

# RADIOLOGY RESEARCH UPDATE *April 2026, Issue 35*

Department of Diagnostic Radiology and Nuclear Medicine

## GRANTS

**Peiyong Liu, PhD** received a five-year, \$3,134,642 R01 grant from the National Institute on Aging to study “Normalized Cerebrovascular Reactivity MRI in Small-Vessel-Disease (SVD) Related Cognitive Impairment.”

**Bruce A. Wasserman, MD** received a three-year, \$300,000 grant from the AD Strategic Fund and the Alzheimer's Association to study “Intracranial Atherosclerosis, Blood Brain Barrier Status, and Dementia Risk.” This will support an ancillary study to the Multi-Ethnic Study of Atherosclerosis (MESA).

**Chengyan Chu, PhD** received \$231K from the American Heart Association for a 3-year grant entitled “Image-Guided Intra-Arterial Gene Delivery of Therapeutic Nanobodies with Enhanced Blood-Brain Barrier Opening in CSVD.”

**Nigun Ambaye, PhD** received a one-year, \$75,000 EDS Accelerator Award from the American Cancer Society to study “Perforalytics: A

First-in-Class Therapeutic Modality for Eliminating Refractory Tumors.”

**Yajie Liang, MD, PhD** and Brian Herb, PhD, received a \$50K Team Science Pilot Grant award from Genome Sciences and Maryland Genomics entitled “6D-scRNA-seq: Integrating Longitudinal Single-Cell Imaging and Transcriptomics in Glioblastoma.”

**Hangfan Liu, PhD** received a \$50K grant from the MPower Early Scholars Investment Fund.

**Dirk Mayer, Dr rer nat** and Brian Polster, PhD received \$40K for an Innovative Collaboration Pilot Grant from the Institute for Clinical and Translational Research (ICTR) entitled “Assessing Effects of Potential Therapeutic Compounds Targeting Metabolic Dysfunction in a Mouse Model of Traumatic Brain Injury Using Metabolic Imaging of Deuterated Glucose.”

**Florence Doo, MD**, and Ang Li, PhD received a \$40k Artificial Intelligence/Cybersecurity/

Machine Learning Pilot Grant from ICTR to study “HEAL-HCC: Harmonized Evaluation of AI and Large Foundation Models for Hepatocellular Carcinoma.”

## FEATURED PUBLICATIONS

**Zeng X, Li Y, Hua L, Lu R, Franco LL, Kochunov P, Chen S, Detre JA, Wang Z;** Alzheimer's Disease Neuroimaging Initiative. Spatially and Temporally Progressive Hypoperfusion in Alzheimer's Disease Revealed by Normative Modeling. *Alzheimers Dement.* 2026 Mar;22(3):e71203

**Wang J, Tan H, Russell C, Walczak M, Gao D, Qiao G, Fan X, Chu C, Janowski M, Walczak P, Liang Y.** OPTRACE: Optical Imaging-Guided Transplantation and Tracking of Cells in the Mouse Brain. *Adv Sci (Weinh).* 2026 Feb;13(12):e14183.

For more, see:

*Audio:* [https://drive.google.com/file/d/16m5UbbIjajAbXKFfzDmYIxQpP-](https://drive.google.com/file/d/16m5UbbIjajAbXKFfzDmYIxQpP-8lG_XR/view?usp=drive_link)

[8lG\\_XR/view?usp=drive\\_link](https://drive.google.com/file/d/16m5UbbIjajAbXKFfzDmYIxQpP-8lG_XR/view?usp=drive_link)

*Video:* <https://youtu.be/-4xu3TVvXWo>

**Doo FX**, Lee R, Rockall A, Rula EY, Moy L. Medical Imaging Contrast Media Use. *JAMA Netw Open*. 2025 Dec 1;8(12):e2547304.

For more: [Read the press release](#)

**Chang L, Liang H, Ernst T, Cunningham E, Wang J, Baptiste J**, Lohaugen GCC. *LMX1A* and *APOE  $\epsilon$  Genotype Associations with Working Memory Training Effects in HIV and Non-HIV: A Randomized Controlled Trial. *Neurol Neuroimmunol Neuroinflamm*. 2026 Jan;13(1):e200519.*

**Dreizin D**, Champ K, **Dattwyler MP**, Garzan AD, Edmond T. CT of Acute Shoulder Girdle Fractures in Adults: Biomechanics, Classification, and Management. *Radiographics*. 2026 Jan;46(1):e250025.

**Chon B, Yadav MP**, Ghann W, Martin SS, Uddin J, Annapragada A, **Kundra V**. Fluorescence Imaging of DMDG-ICG Across NIR-I and NIR-II Windows Using a Single-Camera System. *Int J Mol Sci*. 2026 Feb 14;27(4):1857.

## GRANT WRITING ASSISTANCE

The Center for Advanced Research Training & Innovation (CARTI) is offering a new Grantsmanship Diagnostic and Tune-Up that gives researchers the opportunity to have their grants reviewed by Christy Chang, PhD, MS, a National Institutes of Health (NIH)-trained grant writing coach and a NIH-funded investigator.

Those interested will submit completed but unfunded proposals (or nearly complete applications) to any funding mechanism or agency. After her review, Dr. Chang will meet in person with the applicant.

For more information, see: [Grantsmanship Diagnostic & Tune-up](#)

## KUDOS

**Omer Awan, MD, MPH** was accepted into the 2026 class of Fellows of the Association of Academic Radiology in recognition of his contributions in administration, mentorship, professionalism, research, teaching, leadership, scholarship, and education.

## RESEARCH ADMINISTRATION CONTACTS

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To submit to *Radiology Research Update*, email Brigitte Pocta.