *J Am Coll Radiol*. 2023 Sep 22:S1546-1440(23)00723-8. Epub ahead of print. PMID: 37742729.

Authors' Reply.

Hellmann DB, Fishman EK, Lugo-Fagundo E, Chu LC, Rowe SP. *J Am Coll Radiol*. 2023 Sep 21:S1546-1440(23)00721-4. Online ahead of print. PMID: 37741427.

Building Bridges: Future-Proofing Established Industries and Building Relationships with the Black Community.

Rahmani J, Fishman EK, Rowe SP, Chu LC, Lugo-Fagundo E. *J Am Coll Radiol*. 2023 Sep 17:S1546-1440(23)00711-1. Online ahead of print. PMID: 37726042.

Addressing Mental Health in Professional Management.

Greenberg P, Fishman EK, Chu LC, Rowe SP, Lugo-Fagundo E. *J Am Coll Radiol*. 2023 Sep 17:S1546-1440(23)00712-3. Online ahead of print. PMID: 37726041.

Uterine uptake of estrogen and progestogen-based radiotracers in rhesus macaques with endometriosis.

Wilson RC, Link JM, Lee YZ, Oldan JD, Young SL, Slayden OD. *Res Sq*. 2023 Sep 8:rs.3.rs-3311162. Preprint.

Finding Common Ground: The Intersection of Science, Creativity, and the Human Connection.

Lang D, Fishman EK, Chu LC, Lugo-Fagundo E, Rowe SP. *J Am Coll Radiol*. 2023 Sep 4:S1546-1440(23)00699-3. Online ahead of print. PMID: 37673229.

Evaluation of extensive inflammatory conditions of the bowel using three-dimensional CT cinematic rendering: focus on inflammatory bowel disease.

Rowe SP, Kaddu G, Chu LC, Fishman EK. *Emerg Radiol*. 2023 Oct;30(5):683-690. Epub 2023 Sep 4. PMID: 37665535.

Prostate-Specific Membrane Antigen-Ligand Therapy: What the Radiologist Needs to Know.

Rowe SP, Sadaghiani MS, Gafita A, Sheikbahaei S, Pomper MG, Young J, Spitz A, Werner RA, Oldan JD, Solnes LB. *Radiol Clin North Am*. 2024 Jan;62(1):177-187. Epub 2023 Aug 21. PMID: 37973242.

Detection of Biochemically Recurrent Prostate Cancer with $[18\text{F}]$ DCFPyL PET/CT: An Updated Systematic Review and Meta-Analysis with a Focus on Correlations with Serum

Prostate-Specific Antigen Parameters.

Sadaghiani MS, Sheikbahaei S, Al-Zaghali A, Solnes LB, Pomper MG, Oldan JD, Ulaner GA, Gorin MA, Rowe SP. *Tomography*. 2023 Aug 15;9(4):1504-1514. PMID: 37624113.

Standardized PSMA-PET Imaging of Advanced Prostate Cancer.

Seifert R, Gafita A, Telli T, Voter A, Herrmann K, Pomper M, Hadaschik B, Rowe SP, Fendler WP. *Semin Nucl Med*. 2023 Aug 10:S0001-2998(23)00059-4. Online ahead of print. PMID: 37573199.

Vascular Expression of Prostate-specific Membrane Antigen (PSMA) in MiTF Family Translocation Renal Cell Carcinoma and Related Neoplasms.

Baraban EG, Ged Y, Singla N, Allaf ME, Gorin MA, Markowski MC, Rowe SP, Argani P. *Appl Immunohistochem Mol Morphol*. 2023 Sep 1;31(8):544-549. Epub 2023 Jul 20. PMID: 37471632.

Preclinical Development in Radiopharmaceutical Therapy for Prostate Cancer.

Alati S, Singh R, Pomper MG, Rowe SP, Banerjee SR. *Semin Nucl Med*. 2023 Sep;53(5):663-686. Epub 2023 Jul 18. PMID: 37468417.

[^{18}F]FNDP PET neuroimaging test-retest repeatability and whole-body dosimetry in humans.

Du Y, Coughlin JM, Armindarolzarbi A, Sweeney SE, Harrington CK, Brosnan MK, Zandi A, Shinehouse LK, Sanchez ANR, Abdallah R, Holt DP, Fan H, Lesniak WG, Nandi A, Rowe SP, Solnes LB, Dannels RF, Horti AG, Lodge MA, Pomper MG. *Eur J Nucl Med Mol Imaging*. 2023 Oct;50(12):3659-3665. Epub 2023 Jul 17. PMID: 37458759.

Prostate-specific Membrane Antigen Reporting and Data System Version 2.0.

Werner RA, Hartrampf PE, Fendler WP, Serfling SE, Derlin T, Higuchi T, Pienta KJ, Gafita A, Hope TA, Pomper MG, Eiber M, Gorin MA, Rowe SP. *Eur Urol*. 2023 Nov;84(5):491-502. Epub 2023 Jul 4. PMID: 37414701

An Approach to Leadership in Academic Medicine: Lessons Learned From the Experience of Dr. John L. Cameron.

Rowe SP, Fishman EK, Chu LC, Johnson PT, Cameron JL. *Curr Probl Diagn Radiol*. 2023 Sep-Oct;52(5):313-314. Epub 2023 Jul 1. PMID: 37438230.

Response Evaluation Criteria in PSMA PET/CT (RECIP 1.0) in Metastatic Castration-resistant Prostate Cancer.

Gafita A, Djaileb L, Rauscher I, Fendler WP, Hadaschik B, Rowe SP, Herrmann K, Calais J, Rettig M, Eiber M, Weber M, Benz MR, Farolli A. *Radiology*. 2023 Jul;308(1):e222148. PMID: 37432081.

Increased tryptophan, but not increased glucose metabolism, predict resistance of pembrolizumab in stage III/IV melanoma.
 Oldan JD, Giglio BC, Smith E, Zhao W, Bouchard DM, Ivanovic M, Lee YZ, Collichio FA, Meyers MO, Wallack DE, Abernethy-Leinwand A, Long PK, Trembath DG, Googe PB, Kowalski MH, Ivanova A, Ezzell JA, Nikolaishvili-Feinberg N, Thomas NE, Wong TZ, Ollila DW, Li Z, Moschos SJ. *Oncoimmunology*. 2023 Apr 26;12(1):2204753. PMID: 37123046.

MUSCULOSKELETAL IMAGING

Charting Aging Trajectories of Knee Cartilage Thickness for Early Osteoarthritis Risk Prediction: An MRI Study from the Osteoarthritis Initiative Cohort.

Li T, Luo T, Chen B, Huang C, Shen Z, Xu Z, Nissman D, Golightly YM, Nelson AE, Niethammer M, Zhu H. *medRxiv*. 2023 Sep; 13:2023.09.12.23295398.

Added value of high-resolution ultrasound and MRI in the evaluation of rheumatologic diseases.

Sahu AK, Kataria S, Gandikota G. *J Ultrason*. 2023 Oct; 23: e283-e296. doi: 10.15557/JoU.2023.0035.

Role of ultrasound and MRI in the evaluation of postoperative rotator cuff.

Sahu AK, Moran EK, Gandikota G. *J Ultrason*. 2023 Oct; 23: e186-e199. doi: 10.15557/JoU.2023.0028.

An Automatic 3D Ultrasound and Photoacoustic Combined Imaging System for Human Inflammatory Arthritis.

Peng X, Dentinger A, Kewalramani S, Xu Z, Gray S, Ghose S, Tan YT, Yang Z, Jo J, Chamberland D, Xu G, Abdulaziz N, Gandikota G, Mills D, Wang X. *IEEE Trans Ultrason Ferroelectr Freq Control*. 2023 Jun 28;PP. Epub ahead of print. PMID: 37379174.

Longitudinal volumetric assessment of inflammatory arthritis via photoacoustic imaging and Doppler ultrasound imaging.

Peng X, Xu Z, Dentinger A, Kewalramani S, Jo J, Xu G, Chamberland D, Abdulaziz N, Gandikota G, Mills D, Wang X.

NEURORADIOLOGY

Imaging of Reversible Cerebral Vasoconstriction Syndrome and Posterior Reversible Encephalopathy Syndrome.

Battal B, Castillo M. *Neuroimaging Clin N Am*. 2024 Feb;34(1):129-147. Epub 2023 Aug 7. PMID: 37951698.

Editorial Comment: Percent Insular Ribbon Infarction-Can It Simplify Prediction of Infarct Growth Rate and Clinical Outcome?

Zamora C. *AJR Am J Roentgenol*. 2023 Jul;221(1):114. Epub 2023 Mar 1. PMID: 36856305.

Neuroimaging of Coma, Brain Death, and Related Conditions.

Near-Peer Teaching in Radiology Symposia: A Success Story in Residents as Teachers.

Oldan JD, Jordan SG, Wallace J, Campbell J, Fordham LA, Beck Dallaghan GL. *J Med Educ Curric Dev*. 2023 Mar 7;10:23821205231162459. PMID: 36911752.

One institutions' experience with a true standard 15 mCi dose of I-131 for the treatment of Graves' Disease.

M. Muhleman, A. Fahim, T. Benefield, J. Oldan, A. Khandani. *Nucl Med Commun*. 2023; 44(1):49-55.

Photoacoustics. 2023 May 21;31:100514. PMID: 37255965.

Knee kinetics and the medial femoral cartilage cross-sectional area response to loading in individuals with anterior cruciate ligament reconstruction.

Bjornsen E, Davis-Wilson H, Evans-Pickett A, Horton WZ, Lisee C, Munsch AE, Nissman D, Blackburn JT, Franz, JR, Pietrosimone B. *Clin Biomech (Bristol, Avon)*. 2023 Apr 29;105:105979.

Gait variability structure linked to worse cartilage composition post-ACL reconstruction.

Armitano-Lago C, Davis-Wilson HC, Evans-Pickett A, Lisee C, Kershner CE, Blackburn T, Franz JR, Kiefer AW, Nissman D, Pietrosimone B. *Med Sci Sports Exerc*. 2023 Mar 21.

Photoacoustic Imaging of COVID-19 Vaccine Site Inflammation of Autoimmune Disease Patients.

Jo J, Mills D, Dentinger A, Chamberland D, Abdulaziz NM, Wang X, Schiopu E, Gandikota G. *Sensors (Basel)*. 2023 Mar 3;23(5):2789. PMID: 36904999.

Patterns of variation among baseline femoral and tibial cartilage thickness and clinical features: Data from the Osteoarthritis Initiative.

Keefe TH, Minnig MC, Arbeeva L, Niethammer M, Xu Z, Shen Z, Chen B, Nissman DB, Golightly YM, Marron JS, Nelson AE. *Osteoarthr Cartil Open*. 2023;5(1):100334.

Zamora E, Chun K, Zamora C. *Neurographics* 2023 Jul; 13(3):190-209.

Combined rapid sequence MRI protocol and skull radiography as an alternative to head CT in the evaluation of abusive head trauma in children: a pilot study.

Franklin D, Tiwari C, Zamora C, Barnett R, Woolard A, Hung SC, Berkoff M, Quinsey C. *Neurosurg Rev*. 2023 Jul 14;46(1):175. PMID: 37450200.

Imaging of Skull Base Tumors.

Battal B, Zamora C. *Tomography*. 2023 Jun 21;9(4):1196-1235. PMID: 37489465.

NEURORADIOLOGY CONTINUED

Troubleshooting Lesions: Spinal Tumor Mimics.

McCullagh K, Zamora C, Castillo M. *Neuroimaging Clin N Am.* 2023 Aug;33(3):423-441. Epub 2023 May 18. PMID: 37356860.

Editorial Comment: Estimation of venous sinus pressure drop in patients with idiopathic intracranial hypertension using 4D-flow MRI.

Battal B, Zamora C. *Eur Radiol.* 2023 Apr;33(4):2574-2575. Epub

2023 Jan 24. PMID: 36692599.

Oncologic Emergencies in the Head and Neck.

Zamora C, Castillo M, Puac-Polanco P, Torres C. *Radiol Clin North Am.* 2023 Jan;61(1):71-90. PMID: 36336393.

A RAPID Checklist: Understanding Pitfalls and Artifacts in Stroke.

Bregnii A, Ho J, Castillo M, Zamora C. *Neurographics* 2023 Jan;13(1):27-34.

PEDIATRIC IMAGING

Cardiac Dysfunction in Neonatal HIE Is Associated with Increased Mortality and Brain Injury by MRI.

Altit G, Bonifacio SL, Guimaraes CV, Sivakumar G, Yan B, Chock V, Van Meurs K, Altit G, Bonifacio SL, Guimaraes CV, Bhombal S, Sivakumar G, Yan B, Chock V, Meurs KV. *Am J Perinatol.* 2023 Sep;40(12):1336-1344.

Cardiac Dysfunction in Neonatal HIE Is Associated with Increased Mortality and Brain Injury by MRI.

Itit G, Bonifacio SL, Guimaraes CV, Bhombal S, Sivakumar G, Yan B, Chock V, Meurs KV. *Am J Perinatol.* 2023 Sep;40(12):1336-1344.

The Joint Commission's Ongoing Professional Practice Evaluation (OPPE) Process - A National Failure.

Donnelly LF, Platcek TS, Shook J, Towbin AJ. *J Am Coll Radiol.* 2023 Sep 6:S1546-1440(23)00648-8.

Standardization of radiograph readings during bowel management week.

Bischoff A, Hayes K, Guimaraes C, Merrit A, Wickham M, Schneider L, Martin H, Ketzer J, Rodriguez V, Pena A, De La Torre L. *Pediatr Surh Int.* 2023 Jul 20;39(1):236.

Half of US Radiologists Use and Recommend Peer Learning, An ACR Member Survey.

Sharpe RE, Tarrant MJ, Brook OR, Chatfield M, Chaudhry H, City RB, Donnelly LF, Goldberg-Stein S, Hernandez D, Hwang GL, Kunst MM, Lee R, Moriarity A, Pahade J, Broder J. *J Am Coll Radiol.* 2023 Jul;20(7):699-711.

The Association Between Central Line Associated Bloodstream Infection and Central Line Access.

*Ward A, *Chemparathy A, *Seneviratne M, Gaskari S, Mathew R, Wood M, Donnelly LF, Lee GM, Scheinker D, Shin AY. *Crit Care Med.* 2023 Jun 1;51(6):787-796.

ANCA vasculitis expands the spectrum of autoimmune manifestations of activated PI3 kinase syndrome.

Sood AK, Francis O, Schworer SA, Johnson SM, Smith BD, Googe PB, Wu EY. *Frontiers in Pediatrics, section Pediatric Immunolog.* 2023 May 19;11:1179788.

Septum Pellucidum: Spectrum of Normal and Abnormal Imaging Findings

Siala S, Homen D, Smith B, Guimaraes CV. *Br J Radiol.* 2023; 96: 20221058.

ACR-AIUM-SPR-SRU Practice Parameter for the Detection and Assessment of Developmental Dysplasia of the Hip.

2023 Fordham LA (1/28).

VASCULAR AND INTERVENTIONAL RADIOLOGY

Safety and Efficacy of Concurrent Atezolizumab/Bevacizumab or Nivolumab Combination Therapy with Yttrium-90 Radioembolization of Advanced Unresectable Hepatocellular Carcinoma.

Villalobos A, Dabbous HH, Little O, Gbolahan OB, Akce M, Lilly MA, Bercu Z, Kokabi N. *Current Oncology.* 2023 Nov 25;30(12):10100-10.

ACR Appropriateness Criteria® Dialysis Fistula Malfunction.

Expert Panels on Interventional Radiology and Vascular Imaging; Higgins MCSS, Diamond M, Mauro DM, Kapoor BS, Steigner ML, Fidelman N, Aghayev A, Chamathy MRK, Dedier J, Dillavou ED, Felder M, Lew SQ, Lockhart ME, Siracuse JJ, Dill KE, Hohenwalter EJ. *J Am Coll Radiol.* 2023 Nov;20(11S):S382-S412. PMID: 38040461.

Percutaneous decompression of primary hepatic gas gangrene caused by Clostridium perfringens.

VASCULAR AND INTERVENTIONAL RADIOLOGY CONTINUED

Brader R, Yu H. *J Vasc Interv Radiol.* 2023 Oct 25;S1051-0443(23)00785-6. Epub ahead of print. PMID: 37890555.

Implementing methods in the ELEGANCE registry to increase diversity in clinical research.

Secemsky EA, Giri J, Brodmann M, Gouëffic Y, Fu W, Greenberg-Worisek AJ, Jaff MR, Kirksey L, Kohi MP. *J Vasc Surg.* 2023 Sep 22;S0741-5214(23)02048-7. Online ahead of print. PMID: 37742734.

Association of End-Stage Renal Disease after Peripheral Vascular Intervention: How Can We Optimize Care?

Keefe N, Lookstein R. *J Vasc Interv Radiol.* 2023 Sep 9;S1051-0443(23)00656-5. Epub ahead of print. PMID: 37678754.

What predicts durable symptom relief of uterine fibroids treated with MRI-guided focused ultrasound? A multicenter trial in 8 academic centers.

Bitton RR, Fast A, Vu KN, Lum DA, Chen B, Hesley GK, Raman SS, Matsumoto AH, Price TM, Tempany C, Dhawan N, Dolen E, Kohi M, Fennessey FM, Ghanouni P. *Eur Radiol.* 2023 Nov;33(11):7360-7370. Epub 2023 Aug 9. PMID: 37553488.

Recanalization of Proximal Fallopian Tube Obstruction in the Treatment of Infertility.

Mody P, Salazar G, Kohi MP. *Semin Intervent Radiol.* 2023 Aug 10;40(4):379-383. eCollection 2023 Aug. PMID: 37575349.

Local Methotrexate Plus Uterine Artery Embolization for High-Risk Interstitial Ectopic Pregnancy.

Mikhitarian M, Goodnight III W, Keefe N. *Semin Intervent Radiol.* 2023 Aug 10;40(4):357-361. PMID: 37575342.

Recanalization of Proximal Fallopian Tube Obstruction in the Treatment of Infertility.

Mody P, Salazar G, Kohi MP. *Semin Intervent Radiol.* 2023 Aug 10;40(4):379-383. PMID: 37575349; PMCID: PMC10415059.

Utilization of Intravascular Ultrasound in the Management of Venous Disease.

Williams B, Keefe NA. *Tech Vasc Interv Radiol.* 2023 Jun;26(2):100898. Epub 2023 Aug 5. PMID: 37865445.

REBOA: Expanding Applications From Traumatic Hemorrhage to Obstetrics and Cardiopulmonary Resuscitation, From the AJR Special Series on Emergency Radiology.

Webster LA, Little O, Villalobos A, Nguyen J, Nezami N, Lilly M, Dariushnia S, Gandhi R, Kokabi N. *AJR Am J Roentgenol.* 2023 Jan;220(1):16-22. Epub 2022 Aug 3. PMID: 35920708.

Drug-Coated Balloon versus Drug-Eluting Stent: The Debate of Leave Nothing Behind.

Keefe N, Shull T, Botea L, McGinigle K. *Semin Intervent Radiol.* 2023 Jun 16;40(2):161-166. PMID: 37333737.

Racial Differences in Presentation and Outcomes After Peripheral Arterial Interventions: Insights From the NCDR-PVI Registry.

Julien HM, Wang Y, Curtis JP, Johnston-Cox H, Eberly LA, Wang GJ, Nathan AS, Fanaroff AC, Khatana SAM, Groeneveld PW, Secemsky EA, Eneanya ND, Vora AN, Kobayashi T, Barberly C Jr, Chery G, Kohi M, Kirksey L, Armstrong EJ, Jaff MR, Giri J. *Circ Cardiovasc Interv.* 2023 Jun;16(6):e011485. Epub 2023 Jun 20. PMID: 37339237.

Thermal ablation compared to stereotactic body radiation therapy for hepatocellular carcinoma: A multicenter retrospective comparative study.

Moon AM, Kim HP, Singal AG, Owen D, Mendiratta-Lala M, Parikh ND, Rose SC, McGinty KA, Agala CB, Burke LM, Abate A, Altun E, Beyer C, Do J, Folkert MR, Forbes C, Hattangadi-Gluth JA, Hayashi PH, Jones K, Khatri G, Kono Y, Lawrence TS, Maurino C, Mauro DM, Mayo CS, Pak T, Patil P, Sanders EC, Simpson DR, Tepper JE, Thapa D, Yanagihara TK, Wang K, Gerber DA. *Hepatol Commun.* 2023 Jun 14;7(7):e00184. PMID: 37314737.

Authors' Reply: Short- and Long-Term Outcomes for Resin-Based Yttrium-90 Radiation Segmentectomy of Hepatocellular Carcinoma Should Be Further Investigated.

Villalobos A, Kokabi N. *J Vasc Interv Radiol.* 2023 Oct;34(10):1846-1847. Epub 2023 Jun 13. PMID: 37315683.

ACR Appropriateness Criteria® Workup of Noncerebral Systemic Arterial Embolic Source.

Expert Panels on Vascular Imaging and Cardiac Imaging; Parenti VG, Vijay K, Maroules CD, Majdalany BS, Kowek LM, Khaja MS, Ghoshhajra BB, Agarwal PP, Contrella BN, Keefe NA, Lo BM, Malik SB, Surasi DS, Waite K, Williamson EE, Abbara S, Dill KE. *J Am Coll Radiol.* 2023 May;20(5S):S285-S300. PMID: 37236749.

Pneumothorax after computed tomography-guided lung biopsy: Utility of immediate post-procedure computed tomography and one-hour delayed chest radiography.

Weinand JT, du Pisanie L, Ngeve S, Commander C, Yu H. *PLoS One.* 2023 Apr 19;18(4):e0284145. PMID: 37075048.

Interventional Radiology in Obstetrics and Gynecology: Updates in Women's Health.

Tanaka ME, Keefe N, Caridi T, Kohi M, Salazar G. *Radiographics.* 2023 Mar;43(3):e220039. PMID: 36729949.

Interventional Radiology in Obstetrics and Gynecology: Updates in Women's Health.

Tanaka ME, Keefe N, Caridi T, Kohi M, Salazar G. *Radiographics.* 2023 Mar;43(3):e220039. PMID: 36729949.

Yttrium-90 Radiation Segmentectomy of Hepatocellular Carcinoma: A Comparative Study of the Effectiveness, Safety, and Dosimetry of Glass-Based versus Resin-Based Microspheres.

Villalobos A, Arndt L, Cheng B, Dabbous H, Loya M, Majdalany B,

VASCULAR AND INTERVENTIONAL RADIOLOGY CONTINUED

Bercu Z, Kokabi N. *J Vasc Interv Radiol.* 2023 Jul;34(7):1226-1234. Epub 2023 Mar 21. PMID: 36958669.

Using Deep Learning to Predict Treatment Response in Patients with Hepatocellular Carcinoma Treated with Y90 Radiation Segmentectomy.

Wagstaff WV, Villalobos A, Gichoya J, Kokabi N. *J Digit Imaging.* 2023 Jun;36(3):1180-1188. Epub 2023 Jan 11. PMID: 36629989.

Editorial Comment: Thermal Ablation Plus Systemic Chemotherapy in Colorectal Cancer Liver Oligometastases-The Optimal Sequence and Timing.

Yu H. *AJR Am J Roentgenol.* 2023 Jun;220(6):900. Epub 2022 Dec 14. PMID: 36516007.

Editorial Comment: Complete Pathologic Necrosis of Early Hepatocellular Carcinoma After Pre-Liver Transplant Locoregional Therapy-Why Does It Matter?

Yu H. *AJR Am J Roentgenol.* 2023 May;220(5):735. Epub 2022 Dec 7. PMID: 36475818.

Correlation of Non-tumoral Liver Dose with Treatment-Related Adverse Events in Patients with Hepatocellular Carcinoma Treated with Glass-Based Yttrium-90 Radioembolization.

Webster LA, Villalobos A, Cheng B, Xing M, Majdalany BS, Bercu ZL, Cristescu MM, Brandon D, Schuster D, Baum Y, Loya MF, Kokabi N. *Cardiovasc Interv Radiol.* 2023 Jan;46(1):60-68. Epub 2022 Nov 30. PMID: 36450996.

RADIOLOGICAL SCIENCES RESEARCH

Racial and ethnic variation in diagnostic mammography performance among women reporting a breast lump.

Nyante SJ, Abraham L, Aiello Bowles EJ, Lee CI, Kerlikowske K, Miglioretti DL, Sprague BL, Henderson LM. *Cancer Epidemiol Biomarkers Prev.* 2023 Nov 1;32(11):1542-1551. PMID: 37440458.

PETS-Nets: Joint Pose Estimation and Tissue Segmentation of Fetal Brains Using Anatomy-guided Networks

Yuchen Pei, Fenqiang Zhao, Tao Zhong, Laifa Ma, Lufan Liao, Zhengwang Wu, Li Wang, He Zhang, Lisheng Wang, Gang Li. *IEEE Transactions on Medical Imaging.* October 2023.

Self-supervised learning with application for infant cerebellum segmentation and analysis.

Sun Y, Wang L, Gao K, Ying S, Lin W, Humphreys KL, Li G, Niu S, Liu M, Wang L. *Nat Commun.* 2023 Aug 5;14(1):4717. PMID: 37543620.

Mapping the evolution of regional brain network efficiency and its association with cognitive abilities during the first twenty-eight months of life.

Jiang W, Zhou Z, Li G, Yin W, Wu Z, Wang L, Ghanbari M, Li G, Yap PT, Howell BR, Styner MA, Yacoub E, Hazlett H, Gilmore JH, Keith Smith J, Ugurbil K, Elison JT, Zhang H, Shen D, Lin W. *Dev Cogn Neurosci.* 2023 Oct;63:101284. Epub 2023 Jul 27. PMID: 37517139.

Racial and ethnic variation in diagnostic mammography performance among women reporting a breast lump.

Nyante SJ, Abraham L, Aiello Bowles EJ, Lee CI, Kerlikowske K, Miglioretti DL, Sprague BL, Henderson LM. *Cancer Epidemiol Biomarkers Prev.* 2023 Jul 13;EPI-23-0289. Online ahead of print. PMID: 37440458.

Longitudinal Mapping of the Development of Cortical

Thickness and Surface Area in Rhesus Macaques during the First Three Years

Jing Xia, Fan Wang, Ya Wang, Li Wang, Gang Li. *Proceedings of the National Academy of Sciences (PNAS),* July 2023.

Fine-grained Functional Parcellation Maps of the Infant Cerebral Cortex

Fan Wang, Han Zhang, Zhengwang Wu, Dan Hu, Zhen Zhou, Jessica B. Girault, Li Wang, Weili Lin, Gang Li. *eLife,* July 2023.

Mapping Genetic Topography of Cortical Thickness and Surface Area in Neonatal Brains.

Huang Y, Wu Z, Li T, Wang X, Wang Y, Xing L, Zhu H, Lin W, Wang L, Guo L, Gilmore JH, Li G. *J Neurosci.* 2023 Jun 27;JN-RM-1841-22. 1841-22.2023. Epub ahead of print. PMID: 37369585.

Improving motion robustness of 3D MR fingerprinting with a fat navigator.

Hu S, Chen Y, Zong X, Lin W, Griswold M, Ma D. *Magn Reson Med.* 2023 Jun 22. Epub ahead of print. PMID: 37345703.

Four-dimensional mapping of dynamic longitudinal brain subcortical development and early learning functions in infants.

Chen L, Wang Y, Wu Z, Shan Y, Li T, Hung SC, Xing L, Zhu H, Wang L, Lin W, Li G. *Nat Commun.* 2023 Jun 22;14(1):3727. PMID: 37349301.

Digital Breast Tomosynthesis versus Digital Mammography Screening Performance on Successive Screening Rounds from the Breast Cancer Surveillance Consortium.

Sprague BL, Coley RY, Lowry KP, Kerlikowske K, Henderson LM, Su YR, Lee CI, Onega T, Bowles EJA, Herschorn SD, diFlorio-Alexander RM, Miglioretti DL. *Radiology.* 2023 Jun;307(5):e223142. PMID: 37249433.

Attention-guided Autoencoder for Automated Progression Prediction of Subjective Cognitive Decline With Structural MRI.
 Guan H, Yue L, Yap PT, Xiao S, Bozoki A, Liu M. *IEEE J Biomed Health Inform.* 2023 Jun;27(6):2980-2989. Epub 2023 Jun 5. PMID: 37030725.

Delays in Follow-up After a Positive Lung Cancer Screening Exam: Is the Benefit of Screening Compromised?
 Rivera MP, Henderson LM, Sakoda LC. *Ann Am Thorac Soc.* 2023 Jun 13. PMID: 37311217.

Digital Breast Tomosynthesis versus Digital Mammography Screening Performance on Successive Screening Rounds from the Breast Cancer Surveillance Consortium.
 Sprague BL, Coley RY, Lowry KP, Kerlikowske K, Henderson LM, Su YR, Lee CI, Onega T, Bowles EJA, Herschorn SD, diFlorio-Alexander RM, Miglioretti DL. *Radiology.* 2023 Jun;307(5):e223142. PMID: 37249433.

An integrated finite element method and machine learning algorithm for brain morphology prediction
 Poorya Chavoshnejad, Liangjun Chen, Xiaowei Yu, Jixin Hou, Nicholas Filla, Dajiang Zhu, Tianming Liu, Gang Li, Mir Jalil Razavi, Xianqiao Wang. *Cerebral Cortex*, June 2023.

Communication of Positive Lung Cancer Screening Findings and Receipt of Recommended Follow-up Care.
 Henderson LM, Durham DD, Long J, Lamb D, Lane LM, Rivera MP. *JAMA Netw Open.* 2023 Jun 1;6(6):e2320409. PMID: 37347487.

Addressing multi-site functional MRI heterogeneity through dual-expert collaborative learning for brain disease identification.
 Fang Y, Potter GG, Wu D, Zhu H, Liu M. *Hum Brain Mapp.* 2023 Aug 1;44(11):4256-4271. Epub 2023 May 25. PMID: 37227019.

Inferring evolutionary trajectories from cross-sectional transcriptomic data to mirror lung adenocarcinoma progression.
 Kexin Huang, Yun Zhang, Haoran Gong, Zhengzheng Qiao, Tiangang Wang, Weiling Zhao, Liyu Huang, Xiaobo Zhou. *PLoS Comput Biol.* 2023 May 25;19(5):e1011122.

Evidence for human milk as a biological system and recommendations for study design-a report from "Breastmilk Ecology: Genesis of Infant Nutrition (BEGIN)" Working Group 4. Donovan SM, Aghaeepour N, Andres A, Azad MB, Becker M, Carlson SE, Järvinen KM, Lin W, Lönnerdal B, Slupsky CM, Steiber AL, Raiten DJ. *Am J Clin Nutr.* 2023 Apr;117 Suppl 1:S61-S86. PMID: 37173061.

CVAM: CNA Profile Inference of the Spatial Transcriptome Based on the VGAE and HMM.
 Ma J, Guo J, Fan Z, Zhao W, Zhou X. *Biomolecules.* 2023 Apr 28;13(5):767. PMID: 37238637.

National Performance Benchmarks for Screening Digital Breast Tomosynthesis: Update from the Breast Cancer Surveillance Consortium.
 Lee CI, Abraham L, Miglioretti DL, Onega T, Kerlikowske K,

Lee JM, Sprague BL, Tosteson ANA, Rauscher GH, Bowles EJA, diFlorio-Alexander RM, Henderson LM; Breast Cancer Surveillance Consortium. *Radiology* 2023 May;307(4):e222499. Epub 2023 Apr 11. PMID: 37039687.

An attention-based context-informed deep framework for infant brain subcortical segmentation
 Liangjun Chen, Zhengwang Wu, Fenqiang Zhao, Ya Wang, Weili Lin, Li Wang, Gang Li. *NeuroImage.* 269: 119931, April 2023.

Variability in Reporting of Incidental Findings Detected on Lung Cancer Screening.

Henderson LM, Chiles C, Perera P, Durham DD, Lamb D, Lane LM, Rivera MP. *Ann Am Thorac Soc.* 2023 Apr;20(4):617-620. PMID: 36538683.

Variation in second breast cancer risk after primary invasive cancer by time since primary cancer diagnosis and estrogen receptor status.

Lowry KP, Ichikawa L, Hubbard RA, Buist DSM, Bowles EJA, Henderson LM, Kerlikowske K, Specht JM, Sprague BL, Wernli KJ, Lee JM. *Cancer.* 2023 Apr 15;129(8):1173-1182. PMID: 36789739.

Genetic impact on the association of sleep patterns and chronic kidney disease: A prospective cohort study of 157,175 UK Biobank participants.

Li C, Chen Y, Zhao W, Zhang C, Tang L, Ying Z, Chen W, Fu P, Song H, Zhou X, Zeng X. *J Psychosom Res.* 2023 Jun;169:111323. Epub 2023 Mar 28. PMID: 37037154.

Functional brain activity is highly associated with cortical myelination in neonates.

Huang Z, Gao W, Wu Z, Li G, Nie J. *Cereb Cortex.* 2023 Mar 21;33(7):3985-3995. PMID: 36030387.

Longitudinal development of the cerebellum in human infants during the first 800 days.

Wang Y, Chen L, Wu Z, Li T, Sun Y, Cheng J, Zhu H, Lin W, Wang L, Huang W, Li G; UNC/UMN Baby Connectome Project Consortium. *Cell Rep.* 2023 Mar 23;42(4):112281. Epub ahead of print. PMID: 36964904.

Accumulation of network redundancy marks the early stage of Alzheimer's disease.

Ghanbari M, Li G, Hsu LM, Yap PT. *Hum Brain Mapp.* 2023 Jun 1;44(8):2993-3006. Epub 2023 Mar 10. PMID: 36896755.

Detecting type 2 diabetes mellitus cognitive impairment using whole-brain functional connectivity.

Wu J, Fang Y, Tan X, Kang S, Yue X, Rao Y, Huang H, Liu M, Qiu S, Yap PT. *Sci Rep.* 2023 Mar 9;13(1):3940. PMID: 36894561.

iBEAT V2.0: a multisite-applicable, deep learning-based pipeline for infant cerebral cortical surface reconstruction.

Wang L, Wu Z, Chen L, Sun Y, Lin W, Li G. *Nat Protoc.* 2023 May;18(5):1488-1509. Epub 2023 Mar 3. PMID: 36869216.

Development of [18F]F-5-OMe-Tryptophans through Photoredox Radiofluorination: A New Method to Access

Tryptophan-Based PET Agents.

Wu X, Ma X, Zhong Y, Chen W, Xu M, Zhang H, Wang L, Tu X, Han Z, Zhao W, Wu Z, Moschos SJ, Li Z. *J Med Chem.* 2023 Feb 24. Epub ahead of print.

Accurate module induced brain network construction for mild cognitive impairment identification with functional MRI.

Du Y, Wang G, Wang C, Zhang Y, Xi X, Zhang L, Liu M. *Front Aging Neurosci.* 2023 Feb 16;15:1101879. PMID: 36875703.

Real-time prediction of organ failures in patients with acute pancreatitis using longitudinal irregular data.

Luo J, Lan L, Huang S, Zeng X, Xiang Q, Li M, Yang S, Zhao W, Zhou X. *J Bio-med Inform.* 2023 Mar;139:104310. Epub 2023 Feb 10. PMID: 36773821.

An attention-based context-informed deep framework for infant brain subcortical segmentation.

Chen L, Wu Z, Zhao F, Wang Y, Lin W, Wang L, Li G. *Neuroimage.* 2023 Apr 1;269:119931. Epub 2023 Feb 4. PMID: 36746299.

Deep learning in cortical surface-based neuroimage analysis: a systematic review.

Zhao F, Wu Z, Li G. *Intelligent Medicine.* 2023 Feb; 3(1): 46-58.

Fusing Multiview Functional Brain Networks by Joint Embedding for Brain Disease Identification.

Wang C, Zhang L, Zhang J, Qiao L, Liu M. *J Pers Med.* 2023 Jan 29;13(2):251. PMID: 36836485.

Genetic Influences on the Developing Young Brain and Risk for Neuropsychiatric Disorders.

Alex AM, Buss C, Davis EP, Campos GL, Donald KA, Fair DA, Gaab N, Gao W, Gilmore JH, Girault JB, Grewen K, Groenewold NA, Hankin BL, Ipser J, Kapoor S, Kim P, Lin W, Luo S, Norton ES, O'Connor TG, Piven J, Qiu A, Rasmussen JM, Skeide MA, Stein DJ, Styner MA, Thompson PM, Wakschlag L, Knickmeyer R; ENIGMA ORIGINS group. *Biol Psychiatry.* 2023 May 15;93(10):905-920. Epub 2023 Jan 28. PMID: 36932005.

Performance of statistical and machine learning risk prediction models for surveillance benefits and failures in breast cancer survivors.

Su YR, Buist DS, Lee JM, Ichikawa L, Miglioretti DL, Aiello Bowles EJ, Wernli KJ, Kerlikowske K, Tosteson A, Lowry KP, Henderson LM, Sprague BL, Hubbard RA. *Cancer Epidemiol Biomarkers Prev.* 2023 Jan 25;EPR-22-0677. Online ahead of print. PMID: 36697364.

AgeAnno: a knowledgebase of single-cell annotation of aging in human.

Huang K, Gong H, Guan J, Zhang L, Hu C, Zhao W, Huang L, Zhang W, Kim P, Zhou X. *Nucleic Acids Res.* 2023 Jan 6;51(D1):D805-D815. PMID: 36200838.

SPASCR: spatial transcriptomics annotation at single-cell resolution.

Fan Z, Luo Y, Lu H, Wang T, Feng Y, Zhao W, Kim P, Zhou X. *Nucleic Acids Res.* 2023 Jan 6;51(D1):D1138-D1149. PMID: 36243975.

DomainATM: Domain adaptation toolbox for medical data analysis.

Guan H, Liu M. *Neuroimage.* 2023 Mar;268:119863. 2023.119863. Epub 2023 Jan 5. PMID: 36610676.

¹¹C, ¹²C and ¹³C-Cyanation of Electron-Rich Arenes via Organic Photoredox Catalysis.

Wu X, Chen W, Holmberg-Douglas N, Bida GT, Tu X, Ma X, Wu Z, Nicewicz DA, Li Z. *Chem.* 2023 Feb 9;9(2):343-362. Epub 2023 Jan 2. PMID: 36777049. selected as cover feature article.

An End-To-End Infant Brain Parcellation pipeline.

Limei Wang, Yue Sun, Gang Li, Weili Lin, Li Wang. *Intelligent Medicine.* 2023.

Automated CT Pancreas Segmentation for Acute Pancreatitis Patients by combining a Novel Object Detection Approach and U-Net.

Deng Y, Lan L, You L, Chen K, Peng L, Zhao W, Song B, Wang Y, Ji Z, Zhou X. *Biomed Signal Process Control.* 2023 Mar;81:104430. Epub 2022 Dec 6. PMID: 37304128.

3D-MASNet: 3D mixed-scale asymmetric convolutional segmentation network for 6-month-old infant brain MR images.

Zeng Z, Zhao T, Sun L, Zhang Y, Xia M, Liao X, Zhang J, Shen D, Wang L, He Y. *Hum Brain Mapp.* 2023 Mar;44(4):1779-1792. Epub 2022 Dec 14. PMID: 36515219.

Evaluation of sulfone-labeled amino acid derivatives as potential PET agents for cancer imaging.

Hu M, Yang L, Liu N, Long R, Zhou L, Zhao W, Feng Y, Wang C, Li Z, Chen Y, Wang L. *Nucl Med Biol.* 2023 Jan-Feb;116-117:108311. Epub 2022 Dec 24. PMID: 36580767.

Multifaceted atlases of the human brain in its infancy.

Ahmad S, Wu Y, Wu Z, Thung KH, Liu S, Lin W, Li G, Wang L, Yap PT. *Nat Methods.* 2023 Jan;20(1):55-64. Epub 2022 Dec 30. PMID: 36585454.

Harmonization of Multi-site Cortical Data Across the Human Lifespan.

Ahmad S, Nan F, Wu Y, Wu Z, Lin W, Wang L, Li G, Wu D, Yap PT. *Mach Learn Med Imaging.* 2022 Sep;13583:220-229. Epub 2022 Dec 16. PMID: 37126478.

Unsupervised cross-domain functional MRI adaptation for automated major depressive disorder identification.

Fang Y, Wang M, Potter GG, Liu M. *Med Image Anal.* 2023 Feb;84:102707. Epub 2022 Nov 28. PMID: 36512941.

The Art, Science, and Secrets of Scanning Young Children.

Spann MN, Wisnioski JL; HBCD Phase I Scanning Young Populations Working Group; Smyser CD; Fetal, Infant, and Toddler Neuroimaging Group (FIT'NG); Howell B, Dean DC 3rd. *Biol Psychiatry.* 2023 May 15;93(10):858-860. Epub 2022 Sep 29. PMID: 36336497.

2023 Mauricio Castillo, MD Scholars Program -- An Evening of Scholarship



Top to bottom, left to right: Scholar Brayan Corona-Macedo poses with a skull in front of his poster. Scholar Estefania Gonzales presents her poster to former scholar Smith Ngeve. Scholar Katherine Li gives her oral presentation. Dr. Gloria Salazar giving her speech opening the reception. Yuka Koyama getting his picture taken in front of his presentation. Scholar Anysa Fernandez presents to Drs. Yueh Lee and Karenne Ricketts. Dr. Gloria Salazar calling for questions during scholar Seidah Congleton's oral presentation. Scholars pose with Dr. Gloria Salazar.

On Thursday, July 27th, we concluded the 2023 Mauricio Castillo, MD, Scholars Program with an Evening of Scholarship. UNC Medical Alumni Association sponsored the event at the Carolina Club, a celebration of the conclusion of the 8-week summer experiences of the 11 Castillo Scholars. At the event the scholars successfully showcased their summer research projects

The Department of Radiology would like to highlight our Radiology Castillo Scholars, Katherine Li, Diagnostic Radiology, and Estefania Gonzales, Interventional Radiology.

Katherine presented her project, "Developing an Automated Pipeline for CT-Derived Body Composition Analysis as a Predictor for Toxicity and Survival in Cancer Patients." Dr. Yueh Lee was Katherine's research mentor on this project.

Estefania presented her project "Pelvic Venous Disorders (PeVD): A Preliminary Look into Imaging Findings and Allostasis Load in Patients with and without Symptoms." Dr. Gloria Salazar was Estefania's research mentor on this project.

Best of Luck to Katherine, Estefania, and the rest of the 2023 Castillo Scholars in their 2nd year of Medical School.



If you are interested in donating to our Castillo Scholars Fund, scan the qr code

Welcome New Faculty

JENNIFER SCHROEDER, MD

ASSISTANT PROFESSOR,
MOLECULAR IMAGING &
THERAPEUTICS



Dr. Schroeder received her bachelor's from Appalachian State University in 2010 before earning her Medical Degree from the Medical University of South Carolina in 2014. She completed her intern year at the Medical University of South Carolina in Surgery before moving on to a Radiology Residency at Wake Forest School of Medicine. She continued her education with a Nuclear Radiology fellowship at the University of Pennsylvania which boasts one of the largest nuclear medicine departments in the country and is one of the research powerhouses in the field. Dr. Schroeder is excited about the future of nuclear medicine. She believes this is the age of molecular imaging as demonstrated by the identification of molecular markers for disease states with several new molecular directed radiotherapies approved by the FDA in the last 5 years alone.

NIMA KOKABI, MD, FRCPC

ASSOCIATE PROFESSOR,
VASCULAR AND
INTERVENTIONAL
RADIOLOGY AND VICE
CHAIR OF CLINICAL
RESEARCH



Dr. Kokabi was born in Iran and grew up in Canada. He graduated with honors from the University of Sydney Medical School in 2011. From there, he completed his internship at Metro West Medical Center, Harvard Medical School before moving on to his Diagnostic Residency at Emory University School of Medicine. He completed his Vascular Interventional Radiology Fellowship at Yale University School of Medicine in 2017. His main area of research is Interventional Oncology, delivering minimally invasive cancer treatments for patients with many different cancers, including GI, genitourinary, and bone cancer. He has conducted several clinical trials. Many of which are supported by industry partners.

JOHN NAZARIAN, MD

ASSOCIATE PROFESSOR,
EMERGENCY RADIOLOGY



Dr. John Nazarian earned undergraduate and medical degrees from Northwestern University. He completed his diagnostic radiology residency at University Hospitals Case Medical Center in Cleveland, Ohio. He then completed his neuroradiology fellowship at the Mallinckrodt Institute of Radiology at Washington University in St. Louis, Missouri.

Before coming to UNC he worked in private practice in Raleigh. He also worked part-time for the Department of Veterans Affairs and serves as an expert reviewer for the North Carolina Medical Board. Dr. Nazarian is interested in the care of trauma patients, healthcare economics, and quality and safety.

DUSTIN REA, MD

ASSISTANT PROFESSOR,
ABDOMINAL IMAGING



Dr. Dustin Rea earned his undergraduate degree from The University of Virginia, Charlottesville. He then completed his medical degree at The University of North Carolina and internship year at New Hanover Regional Medical Center, Wilmington, NC. He returned to UNC for his diagnostic residency and Abdominal Imaging Fellowship training. Dr. Rea chose the path of a physician because he was blessed with wonderful mentors. He always loved science and found the way the body works interesting. Being a physician is the ultimate way to use that knowledge and education to help others. His expertise lies in Abdominal Imaging - interpreting CT, MR, US, fluoroscopy of the abdomen and pelvis.

**ERIC
MUIR, PhD**
ASSOCIATE PROFESSOR

Eric Muir completed his Bachelor of Science and PhD from the Georgia Institute of Technology. He completed additional post-doctoral imaging work at the University of Texas Health Science Center at San Antonio.

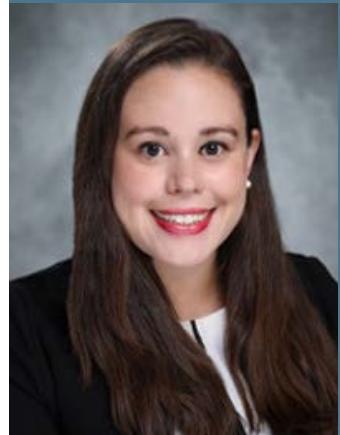
A major focus of his research work has been to i) develop high-resolution MRI to image different retinal physiology in various diseases ii) to develop and apply sophisticated MRI techniques to investigate neurological disease pathophysiology. In recognition of his contributions to advancing ocular and retinal MRI, he has been selected as a Junior Fellow by the International Society for Magnetic Resonance in Medicine.

**FENNER
GRIFFIN, MD**
ASSISTANT PROFESSOR,
CARDIOTHORACIC
IMAGING

Dr. Fenner completed his Bachelor of Science and Master of Science in Mechanical Engineering from North Carolina State University. He received his medical degree at Brody School of Medicine at East Carolina University. He completed his diagnostic radiology residency at George Washington University and his Cardiothoracic Imaging Fellowship at Duke University. His research focuses on integrating AI with coronary CTA and interpretation, helping to increase the speed of the interpreter to increase access to exams. He has also researched lymphoproliferative disorders and their manifestation in the lungs, specifically associated with connective tissue disease and autoimmune diseases.

**STEVEN
ROWE, MD, PhD**
CHIEF & PROFESSOR,
MOLECULAR IMAGING &
THERAPEUTICS

Dr. Rowe received his medical degree and Ph.D. in chemistry from the University of Michigan. He completed residencies in radiology and nuclear medicine at Johns Hopkins University School of Medicine. Most recently, he was an Associate Professor of Radiology and Radiological Science at Johns Hopkins University Maryland. He clinically focuses on nuclear medicine, and his research work has been centered around applications of novel molecular imaging agents for positron emission tomography and single-photon emission computed tomography. He is interested in the use of prostate-specific membrane antigen-targeted PET agents in prostate cancer and renal cell carcinoma, and the clinical utilization of $99m$ Tc-sestamibi SPECT for non-invasive characterization of renal masses.

**MARIANA
DEFREITAS, MD**
ASSISTANT PROFESSOR,
EMERGENCY RADIOLOGY

Dr. DeFreitas was born in Brazil and moved to Italy when she was three. When she was eleven, her father, a mechanical engineer, moved the family to a Detroit, Michigan suburb to work for the automotive industry. Dr. DeFreitas completed her Bachelor of Science in Biomedical Engineering and her medical degree from the University of Michigan. She concluded her training at Duke University through her diagnostic radiology residency, a six-month abdominal mini-fellowship, and a neuroradiology fellowship. Dr. DeFreitas is passionate about serving the people of North Carolina, a state she calls home. And focusing on educating the next generation of physicians is essential to her.

Welcome New Faculty

**ALEX
VILLALOBOS, MD**
ASSISTANT PROFESSOR,
INTERVENTIONAL
RADIOLOGY



Dr. Alex Villalobos has recently joined the UNC Department of Radiology from Emory University, where he completed his Diagnostic and Interventional Radiology training. A native of South America, Dr. Villalobos started his journey in the USA at a rural Texas town. From there, he went on to pursue studies and research in physics and biomedical engineering at the University of Texas at Arlington – where he developed the belief that the future of medicine will be heavily influenced by imaging technologies. He also came to understand the importance of having a connection between those who develop technologies/treatments and those who practice medicine. He received his medical degree from the University of Texas Medical Branch prior to completing his internship at the Medical College of Wisconsin Affiliated Hospitals.

**LI-MING
HSU, PhD**
ASSOCIATE RESEARCH
PROFESSOR



Li-Ming Hsu completed his bachelor's degree in Medical Imaging and Radiology Science from Chang Gung University. He received his Master's and PhD from the National Yang Ming University (now known as National Yang Ming Chiao Tung University). He was most recently a post-doctoral fellow at UNC. Li-Ming's expertise lies in neuroimaging, specifically functional MRI, and understanding the complex networks of the brain. He has also invested a significant amount of time in studying addiction models. The brain's interconnecting networks and their role in behavior, disease, and addiction remain somewhat uncharted. The challenge of demystifying these complex structures and pathways using cutting-edge imaging technology was an irresistible pursuit.

"OUR FACULTY SERVE AS VITAL PHYSICIANS AND EDUCATORS, MERGING CLINICAL EXPERTISE WITH TEACHING PROWESS TO SHAPE FUTURE RADIOLOGISTS, ADVANCE MEDICAL KNOWLEDGE, AND IMPROVE PATIENT CARE."

WE ARE EXCITED TO WELCOME OUR NEW FACULTY TO OUR TEAM AND LOOK FORWARD TO SEEING THE POSITIVE IMPACT THEY WILL HAVE ON OUR PROGRAM."

Maureen P. Kohi, MD, FSIR, FCIRSE, FAHA
Ernest H. Wood Distinguished Professor and Chair

Welcome New Staff

ANNA BYERS

Administrative Support Associate



anna_byars@med.unc.edu
(919) 966-4292

role: administrative support for CT and Neuroradiology divisions.

ALEXIS MILLER

HR Consultant



Alexis_Miller@med.unc.edu
(919) 962-6556

role: human resource support for the Department.

ASHLEY PAUL

Administrative Support Associate



ashley_paul@med.unc.edu
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role: administrative support for Abdominal and Emergency divisions and Global Health.

ALEXANDRA ROMFOE

Research Specialist



email: alex_romfoe@med.unc.edu
(919) 445-0218

role: research support for the Epidemiology Research team.

KENDALL SATCOWITZ

Research Technician



email: kensat@email.unc.edu
(984) 974-9362

role: research support for Dr. Steve Rowe.

Promotions

**JOANNA
NEWMAN**

Program Coordinator

**DESMa
JONES**

Interim Administrative Director for Clinical Research

**ADRIANA
DELGADO**

Associate Clinical Research Coordinator

**HANNAH
MIGNOSA-MARTIN**

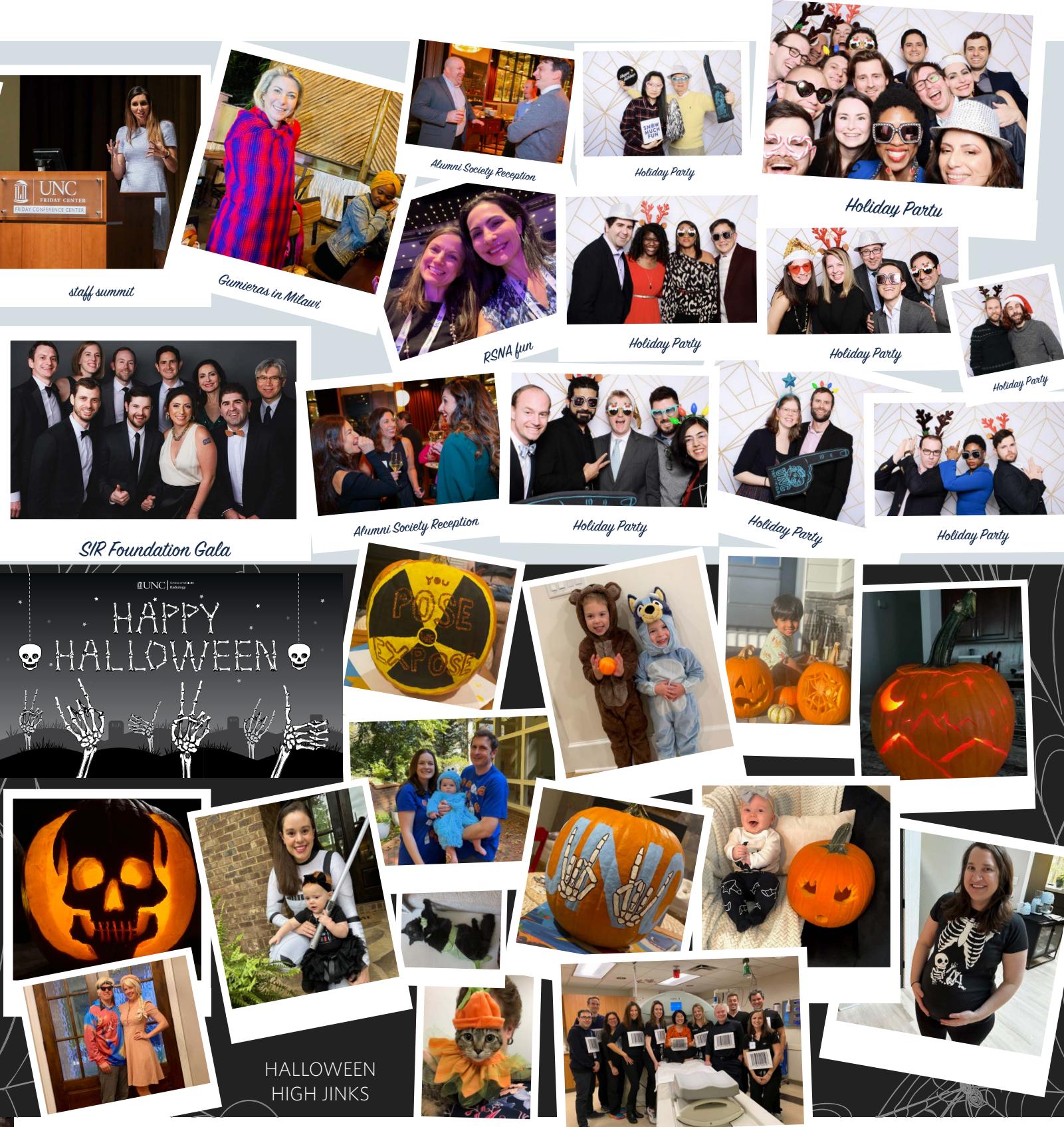
Clinical Research Coordinator

**LOUIS
MURPHY**

Associate Clinical Research Coordinator

Community Engagement





Highlights and Honors



ERSAN ALTUN, MD
Associate Professor, Abdominal Imaging

Appointed to Director of MRI.



LAUREN BURKE, MD
Professor, Abdominal Imaging

Promoted to Clinical Professor of Radiology. Accepted into the Leading Transformation in Academic Medicine (LTAM) program.



MAURICIO CASTILLO, MD
*Matthew A. Mauro, M.D.
Distinguished Professor,
Neuroradiology*

Awarded Academy of Educators Lifetime Achievement Award in Medical Education.



NICOLE CLAYTON
Administrative Specialist

Vicki Holland Award Winner.



ERAN DAYAN, PhD
Associate Professor, Radiological Sciences

Received the Academy for Radiology & Biomedical Imaging Research 2023 Distinguished Investigator Award.



LANE DONNELLY, MD
Professor, Pediatric Imaging

Received the Presidential Award for the Society of Pediatric Radiology - 2023 Annual meeting and Caffey Award for Best Non-Clinical Paper at the 2023 SPR.



LOURENS DU PISANIE, JR., MD
PGY 5 Integrated Vascular and Interventional Radiology Resident

Awarded the Doximity Travel Scholarship for his upcoming global health elective in Lilongwe, Malawi.



ANTHONY DYER, MD
PGY4 Diagnostic Radiology Resident

Won the Society of Radiologists in Ultrasound Members in Training award for research.



JOSEPHINE FINAZZO, MD
Associate Professor, Abdominal Imaging

Accepted position as the Abdominal Imaging Fellowship Director in 2023.



LYNN FORDHAM, MD
Professor, Pediatric Imaging

Elected to serve on the Committee on Appointments, Promotions and Tenure for the UNC School of Medicine.



GIRISH GАНДIKO, MD
Associate Professor, Musculoskeletal Imaging

Interim Chief of the Musculoskeletal Division.



JAMES GRUDEN, MD
Professor, Cardiothoracic Imaging

Promoted to Vice Chair of Quality and Safety.



CAROLINA GUIMARES, MD
Chief, Pediatric Imaging

Selected for the LEAD (Leading Empowering And Disrupting) program for women in leadership sponsored by GE and SCARD. Selected as the Anne Osborne ASNR International Outreached Professorship in Tanzania.



AMIR KHANDANI, MD
Professor, Molecular Imaging & Therapeutics

Completed a 2-year term as the President of the American Board of Science in Nuclear Medicine (ABS NM).



NICOLE KEEFE, MD
Assistant Professor, Vascular and Interventional Radiology

Accepted into the Leadership in Academic Medicine Program (LAMP).



MAUREEN KOHI, MD
Ernest H. Wood Distinguished Professor and Chair

Elected as the Chair of the SIR Foundation. Awarded the Tom Dorsey Gold Medal by the Western Angiographic and Interventional Society (WAIS).



CHERIE KUZMIAK, MD
Professor, Breast Imaging

Invited to hold the position of Breast Imaging Associate Section Chief for ACR Institute for Radiologic Pathology.

Highlights and Honors Continued

**JOSEPH J.T. LEE, MD***Professor & Chair Emeritus*

Awarded the Gold Medal from RSNA at its annual meeting on Nov 27, 2023 in Chicago.

**YUEH LEE, MD, PhD***Professor, Neuroradiology*

Promoted to Professor with tenure. Inducted as a Fellow of the American College of Radiology. Received the Academy for Radiology & Biomedical Imaging Research 2023 Distinguished Investigator Award.

**MATT MAURO, MD***Professor & Chair Emeritus*

President of RSNA.

**PRIYA MODY, MD***Assistant Professor, Vascular and Interventional Radiology*

Accepted into the Leadership in Academic Medicine Program (LAMP).

**JOHN MONGE, MD***Assistant Professor, Breast Imaging*

Selected for the 2023-2024 Passing the Torch: Fostering Medical Humanism through Faculty Role Models program.

**DANIEL NISSMAN, MD***Professor, Musculoskeletal Imaging*

Promoted to Clinical Professor. Awarded 2022 Radiology: Artificial Intelligence Editor's Recognition Award with Special Distinction.

**KRISTEN OLINGER, MD***Assistant Professor, Abdominal Imaging*

Received the Charles A. Bream Teaching Award from UNC Department of Radiology.

**DAVID SAILER, MD***PGY2 Diagnostic Radiology Resident*

Academy of Educators Induction & Teaching As a Resident: Highlighting the Evidence and Enthusiasm of Learning (TAR HEEL).



CODY SCHWARTZ, MD
Associate Professor, Musculoskeletal Imaging

Promoted to Associate Clinical Professor.



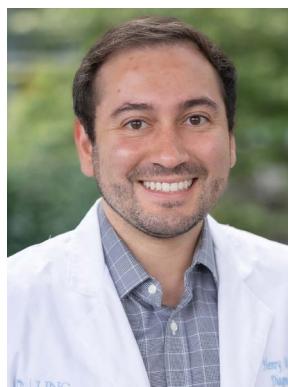
DOROTHY SIPPO, MD
Associate Professor, Breast Imaging and Vice Chair of Informatics

Inducted as a Fellow of the Society of Breast Imaging (FSBI).



BENJAMIN SMITH, MD
Assistant Professor, Radiological Sciences

Academy of Educators New Member Induction.



HENRY STIEPEL, MD
PGY3 Diagnostic Radiology Resident

Chosen as UNC's Radiology Resident Scholar by the North Carolina Radiological Society to attended the 100th annual ACR meeting.



KERRY THOMAS, MD
Associate Professor, Abdominal Imaging

Selected to serve as the Chief GME Officer | ACGME Designated Institutional Official UNC Hospitals & Senior Associate Dean for Graduate Medical Education UNC SOM.



LI WANG, PhD
Associate Professor, Radiological Sciences

Promoted to Associate Professor with Tenure.



ZHANHONG WU, PhD
Associate Professor, Radiological Sciences

Promoted to Associate Professor.



CARLOS ZAMORA, MD
Chief and Associate Professor, Neuroradiology

Selected for the 2023 AUR Radiology Management Program at the Association of University Radiologists, Austin, TX.

Awards & Recognition

**ERAN DAYAN, PhD**

Associate Professor,
Radiological Sciences

Awarded a two-year grant for "Targeted Motor Learning to Improve Gait for Individuals with Parkinson's Disease" in the amount of \$404,276.

**LOUISE HENDERSON,
PhD**

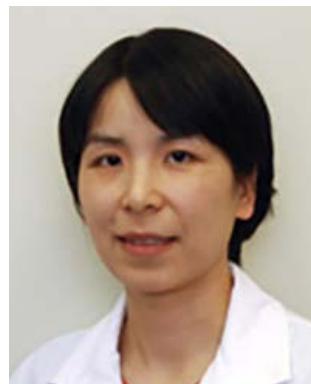
Professor, Radiological Sciences

Awarded a five-year, \$1.76 million NIH/NIC grant, "Applying causal inference methods to improve estimation of the real-world benefits and harms of lung cancer screening" (MPI). Also received a five-year, NIH/NIC grant, "Evaluating Lung Cancer Screening Patterns and Outcomes in Diverse Populations and Settings" (PI).

**GUOSHI LI, PhD**

Research Instructor,
Radiological Sciences

Awarded a two-year grant from the National Institute of Aging (NIH/NIA) "Accurate and Individualized Prediction of Excitation-Inhibition Imbalance in Alzheimer's Disease using Data-driven Neural Model" in the amount of \$427,625.

**HONG YUAN, PhD**

Professor, Radiological Sciences

Awarded the NIH S10 one-year grant, "Preclinical Vevo-F2 ultrasound imaging system for Small Animal Imaging core facility in the amount of \$490,700. Also received the UNC LCCC Developmental Award for one-year, "Developing FAP targeted theranostic agents for brain metastases."

**JAMES GRUDEN, MD**

Associate Professor,
Cardiothoracic Imaging

Co-investigator with Louise Henderson on a five-year, NIH/NIC grant, "Evaluating Lung Cancer Screening Patterns and Outcomes in Diverse Populations and Settings."

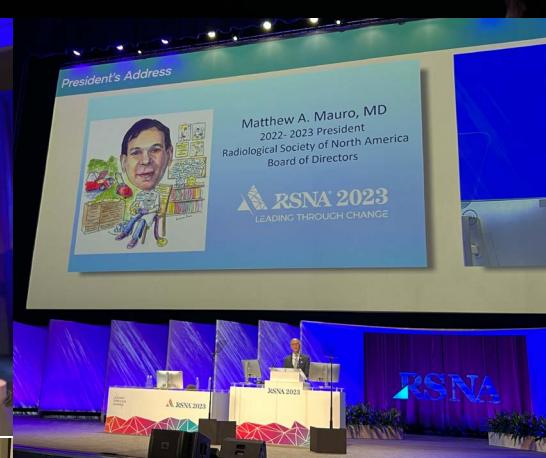
**CHERIE KUZMIAK, MD**

Professor, Breast Imaging

Co-investigator on an NIH four-year \$2.5 million grant, "VisR Ultrasound for Noninvasively Interrogating Stromal Collagen Organization in Women as a Breast Cancer Biomarker." To evaluate stromal collagen organization as a diagnostic breast cancer biomarker using Viscoelastic Response (VisR) ultrasound.

MATTHEW A. MAURO, MD

President
Radiological Society of North America



Top to bottom, left to right: Matthew A. Mauro, MD, President of Radiological Society of North America giving the Presidential Speech. Dr. Mauro posing with Joseph K.T. Lee former Chair of UNC Radiology and the RSNA Gold Medalist. Dr. Lee giving his award speech. Alan H. Matsumoto, former UNC Resident introducing Dr. Mauro. Dr. Lee before he enters the RSNA Award and Honorees Luncheon.

2023 RSNA & Alumni Reception

It was an incredible year for UNC Radiology at RSNA 2023. During the annual scientific meeting which took place from November 26th to the 30th in McCormick Place, Chicago, the Department had major triumphs.

RSNA 2023

The Radiological Society of North America (RSNA) is a non-profit organization representing professionals spanning the full breadth of radiologic subspecialties in more than 150 countries worldwide. The Annual Meeting is an opportunity to explore and embrace the new perspectives and technologies that are strengthening the future of the field.

On Sunday, November 26, 2023, Matthew A. Mauro, MD, FACP, FSIR, FAHA, gave the President's Address and commenced the 109th Scientific Assembly and Annual Meeting. Dr. Mauro is the past Chair of UNC Radiology and the 2022-2023 President of the Radiological Society of North America (RSNA) Board of Directors.

"The healthcare landscape is rapidly changing as we enter our post-pandemic environment," Dr. Mauro said. "In addition to technical and scientific advances, we can anticipate changes to our healthcare delivery systems, labor management, and patient expectations. The RSNA will maintain our position as the great convener for all those

who interact with our members to advance the fields of diagnostic radiology, interventional radiology, radiation oncology, and medical physics. I am honored to have the privilege of serving as president of the RSNA."

Alan H. Matsumoto, MD, former UNC Resident and current Chair of Radiology at UVA, introduced Dr. Mauro.

Joseph K.T. Lee, former Professor and Chair of Radiology from 1991 to 2006, received the RSNA Gold Medal. On Monday, November 27th, the medalists were presented their awards during a luncheon ceremony that included a lovely speech by Dr. Lee. Hailed throughout the world as a pioneer in MR imaging and computed body tomography, Joseph K. T. Lee, MD, has steered historic advances in the evolution of quantitative abdominal imaging.

"Joe is a remarkable individual, and his contributions to the field of abdominal imaging are legendary," said Matthew A. Mauro, MD. "He has served as a mentor, boss, colleague, and friend for over four decades as he pioneered the development of abdominal CT and MRI and transformed the Department of Radiology at UNC."

What a tremendous honor for our

Department! We are so proud of Drs. Mauro and Lee and their contributions to Radiology and the RSNA.

Numerous UNC Radiology faculty were showcased, delivering invited talks and moderating various sessions. In addition, we are so proud of our trainees who presented at multiple venues throughout the meeting.

RECEPTION

On Monday, November 27, 2023, UNC Radiology hosted its second annual RSNA Alumni Reception in Chicago! Alums from all over the country joined current faculty and trainees for celebration and reconnection.

At the event, UNC Radiology hosted over 40 alumni, faculty, and trainees at Swift & Son's. It was a meaningful time seeing familiar faces, building new relationships, and celebrating UNC Radiology's strong presence at RSNA 2023.

The Department of Radiology would like to thank everyone who joined the UNC Radiology RSNA Alumni Reception. Our alumni are a cornerstone of UNC Radiology, representing our past, present, and future. In 2024, we will continue to fortify this network and hope for more to join our RSNA Alumni Reception.



Department of Radiology
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CB #7510
Chapel Hill, NC 27599

Vision

To be the premier Department of Radiology in the Southeast.

Mission

Our mission is to deliver compassionate clinical care, advance healthcare through innovative research, and train the future generation of radiologists and scientists.



Wishing you
a RAD
holiday season