



The University of Arizona  
**APIDA**  
**HERITAGE**  
*Month*

# R & R

## RECOGNIZE & REWARD

# May 2023



Banner  
University Medical Center  
Tucson



THE UNIVERSITY OF ARIZONA  
COLLEGE OF MEDICINE TUCSON  
Medical Imaging

# PROMOTION

Congratulations to **Bital Savir-Baruch, MD, FACNM**, who has been promoted to Professor of Medical Imaging.

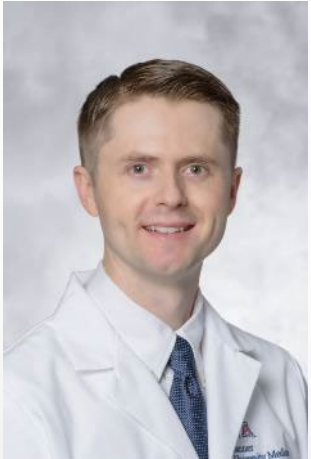
Chief of the [Nuclear Medicine Division](#), Dr. Savir-Baruch focuses on the diagnosis and management of prostate, thyroid, and neuroendocrine cancers.

Since joining Medical Imaging, she has worked to successfully establish the [Theranostics Clinic](#) and was instrumental in obtaining the highest honor awarded to treatment centers: Comprehensive Radiopharmaceutical Therapy Center of Excellence





# ASNR

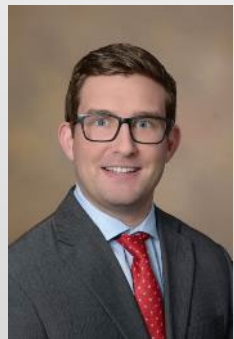


Sam Rogers, MD



Aubrey Frazzitta, MD

**Sam Rogers and Aubrey Frazzitta** presented 3 oral national podium presentations and 1 educational exhibit at the Annual Meeting of the American Society of Neuroradiology (ASNR)



Mark Greenhill, DO



Conner Reynolds, DO



Unni Udayasankar, MD

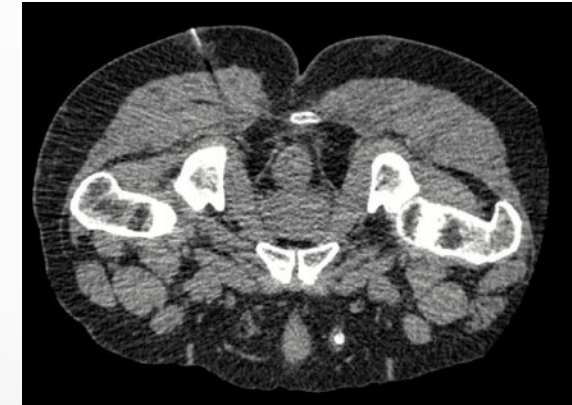
▶ **Aubrey, Conner Reynolds, and Sam Rogers**, “Brainstem” educational exhibit (*The Brainstem Stroke Atlas: What Every Neuroradiologist Needs to Master the Anatomy and Expertly Diagnose Brainstem Stroke Syndromes*) was selected for oral podium presentation and invited to submit for publication in Neurographics.

▶ **Mark Greenhill, Aubrey Frazzitta, Unni Udayasankar and Sam Rogers** educational exhibit, *Craniosynostosis: A Pictorial Review. American Society of Neuroradiology*, was invited for submission for publication in Neurographics.

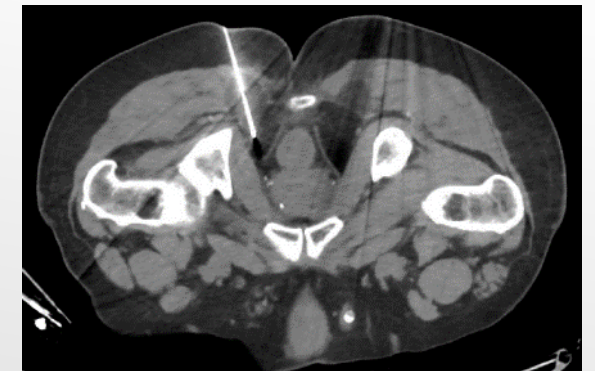
# INNOVATION STORIES: IR DIVISION

*INNOVATION STORIES* is new feature highlighting the ways MI divisions synthesize novel techniques and applications to improve the value of their service

- ▶ **Pudendal Nerve Cryoneurolysis** – is a new treatment for pain management involving cryoablation that is being pioneered by Interventional Radiology (IR)
- ▶ Through participation in weekly tumor board meetings, the IR Division has received referrals to treat patients with large pelvic tumors
- ▶ To date, IR has performed ten procedures with great success; patients report experiencing almost immediate relief from persistent and debilitating pain
- ▶ IR is working with UArizona's [Research Innovation & Impact](#) Institutional Review Board (IRB) to begin a Prospective Trial



Procedure 1:  
Block



Procedure 2:  
Cryoneurolysis



# NEW ARRIVAL

Beautiful baby girl **Maya** arrived this month, healthy and happy.

Many congratulations to the Sadovnikov family!



4<sup>th</sup> Year Resident  
and Proud Parent,  
**Irina Sadovnikov,  
MD**



# FAREWELL

**Nilu Dorschner, MLS, C-TAGME,**  
Manager IR Residencies and  
Fellowships, retired from the  
UArizona Department of Medical  
Imaging on May 3<sup>rd</sup>.

We are grateful for her many  
contributions and wish her all the  
best!





# NEW STAFF MEMBER

**Kevin Matsunaga** joins us as a part-time Administrative Support Assistant.

Kevin brings a wealth of experience in graphic design, having earned his BFA in Visual Communication (Illustration Emphasis) at the University of Arizona.

Please join us in welcoming Kevin to the team. Find him in HISB room 32 on Mondays and Wednesdays.



# CONGRATS, GRAD!

Congratulations to our  
*very favorite* 2023  
University of Arizona  
graduate,  
**Lonn'tiay (Tae)  
Williams**

We miss you already and  
wish you all the best in  
Graduate School, Law  
School and beyond!



Thank you *Tae*

#best  
student worker!



Congratulations!





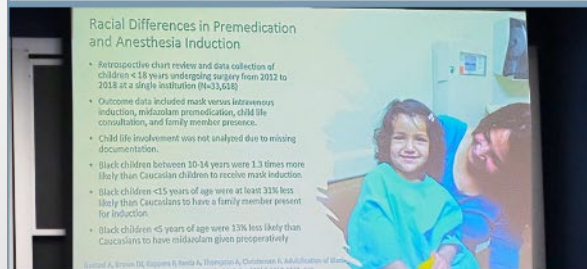
# WEDNESDAY WORKSHOP

DEI PRESENTATION | MAY 10, 2023

Thank you 🙏 to  
**Celia Valenzuela, MD**, Interim  
Vice Dean, Diversity, Equity and  
Inclusion for her tailored-for-  
Radiology DEI lecture,  
“Mending Health Inequities  
Through Culturally Humble Care.”

## DEI LECTURE

### “Mending Health Inequities Through Culturally Humble Care Training”



THE UNIVERSITY OF ARIZONA  
COLLEGE OF MEDICINE TUCSON  
Office of Diversity,  
Equity & Inclusion



Celia Valenzuela, MD  
and Hina Arif, MD, FSAR

# GRAND ROUNDS

HEALTH EQUITY | MAY 17, 2023



Thank you and *kudos* to DR Residents **Stefano Natali** and **Dallin Christensen** for their presentation, “The ‘Pan-Scan’ of Border Trauma.”

See the presentation on [Panopto](#)\* (\*access with UA NetID and Password)



# PUBLICATION

## MR Virtual Biopsy of Solid Renal Masses: An Algorithmic Approach

Stephane Chartier and Hina Arif-Tiwari

Cancers 2023, 15(10), 2799;

<https://doi.org/10.3390/cancers15102799>



Stephane Chartier, DO



Hina Arif, MD, FSAR

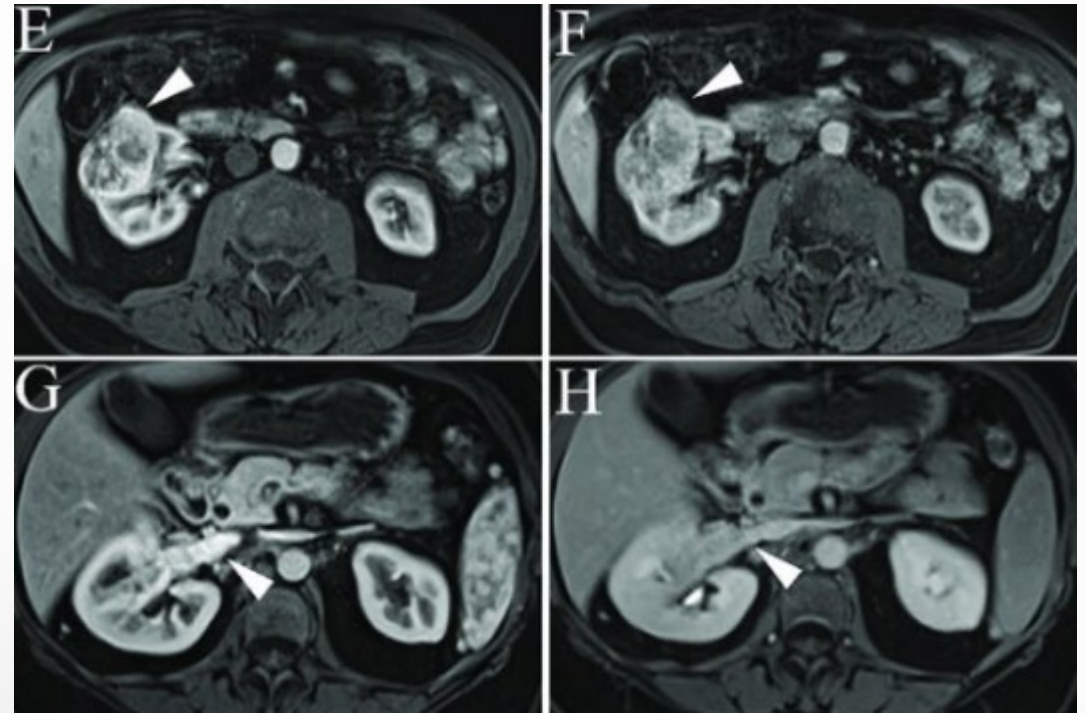


Figure 4. Clear cell renal cell carcinoma. (A) Single-shot T2-weighted image demonstrating high signal intensity of a clear cell renal cell carcinoma (ccRCC, arrowheads) in the anterior cortex of right kidney. (B) T1 weighted-image (T1WI), in-phase GRE image. (C) T1 out-of-phase GRE image shows signal "drop-out" secondary to microscopic/cytoplasmic intralesional lipid content. (D) T1-weighted pre-gadolinium enhanced fat-suppressed three-dimensional gradient-echo (T1WI FS 3D GRE) image. (E) T1WI post-gadolinium FS 3D GRE, arterial phase image. (F) T1WI post-gadolinium FS 3D GRE, delayed phase image. Note the increased arterial enhancement of the tumor as compared to delayed phase image. (G,H) Note the tumor thrombus in the right renal vein showing similar hypervascularity in arterial phase and relative washout in delayed phase images (arrowheads).

# PUBLICATION

## Thermal and Acoustic Stabilization Of Volatile Phase-Change Contrast Agents Via Layer-By-Layer Assembly

Pedro Enrique Alcaraz <sup>a b d</sup>, Skylar J. Davidson <sup>b</sup>, Evan Shreeve <sup>b</sup>, Rainee Meuschke <sup>b</sup>, Marek Romanowski <sup>b c</sup>, Russell S. Witte <sup>b c d</sup>, Thomas R. Porter <sup>e</sup>, Terry O. Matsunaga <sup>b d</sup>

*Ultrasound in Medicine & Biology*, Volume 49, Issue 5, May 2023

<https://doi.org/10.1016/j.ultrasmedbio.2022.12.002>



Russell Witte, PhD



Terry Matsunaga, PhD

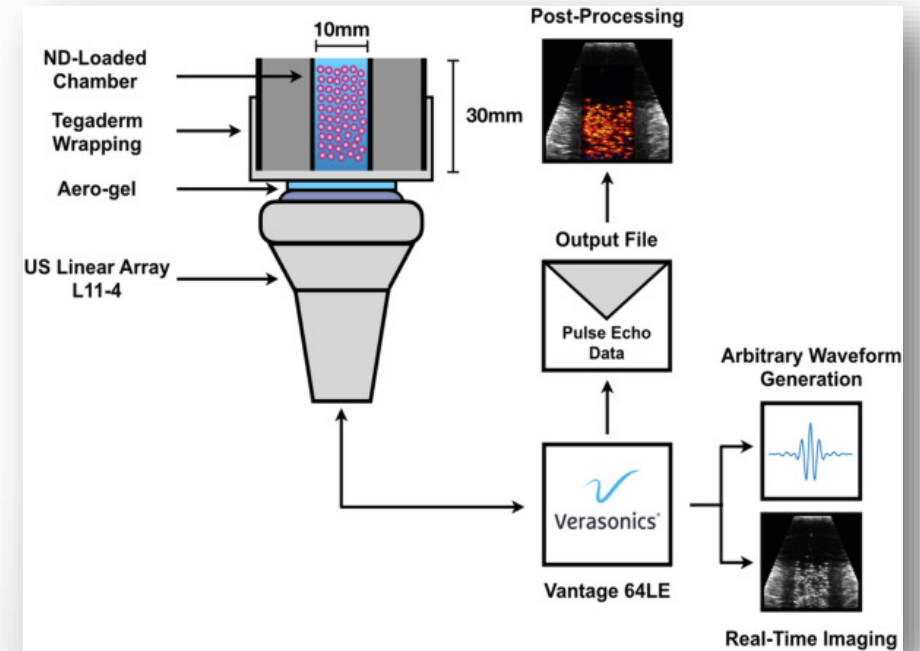


Figure 2. Schematic of the US imaging system. A phantom chamber is coupled to the Vantage64 LE imaging system via the L11-4 transducer. The transducer is driven/controlled via commercially available software (Verasonics) executed in MATLAB. Raw pulse echo data is processed via an image processing routine to count particles and remove back-scatter/reflections.



# PUBLICATION

## Acoustic Detection of Retained Perfluoropropane Droplets Within the Developing Myocardial Infarct Zone

Ping Zeng <sup>\*†</sup>, Cheng Chen <sup>‡</sup>, John Lof <sup>†</sup>, Elizabeth Stolze <sup>†</sup>, Shouqiang Li <sup>†§</sup>, Xucai Chen <sup>‡</sup>, John Pacella <sup>‡</sup>, Flordeliza S. Villanueva <sup>‡</sup>, Terry Matsunaga <sup>¶||</sup>, E. Carr Everbach <sup>#</sup>, Hongwen Fei <sup>\*</sup>, Feng Xie <sup>†</sup>, Thomas Porter <sup>†</sup>

**Ultrasound in Medicine & Biology**, Volume 48, Issue 11, November 2022

<https://doi.org/10.1016/j.ultrasmedbio.2022.07.005>



Terry Matsunaga, PhD

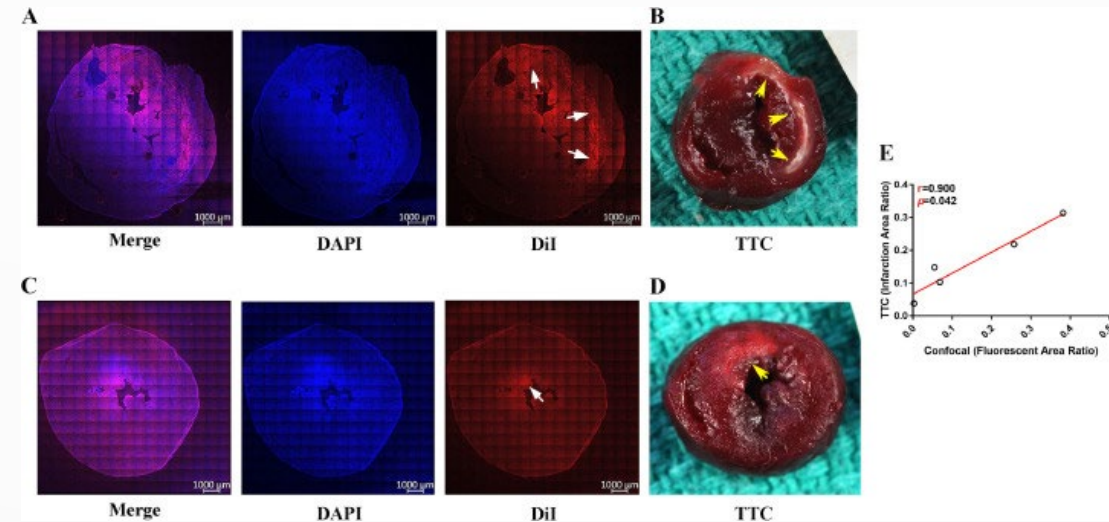


Fig. 6. Fluorescence stains for DAPI and Dil, and the subsequent confocal image in a rat who was sacrificed 3 min post-intravenous injection. Note the concentration of Dil fluorescence in the anterior and anterolateral wall (A, arrows). This corresponded to the developing scar zone on TTC staining (B). (C, D) Confocal image in another rat (C) revealing the increased Dil staining in the anteroseptal segments corresponding to the infarct on TTC staining postmortem (D). (E) Spearman correlation analysis between fluorescence-enhanced area at 3 min ( $n = 5$  rats) post-injection and TTC infarct size ( $r = 0.90$ ,  $p = 0.037$ ). No preferential fluorescence-enhanced region within the DSZ was observed when the same dose of Dil was given in saline. DAPI = 4',6-diamidino-2-phenylindole; Dil = 1,1'-dioctadecyl-3,3,3',3'-tetramethylindocarbocyanine perchlorate; DSC = developing scar zone; TTC = triphenyl tetrazolium chloride.

# RSNA NEWS



Aubrey Frazzitta, MD

**Aubrey Frazzitta** was invited for an interview with RSNA news resulting in two articles on female representation in radiology. First appearing online in April and May, these articles will also be shared in the June print issue.

- ▶ [Too Few Women in the Field of Radiology](#)
- ▶ [Solutions to Increase Women's Representation At All Levels of Radiology](#)





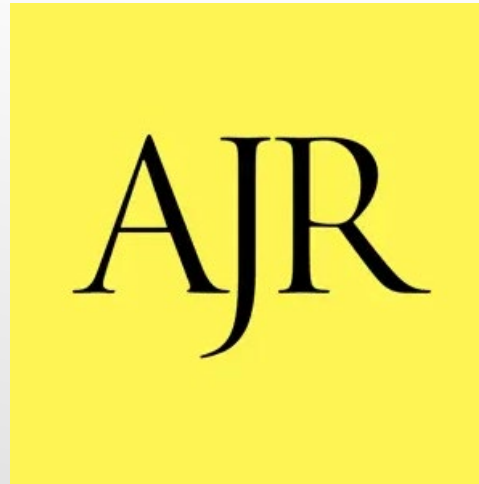
# PODCAST



Abdul Khan, MD

Moral distress may cause burnout. **Abdul Khan, MD**, discusses a recently published AJR article in which investigators evaluate the prevalence of moral distress and evaluate for causes of moral distress as well as potential solutions for moral distress.

Find the podcast [here](#).



# IR ANNUAL MEETING: FACULTY



Shamar Young, MD



Greg Woodhead, MD

## SHAMAR YOUNG, MD

- ▶ **Innovation Speaker:** “Good Circulation: a Review of Peripheral immune Cells,” 5/19/23
- ▶ **Education Speaker:** “RF Ablation for Benign Thyroid Nodules,” 5/18/23
- ▶ **Abstracts Session VII:** Best Scientific Abstracts & Awards – Moderator, 5/19/23
- ▶ **Masterclass** – Panelist, 5/19/23
- ▶ **Innovation** – Research I – Moderator, 5/18/23
- ▶ **Innovation** – Research II – Moderator, 5/19/23
- ▶ **Education** - Session V: Thyroid Interventions Moderator, 5/18/23
- ▶ **Masterclass Demonstrator** - Session XVII: Ablation, 5/19/23

## GREGORY WOODHEAD, MD, PhD

- ▶ **Innovation Speaker:** “Ablation and Immunotherapy, a Match Made in Heaven?” 5/19/23
- ▶ **Innovation** – Panelist, 5/19/23
- ▶ **Abstracts Session VIII:** Moderator, 5/20/23



**Research Session I** Thursday, May 18 5:30-6:30 PM

Please join us for an exciting preview of the new and emerging areas of embolic and oncologic treatments in interventional radiology. This dynamic session will include discussion of upcoming trials, exciting equipment development, and new horizons for interventional radiologists.

**Research Session II** Friday, May 19 5:30-6:30 PM

Unlocking the immune system represents a big step forward in the field of cancer therapy. However, further work needs to be done to improve efficacy, interventional oncologic synergistic treatment with immunotherapies. Join us as we discuss current factors and future directions.



**Best Scientific Abstracts & Awards**

Saturday, May 20 10:30-11:45 am

The Best Scientific Abstracts and Awards session will include a celebration of the top abstracts submitted to GEST 2023. After the authors present, a panel of Research Committee members and the audience will be able to ask questions. The session will conclude with the awarding of cash prizes for the top abstracts.

**Session VIII: Masterclass IO Vascular - Master your way out of Mystery: Emulate the Masters**

Friday, May 19 8:00-9:30 am

With a focus on Vascular Interventions in IO, the faculty will showcase both well-established and novel technologies to real time. Our expert panel will discuss their own experience in current practice and outline the future trends and developments. The audience can appreciate a lively discussion around practical issues they may face in their practice.



# IR ANNUAL MEETING: RESIDENTS



Residents participating at GEST 2023: David McNiel, Art Abramyan, Chris Brunson, Michael Lee, Salil Kalarn and Miles Seidel



- ▶ Long Term Outcomes and Safety of Cryoablation in the Liver – **Artyom Abramyan, DO**
- ▶ “A retrospective analysis of the tumor to normal ratio in NASH/NAFLD-induced HCC” and “Oncologic outcomes in patients with NASH/NAFLD-induced HCC: a retrospective comparative analysis” – **Christopher Brunson, MD**
- ▶ “Cirrhotics Undergoing Splenic Artery Embolization for Traumatic Injury: Does Embolic Choice Matter?” – **Salil Kalarn, DO**
- ▶ “T1b Renal Cell Carcinoma: is Cryoablation a Viable Option?” – **Michael Lee, MD**
- ▶ “Transcatheter Gene Delivery: Towards Novel Imaging and Treatment Strategies” – **David McNiel, MD, PhD**
- ▶ “Metastatic Sarcoma Treated with Transarterial Radioembolization: Dosing Thresholds and Clinical Outcomes” – **Miles Seidel, MD**

# DEI: VISITING MEDICAL SCHOOL STUDENT SCHOLARSHIP



We are pleased to announce the 2023-2024 recipient of our visiting medical school student scholarship: **Gloria Jang**

Gloria is a rising fourth-year medical student at Lincoln Memorial University-DeBusk College of Osteopathic Medicine in Knoxville, Tennessee. She grew up in Toronto, Canada, and Northern Virginia and received her bachelor’s degree in biology at John Brown University in Siloam Springs, Arkansas. After college, she worked as an ophthalmic technician and scribe, optometric technician, and ESL tutor in Northern Virginia. She is applying for a diagnostic radiology residency in the fall.

Congratulations, Gloria!

Diversity Scholarship for  
Visiting Medical Students #Radiology

Learn More &  
Apply



Medical Imaging

3<sup>rd</sup> Annual Scholarship Awarded!



# RESIDENT SPOTLIGHT

Jen  
Kramer

## Where do you call home?

I was born in Montreal, Canada but grew up in Phoenix, AZ

## What inspired you to become a Radiologist?

Radiology is a true amalgamation of art and science. Because of technological advances in medical imaging, Radiologists hold a unique role as universal diagnostic consultants for all other medical specialties. The different imaging modalities we have at our disposal are not only essential for diagnostic accuracy, allowing us to help our clinician colleagues solve a myriad of medical puzzles, but are also beautiful, whether it's the rainbow of colors in a Nuclear Medicine study, the exquisite detail of an MRI, or a perfectly timed angiographic study, impeccably detailing vascular anatomy.

## What is on the horizon after graduation?

Breast Imaging Fellowship at The University of Arizona

## Share three fun facts about yourself

1. I love to bake (and eat) cookies. To date, I have probably baked upwards of 5,000 cookies.
2. My puppy is the love of my life. He is a black and white Sheepadoodle named Bo, after the great Humphrey Bogart.
3. I make costume pieces and armor out of craft foam.



Jennifer Kramer, MD





# RESIDENT SPOTLIGHT

## Danh Truong

Where do you call home?

Oklahoma City

What inspired you to become a Radiologist?

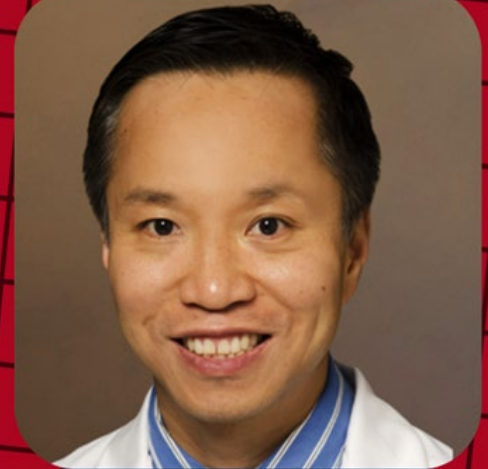
I was drawn to the visual workflow in radiology.

What is on the horizon after graduation?

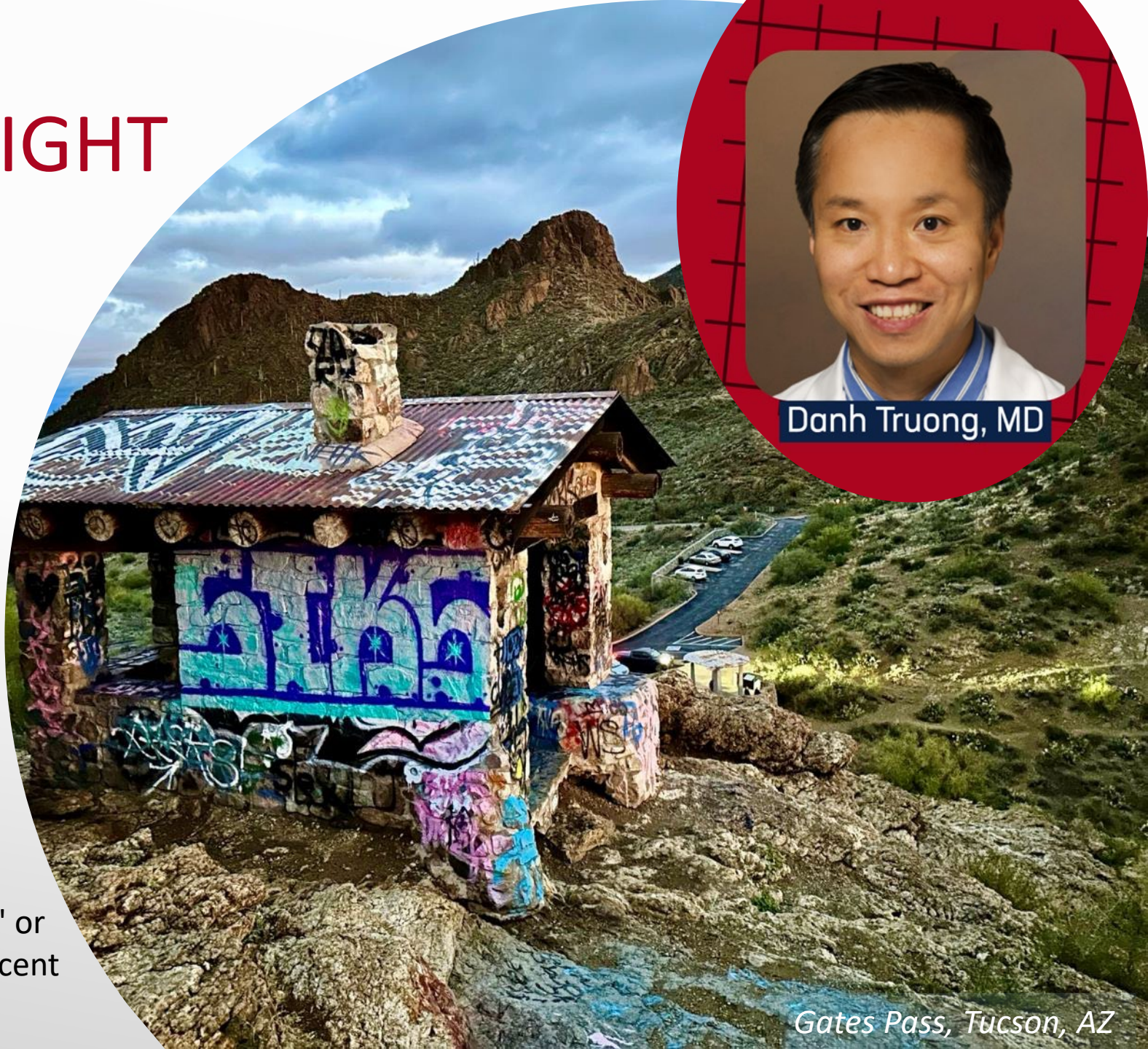
Body Fellowship at The University of Arizona

Share three fun facts about yourself

1. I have a vintage camera lens that is radioactive.
2. I have visited 40 of the 50 states.
3. My name is pronounced more like "Zane" or "Yane", depending on the Vietnamese accent being used.



Danh Truong, MD



Gates Pass, Tucson, AZ



# OUTREACH



Terry Matsunaga, PhD

Congratulations! The EPICS with Autism Program has launched two new internships this year. [Raytheon Technologies](#) and [Texas Instruments](#) have signed on to mentor students with a focus in mechanical, systems, computer, and electrical engineering.



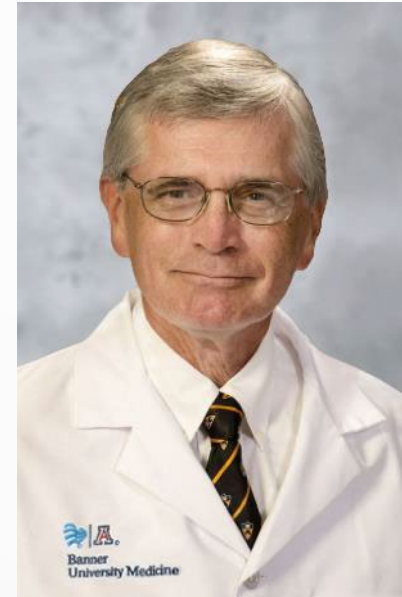
**Engineering Professional Internships for College Students (EPICS) with Autism**



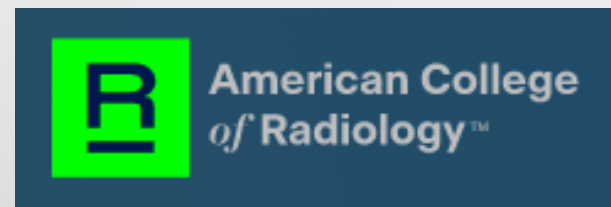
# OUTREACH

Professor Emeritus **Wayne Kubal** presented four lectures at the [American College of Radiology Education Center](#) in Reston, Virginia

- ▶ Traumatic Brain Injury | May 1
- ▶ Stroke | May 2
- ▶ C-Spine Trauma | May 2
- ▶ Head and Neck Infections | May 3



Wayne Kubal, MD



# SOCIAL

We want to follow you!

Message us:

[UAZMedImaging](#), [UofAZRads](#)  
or [UofAZRads](#)



UArizona Department of Medical Imaging @UAZMedImaging · May 18

Thank you to @UofAZRads Dallin Christensen and @StefanoNatali12 for an engaging and eye-opening Health Equity Grand Rounds presentation [#diversityandinclusion](#) [#Radiology2023](#)



Geoff Rubin MD MBA and 3 others

3 replies 14 likes



Geoff Rubin MD MBA @GeoffRubin · May 5

Thank YOU @NeuroradRogers for being a mentor extraordinaire and creating invaluable opportunities for our team to shine @UAZMedImaging #asnr23



Samuel Rogers @NeuroradRogers · May 4

Proud to be a mentor to my @UofAZRads #radres who worked hard and represented at #ASNR23. Congratulations Dr Frazzitta @afrazzMD and Dr Greenhill for being invited to submit to @ASNRographics! An achievement to always remember, no doubt about it.

@UAZMedImaging  
#neurorad



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@UAZMedImaging  
#neurorad

Dear Dr. Frazzitta,

Congratulations on your ASNR 2023 Educational Exhibit The Brainstem Stroke Atlas: What Every Neuroradiologist Needs to Master the Anatomy and Expertly Diagnose Brainstem Stroke Syndromes. As part of the scoring process for the exhibits, suitability for potential publication in Neurographics, the educational journal of the ASNR, is assessed. I am pleased to inform you that your exhibit scored highly in this regard and I would like to invite you to submit a manuscript based on this project. Please submit via the

Dear Dr. Greenhill,

Congratulations on your ASNR 2023 Educational Exhibit Craniostylosis: A Pictorial Review. As part of the scoring process for the exhibits, suitability for potential publication in Neurographics, the educational journal of the ASNR, is assessed. I am pleased to inform you that your exhibit scored highly in this regard and I would like to invite you to submit a manuscript based on this project. Please submit via the

4 replies 19 likes



UArizona Department of Medical Imaging @UAZMedImaging · May 12

Congratulations to our amazing student worker Lonnt'lay Williams graduating today [#WildcatForLife](#) [#BearDownGrad](#) We are so very proud of you, Tae!!! [#LawSchoolBound](#)



You and 2 others



Geoff Rubin MD MBA @GeoffRubin · May 5

We are privileged @BitalSavirBMD that YOUR star shines so bright here in Tucson @UAZMedImaging. We are very proud of you. Congratulations! 🌟



Bital Savir-Baruch MD, FACNM @BitalSavirBMD · May 5

Super excited to be promoted to a full Professor! I am privileged to be part of the @UAZMedImaging I am so proud to be a part of this amazing Nuclear Medicine team! Thank you for all my mentors! More to come!



I am pleased to inform you that your promotion is approved. Your promotion was based on the Committee on Appointments, Promotion and Termination committees that contributed to the department's success effective July 1, 2023.

In this important achievement. As a College of Medicine, we are committed to the success of the missions of the College and we are proud to have an outstanding clinician, educator and scholar who has achieved this milestone.

Wishes for your continued success.

1 reply 1 retweet 10 likes



# POSTSCRIPTUM



May 16: members of the administrative staff enjoyed a lunch and bowling teambuilding event



During her trip to ASNR this month, **Aubrey Frazzitta** (right) caught up with **Shahad Al Bayati**, University of Arizona, COM-T Diagnostic Radiology Residency Alum