

# RADIOLOGY RESEARCH UPDATE *August 2023, Issue 27*

Department of Diagnostic Radiology and Nuclear Medicine

## JOHN M. DENNIS, M.D. MEMORIAL LECTURE & RESEARCH DAY

**Dr. Dheeraj Gandhi** was the moderator of The John M. Dennis, MD Memorial Lecture and Research Day that was held on June 12<sup>th</sup>.

**Dean Mark T. Gladwin, MD** gave the lecture, speaking on “Translating Redox Biology to Medicine: Lessons Learned, Taking Risks, and Going NO Where.”

Congratulations to the Research Day award winners:  
*Reuben S. Mezrich Research Prize: Piotr Walczak, MD, PhD*

*The Bruce Roberts Line Prize: Uttam Bodanapally, MBBS*  
*RSNA Resident Research Prize: Hana Haver, MD*

(L. to R.: Drs. Gandhi, Bodanapally, Haver, Walczak, Gladwin & Melhem.  
Photo courtesy of Dr. Hadeel Alwani.)



## GRANTS

### *Industry Grants:*

**Hyun Kevin Kim, MD** was awarded \$1,139,061 from TriSalus Life Sciences for “A Phase 1b/2 Pressure Enabled Regional Immuno-Oncology Study of Hepatic Arterial Infusion of SD-101 with Systemic Checkpoint Blockade for Hepatocellular Carcinoma and Intrahepatic Cholangiocarcinoma” and \$688,017 from Replimune Group Inc for “An Open-Label, Multicenter, Phase 1 Study of RP3 as a Single Agent and in Combination with PD-1 Blockade in Patients with Solid Tumors.”

### *Pepper Awards:*

**Linda Chang, MD, MS** and **Alice Ryan, PhD** received a \$393,957 Pepper Supplement Award for “Adaptive Working Memory and Physical Exercise Training to Improve Brain and

Mitochondrial Function in MCI.”

**Stephanie Jo, MD, PhD** received a \$50,000 Pepper Scholar Award for “Identification of High-risk Prognostic Factors of Osteoarthritis Based on Single Nucleotide Polymorphism and MRI Morphometry Utilizing the Osteoarthritis Initiative Database.”

**Sui Seng Tee, PhD** received a \$50,000 Pepper Scholar Award for “Metabolic Imaging as a Biomarker of Muscle Aging.”

**Paul Yi, MD** received a \$30,000 Pepper Pilot Award for “Using Deep Learning to Measure Quantitative Imaging Biomarkers of Body Composition on MRI of the Knee in Older Adults with or At-Risk for Knee Osteoarthritis.”

*UMMC Innovation  
Challenge Awards:*

**Paul Yi, MD** received a \$125,000 UMMC Innovation Challenge Award for “Making MRIs Faster Using Artificial Intelligence to Improve Patient Experiences and Hospital Efficiency.”

**Vikas Kundra, MD** received a \$125,000 UMMC Innovation Challenge Award for “Low contrast dose TAVR CT.”

*RSNA Grants:*

**Paul Yi, MD** was awarded a \$60,000 RSNA Research Seed Grant for “Assessing the Trustworthiness of Vision Transformer Attention Saliency Maps for Localizing Abnormalities in Medical Imaging.”

**Abigail Corkum** was awarded a \$3000 RSNA Research Medical Student Grant for “CT-Based Computer Aided Detection (CAD) Tools for Traumatic Torso Hemorrhage: Assessing Performance Bias and Hidden Stratification.” (Mentor: **David Dreizin, MD**)

**Samantha Santomartino** was awarded a \$3000

RSNA Research Medical Student Grant for “Improving the Fairness of Deep Learning Models for Pediatric Bone Age Prediction Using Attention-Based Neural Networks.” (Mentor: **Paul Yi, MD**)

*Other grants:*

**Florence Doo, MD**, received a \$140,000 AUR GE Radiology Research Academic Fellowship award to study “The Carbon Footprint of Radiology Artificial Intelligence: Assessing the Impact of Cloud Computing on Climate Change and Health Outcomes.”

**Paul Yi, MD** along with Jeremias Sulam, PhD, Assistant Professor of Biomedical Engineering at Johns Hopkins received a \$75,000 Neiman Health Policy Institute Grant for “Characterizing and Improving Demographic Reporting in FDA-Cleared AI Algorithms and Public Datasets in Radiology: Expanding the ACR DSI’s AI Central and Dataset Directories.” Dr. Yi also was awarded a \$5000 Leaders in Education: Academy of

Presidential Scholars (LEAPS) Instructional Innovation Seed Grant for “Using Eye Gaze Tracking to Measure Chest X-ray Interpretation Skills of Medical Students and to Provide Actionable Suggestion for Improvement.”

**Peter Kamel, MD** received a \$60,000 grant from the Foundation of the American Society of Neuroradiology (ASNR) Grant Program for “Cross-Modality Stroke Segmentation using Deep Convolutional Neural Networks for Detection of Acute Ischemic Infarcts on Non-Contrast Head CT.”

## KUDOS

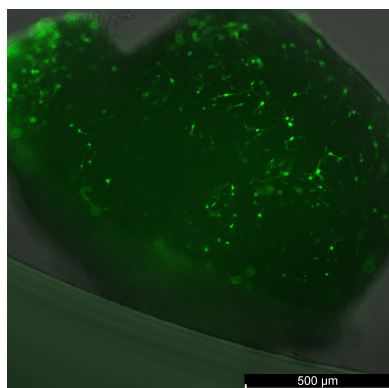
**Clint Sliker, MD** was conferred Fellowship in the American College of Radiology at its annual meeting in Washington, DC, on May 7, 2023. The ACR website states, “One of the highest honors the ACR can bestow on a member in good standing is recognition as a Fellow of the American College of Radiology. ACR Fellows demonstrate a history of service to the College, organized radiology,

teaching, and/or research. Only 15 percent of current ACR members have been awarded this honor.”

**Paul Yi, MD** received the 2023 RSNA Honored Educator Award, recognizing his dedication to furthering the profession of radiology by delivering high-quality educational content for the RSNA.

**Omer Awan, MD** received the UMSOM Golden Apple Award for best clinical faculty. This is voted on by the fourth year medical student graduating class.

Graduate student **Shriya Madan**’s image of a neural organoid transfected with mRNA coding for the green fluorescent protein was one of two images selected to illustrate the Graduate Research Conference booklet:



“A smart mini-brain took an mRNA shot. You can too!”

## IN THE NEWS

**Vasken Dilsizian, MD** appeared in numerous media outlets: “Local Cancer Research and Treatment Initiatives”, FOX-5 (WTTG-TV), Washington, DC, <http://ow.ly/lhhj50MsRyQ>

“Doctor Explains Ways Nuclear Medicine Can Fight Cancer”, NBC Bay Area (KNTV-TV) news, San Francisco, CA <https://www.nbcbayarea.com/news/health/watch-doctor-explains-ways-nuclear-medicine-can-fight-cancer/3140326>

“Preventing Stress: Impacts on Your Heart” CBS-DC (WUSA-TV), Washington, DC <https://app.criticalmention.com/app/#/clip/public/5581bc26-3307-42e0-ab6c-18de28cad418>

“How Stress Affects the Health of Your Heart” FOX-5 DC (WTTG-TV), Washington, DC <https://www.fox5dc.com/video/1207850>

**Omer Awan, MD** discussed the use of AI software tools in healthcare and what it means for patients on a Scripps News Reports. [See it on YouTube.](#)

**Linda Chang, MD, MS** was quoted in U.S. News and World Report article on long covid that was picked up by 33 news outlets worldwide: [Could Long COVID Change Brain Activity? \(usnews.com\)](https://www.usnews.com/story/health/covid-19/could-long-covid-change-brain-activity)

**Paul Yi, MD** was featured on UMB’s podcast on [How UMB is Studying Artificial Intelligence](#). He also was quoted on [WebMD](#) about AI.

## SAVE THE DATE

**September 19, 2023: 2<sup>nd</sup> Annual Alavi-Bradley Symposium**

To register or submit abstracts, visit: [Symposium](#)

**January 5-7, 2024: Society for Image Guided Interventions (SIGN) Conference**

Contact: [neurosignsociety@gmail.com](mailto:neurosignsociety@gmail.com)

To register: [www.neurosignsociety.org](http://www.neurosignsociety.org)

Call for Abstracts: [Abstract Submission | SIGN \(neurosignsociety.org\)](#)