RSNA Research & Education Foundation

New Grants Approved for Funding

2025

RESEARCH GRANTS

RESEARCH SCHOLAR GRANT

The Foundation's premier career development grant transitions junior faculty to independent investigators. Funding protects research time to conduct complex projects under the guidance of a mentor and scientific advisor in preparation for NIH funding. Two-year grant of $200,000.

Dooman Arefan, PhD
University of Pittsburgh
Investigate Novel Imaging Biomarkers From Breast DCE-MRI for Predicting Long-Term Risk of Breast Cancer Recurrence

David Ballard, MD*
Mallinckrodt Institute of Radiology
Feasibility of ^{18} F-Fdg PET-MR To Assess Perianal Fistula Inflammation in Symptomatic Perianal Crohn's Disease

Kathleen M. Capaccione, MD, PhD
Columbia University Irving Medical Center
Mechanisms of Response to FAP Radiotherapy With Immunotherapy in NSCLC

Florence Chiang, MD, PhD
UT Southwestern Medical Center
Toward Characterization of Network-Based Neurodegeneration and Neuroinflammation in Multiple Sclerosis Using PET/MRI

Maggie Chung, MD*
University of California, San Francisco
Deep-learning Based Simulated Contrast Breast MRI for Supplemental Breast Cancer Screening

Pippa Cosper, MD, PhD
University of Wisconsin - Madison
Chromosomal Instability as a Biomarker of Radiation Response in HPV+ Head and Neck Cancers

Andrew C. Gordon, MD, PhD
Northwestern University
Defining an Ablative Dose for Y90 TARE With Advanced Dosimetry and Functional MRI

Avanti Gulhane, MD
University of Washington
Enhancing Cardiac MR Imaging of Sarcoidosis via Radiomics Texture Analysis To Reduce Patient Burden and Improve Efficiency

Sumit Gupta, MBBS, PhD*
Brigham & Women's Hospital
Utilizing Spectral and Ultra High-Resolution Data from Non-Contrast Photon Counting Computed Tomography for Enhanced Cardiopulmonary Tissue Characterization in Transthyretin Amyloid Cardiomyopathy

Christopher Hensley, MD, PhD
The University of Alabama at Birmingham
Optimizing Glutamine PET Tracer Development To Guide Glutamine Inhibitor Use in Breast Cancer

Doris Leithner, MD
NYU Grossman School of Medicine
Multinuclear MRI for Treatment Monitoring in Patients With HER2 Positive Breast Cancer

Ningcheng Peter Li, MD
University of Massachusetts
Gene Therapy for Chronic Venous Disease: Optimizing Delivery and Therapeutic Impact in a Large Animal Model

Thomas Marini, MD
University of Rochester Medical Center
A New Frontier in Neuroimaging: Testing Ultrasound Tomography for Imaging of the Brain

Sarah Mohajeri, MD*
University of Rochester Medical Center
Imaging Hypoxic Brain Injury in Cerebral Malaria: Role in the Acute Phase of Disease, Death and Long Term Sequela in Survivors

Arash Nazeri, MD
Mallinckrodt Institute of Radiology
Indirect and Direct Deuterium Displacement Exchange Imaging for Probing Brain Fluid Dynamics in Health and Disease

Christopher Newman, MD, PhD*
Indiana University
Supplementation of Skeletal Survey with Whole Body MRI for Fracture Detection in Children with Suspected Physical Abuse

Austin R. Pantel, MD*
University of Pennsylvania
^{18}F FluorThanatrace PET/CT to Characterize Malignancy and Guide Therapy

Katherine Reinshagen, MD*
Massachusetts Eye & Ear
Characterizing Structural Connectivity in the Central Auditory Pathway from Hidden Hearing Loss

Jaehoon Shin, MD, PhD*
University of California, San Francisco
A Novel Strategy for Locoregional engineered T cell Therapy

Zaid Siddiqui, MD*
Baylor College of Medicine
Deep Embeddings to Identify Early Phenotype Changes in Brain Metastases

Susan Sotardi, MD*
Children's Hospital of Philadelphia
Center for Diagnostic Imaging in Child Maltreatment: Improving fracture detection through machine learning

**indicates second year-scholar grant recipient*

RESEARCH SEED GRANT

Every great discovery starts with a spark. This grant provides seed money to test hypotheses and conduct pilot studies in preparation for major grant applications to corporations, foundations, and government agencies. One-year grant of up to $60,000.

Michael Bergen, MD
Cleveland Clinic
Tumor Mutational Burden From Circulating Tumor DNA Integrated With Radiomics of Hepatocellular Carcinoma Predicts Response to Y-90 Radioembolization: An Emerging Biomarker Predictive of Imaging Response

Yu-Ming Chang, MD, PhD
Beth Israel Deaconess Medical Center
Non-Invasive Quantification of Glymphatic Function in Patients With Stroke

Johannes Hugo Decker, MD, PhD
Stanford University
Comparing FLEXA With Standard MR Angiography of the Neck

Amy Deipolyi, MD, PhD, FSIR
West Virginia University, Charleston
Prospective Randomized Study of Ketamine/Midazolam Deep Sedation vs. Fentanyl/Midazolam Moderate Sedation for Image-Guided Percutaneous Lung Biopsy

Hyun Soo Ko, MD
University of Melbourne, Peter MacCallum Cancer Centre
Fully Automated CT Body Composition and Blood Gene Expressed Transcriptional Response Factors As Predictive Biomarkers for Cancer Cachexia in Patients With Colorectal Cancer and Peritoneal Metastases

Colin J. McCarthy, MD
Beth Israel Deaconess Medical Center
Examining the Role for Virtual and Augmented Reality Anxiolysis During Image-Guided Procedures

Milica Medved, PhD
University of Chicago
Spatially Aware Physics-Informed Deep Learning AI for Non-Contrast Enhanced Breast MRI

RESEARCH FELLOW/RESIDENT GRANT

This grant provides investigators a chance to explore powerful ideas. Working alongside an experienced advisor, trainees gain insight in research methods and techniques; it is a catalyst to pursue research at a critical point in a radiologist's career. Maximum two-year grant of $50,000/$75,000.

Shariq Ali, MD, PhD
UT Southwestern Medical Center
Ultrasound-Guided Antigen Delivery for Cancer Immunotherapy
RSNA Research Fellow Grant

Wali Badar, MD
University of Illinois at Chicago
Noninvasive Molecular Stratification of Hepatocellular Carcinoma (HCC) with Imaging and Liquid Biopsy
RSNA Research Fellow Grant

Lev Barinov, MD, PhD
University of Pennsylvania
Radiomically Derived Features for Assessing Preoperative Risk in Indeterminate Thyroid Nodules
RSNA Research Resident Grant

Kevin Chen, MD
Washington University in St. Louis
Radiotherapy-Induced Progression of Coronary Artery Calcifications on Non-Contrast CT Scans
RSNA Research Resident Grant

Jennifer Chiang, MD
Stanford University
Genomic and Imaging Biomarkers in Mycosis Fungoides: Evaluating Ethnic Disparities and Prognostic Significance Through Next Generation Sequencing and PET/CT
RSNA Research Resident Grant

Won Kyu (Paul) Choi, MD
Johns Hopkins University
Multiplexed Spatial Quantification of Potential Theranostic Targets in Prostate Cancer with Mass Spectrometry Imaging
RSNA Research Fellow Grant

Paul D'Cunha, MD
Emory University
Automated Segmentation and Radiomics Integration for Non-Invasive Genetic and Prognostic Prediction in Pediatric High-Grade Gliomas
RSNA Research Resident Grant

Siddhant Dogra, MD
New York University
Deep Learning-Based Synthesis of Standard Brain FDG-PET Reconstructions From Early Acquisition Data: A Pilot Study for Improved Clinical Workflow in Dementia Imaging
RSNA Research Resident Grant

Robert Warren Floyd, MD, PhD
University of Texas MD Anderson Cancer Center
Personalized Modeling of Tumor Treatment Response via MRI Based Volumetric and Imaging Biomarkers To Enable Dose Adapted Radiotherapy in Oropharyngeal Cancer
RSNA Research Fellow Grant

Audrey Fohlen, MD, PhD
Centre Hospitalier de l'université de Montréal
Dynamic Oxygen-Enhanced (OE) MRI to Predict Treatment Response After Transarterial Chemoembolization in Hepatocellular Carcinoma Patients
RSNA Research Fellow Grant

Alexey Gurevich, MD
University of Pennsylvania
Characterization and Functional Assessment of the Myeloid Immune Landscape Within Hepatocellular Carcinoma
RSNA Research Resident Grant

Eun Kyoung Hong, MD, PhD
Brigham & Women's Hospital
Radiologist-AI Interaction: Assessing the Impact of Vision and Vision-Language AI Models on Confidence and Automation Bias
RSNA Research Fellow Grant

Yin-Chen Hsu, MD
Cedars-Sinai Medical Center
CEST MR Imaging for Evaluation of Parenchymal pH and Tissue Properties in Alcoholic Pancreatitis
RSNA Research Fellow Grant

Karan Jani, MD
Mallinckrodt Institute of Radiology
Developing a CT-Based Clear-Cell Likelihood Score: An Explainable AI Approach With Transport-Based Morphometry
RSNA Research Resident Grant

Behnaz Khazai, MD
Massachusetts General Hospital
Multi-Parametric Quantitative MRI of Blood-Brain-Barrier Permeability to Water in Alzheimer's Disease Continuum; WEPCAST and DP-ASL
RSNA Research Fellow Grant

Ariel S. Kniss, MD, PhD
Massachusetts General Hospital
MRI-Based Deep Learning to Predict Upgrade Risk of Ductal Carcinoma in Situ
RSNA Research Fellow Grant

Jorge Arturo Larco, MD
UT Southwestern Medical Center
Exploring the Hyperdirect Pathway in Parkinson's Disease: Insights From Tractography and Intraoperative Electrophysiology
RSNA Research Resident Grant

John Mayfield, MD, PhD
Massachusetts General Hospital
Foundation and Temporospatial Deep Learning Methods for Cognitive Impairment Prediction in Mild Traumatic Brain Injury
RSNA Research Fellow Grant

David Nam, MD
University of California, San Diego
Refining and Testing Automated Software To Enhance Treatment Response Assessment by MRI of Primary Liver Cancer After Transarterial Radioembolization
RSNA Research Resident Grant

Shane Neibart, MD
Massachusetts General Hospital
Eye-Tracking as a Rapid and Accurate Adjunct for Assessing Neurocognitive Function in Patients Receiving Cranial Radiation Therapy
RSNA Research Resident Grant

Ifeanyichukwu Ogobuiro, MD
University of Miami
Unraveling Bri3-Mediated Radiation Resistance in Glioblastoma: A Path Towards Therapeutic Innovation
RSNA Research Resident Grant

Farzaneh Rahmani, MD
Mallinckrodt Institute of Radiology
Integration of Head CT Quantified Adiposity and Sarcopenia with Machine Learning for Opportunistic Screening of Alzheimer Disease
RSNA Research Resident Grant

Zubir Rentiya, MD
University of Virginia
Correlation of Radiomic Features With HPV ctDNA in Oropharyngeal Cancers
RSNA Research Resident Grant

Michael Francis Romano, MD, PhD
University of California, San Francisco
Predicting Anti-Amyloid Monoclonal Antibody Response in Alzheimer's Disease Using Diffusion MRI
RSNA Research Resident Grant

Jeffrey Shogan, DO
UPMC Hillman Cancer Center
Tongue-Out Radiation Therapy (TORT) for the Mitigation of Radiotherapy-Related Toxicities in Patients With Head and Neck Cancer
RSNA Research Resident Grant

Vladislav Olegovich Sviderskiy, MD, PhD
Washington University in St. Louis
Overcoming Resistance to PARP Inhibitors in BRCA-Mutated Tumors With Auger-Emitting PARP1 Radioligand77 / Br WC-DZ-Br
RSNA Research Resident Grant

Mateus de Oliveira Taveira, MD, PhD
Memorial Sloan Kettering Cancer Center
AI-Driven PET/CT Imaging Biomarkers for Evaluation of Skeletal Muscle and Fat Glucose Metabolism in Patients With Metastatic Breast Cancer on PI3K Inhibitors
RSNA Research Resident Grant

RESEARCH MEDICAL STUDENT GRANT

Exposure to radiology research in medical schools ignites a passion for the specialty. With support of the community and a network of mentors, a summer project can turn into a career-long pursuit of research and discovery. Grant of $3,000, matched by the sponsoring department.

Hector Acosta Rodriguez
Yale University
The Impact of Chronic Environmental Stressors on Childhood Brain and Cognition

Preetham Bachina
Johns Hopkins University *research performed at*
St. Jude Children's Hospital
Generating Fairness: Synthetic Chest X-Ray Generation with Diffusion Models to Improve AI Fairness

Jaret Barr
Emory University
Coronary Artery Calcium Burden in Cancer Patients

Lulu Bi
The Warren Alpert Medical School of Brown University
Per-Voxel Quantitative ADC Mapping of Core Infarction Following Mechanical Thrombectomy as a Measure of Infarct Depth

Jay Chandra
Massachusetts General Hospital
Opportunistic Screening for Cardiovascular Risk Using Chest X-Rays and Deep Learning: Associations with Coronary Artery Disease in the Project Baseline Health Study and Mass General Brigham Biobank

Josephine Du
University of California, Davis
Impact of Socio-Demographic Factors on Cardiac MRI: Diagnosis and Management at a Single Institution

Michael Fei
Creighton University Phoenix *research performed at*
Massachusetts General Hospital
AI with a Gut Feeling: Developing a Deep Learning Neural Networks in Detecting Gastrointestinal Extravasation Injuries

Daniel Fu
Yale University
A Longitudinal Deep-Learning Model for Predicting Radiation Pneumonitis in Patients Receiving Radiation Therapy for Early-Stage Non-Small Cell Lung Cancer

Sofiya Ghazaryan
University of California, Davis
Investigation of Atrial Function in Patients with Severe Aortic Stenosis Utilizing Tissue Tracking in Cardiac CT with Machine Learning Analysis

Batis Golestany
University of California,Riverside *research performed at*
University of California, Los Angeles
Thyroid Nodule Rupture after Radiofrequency Ablation: Demographic Factors, Nodule Characteristics, and Technical Considerations Underlying this Poorly Understood Complication

Alena Hornak
Boston Children's Hospital
Evaluating Motion Correction Strategies for fMRI Resting State Networks in Pediatric Epilepsy

Brandon Thomas Hubbard
Yale University
Use of 18F2-fluoro-2-D-Doexyglucose and PET/CT For Detection of Subclinical Insulin Resistance

Kyler Hwa
The Warren Alpert Medical School of Brown University
Integration of Deep-Learning AI Models in the Early Diagnosis of Alzheimer's Disease

Tauqeer Iftikhar
University of Saskatchewan
Latent Diffusion Models To Minimize Iodine-Based Contrast Media in CT Angiography

Rachel Ivy
University of Tennessee Health Science Center
research performed at St. Jude Children's Hospital
Ensuring Fairness at Scale: Uncovering & Mitigating Bias in Foundational Models for Radiology AI

Kameel Khabaz
University of California, Los Angeles
Multimodal Deep Learning Approach Integrating MRI Imaging and Clinical Data for Predicting Local Recurrence in Upper Extremity Soft Tissue Sarcoma

Vladimir Kirichenko
Allegheny-Singer Research Institute
Image Analysis in Correlation With Explant Pathology for Hepatocellular Carcinoma Treated With SBRT As a Bridge To Liver Transplantation On a Hybrid MRI-LINAC. Retrospective Study

Igor Mario Kitanovski
Dartmouth College
Sarcopenia: Diagnosis and Surveillance Amid Rising GLP-1 Agonist Use

Emily Knott
Cleveland Clinic
AI-Assisted Prostate Cancer Detection For Multiparametric MRI: A Prospective Study

Alexa Lavergne
Duke University
Augmenting Patient Selection for Lung Transplantation with CT-Based Body Composition to Address Potential Health Disparities from Current Use of Strict BMI Cutoffs

Stephanie Ntim
University of North Carolina at Chapel HIll
Assessment Of Scalp Hematomas In Blunt Trauma Head CT As Predictors Of Intracranial Hemorrhage And Traumatic Brain Injury

Alex Prusky
Thomas Jefferson University
Elucidating Freezing of Gait in Parkinson's Disease Using Simultaneous Brain-Spinal Cord Resting-State fMRI

Alfonso Roque
The Warren Alpert Medical School of Brown University
AI Driven Analysis of Nigrostriatal Imaging Traits in Drug Induced Parkinsonism

Elizabeth Song
The Warren Alpert Medical School of Brown University
Communication Preferences For Screening Mammography AI Results In The Patient Portal: Informing Best Practices For Patient Experience And Engagement

Jason Timmerman
Temple University
Five-Year Trends in Neck Abscesses Among Intravenous Drug Abuse (IVDA) Patients: A Retrospective Chart Review

Kareem Wahid, PhD
University of Texas MD Anderson Cancer Center
research performed at University of Texas Health Science Center at Houston
Evaluating The Impact Of Facial Deidentification On Head and Neck Cancer Radiotherapy Imaging Workflows: Implications for Segmentation and Dosimetric Planning

Michelle Wang
University of California, Davis
The Influence of Music Intervention on Heart Rate Reduction During Coronary CT Angiograms
RSNA Research Medical Student Grant

Christopher Zaki, MD
University of Arizona
Building and Evaluating VR/MR Systems for Radiology Education and Training: A Feasibility Study

Suraj Zaveri
Duke University
Deep Learning Segmentation-Based Bone Removal from CTA to Improve Vertebral Artery Dissection Detection

EDUCATION GRANTS

DEREK HARWOOD-NASH INTERNATIONAL EDUCATION SCHOLAR GRANT

Innovation in education can transform the way radiologists learn, understand, and care for patients. This grant funds investigators looking to affect radiology education around the world. One-year grant of up to $75,000; two year grants will be considered in exceptional cases.

Martin Mutonga, MD
Yale University
Introducing Cerebral Mechanical Thrombectomy for Acute Stroke Treatment in Tanzania Using a Proven Global Health Interventional Radiology Training Model

RSNA/AAR/APDR/SCARD RADIOLOGY EDUCATION RESEARCH DEVELOPMENT GRANT

This grant helps to build a critical mass of radiology education researchers and promotes the careers of those with a passion to advance the science of radiology education. One-year grant of up to $25,000.

Brittany Dashevsky, MD, DPhil
Stanford University
Cancer Enriched Screening Mammography and DBT Training Module Within a Simulated Pacs Environment

EDUCATION PROJECT AWARD

This project award is intended to recognize and highlight the impact of educators by providing supplemental funding of up to $20,000 for new or ongoing education projects.

May Na-Yuan Tsao, MD
University of Toronto
Development of a Novel Multidisciplinary Physics Study Guide for Radiation Oncology Residents

EMERGING ISSUES GRANTS

Emerging Issues Topic: Addressing the Radiologist Workforce Shortage: Maintaining Quality, Safety and Service Standards while ensuring a Sustainable Radiology Workforce

Ali Nowroozi, MD, PhD
Zuckerberg San Francisco General Hospital
Addressing Lung Cancer Screening Workforce Challenges through the Implementation of Risk based Triaging: A Tertiary Safety Net Hospital Experience

Emerging Issues Topic: Environmental Impact and Sustainability of Radiology

Lina Karout, MD
Massachusetts General Hospital
Introducing Same Day - Same Hour Imaging and Interpretation as the Climate Happy Hour

Katie Lichter, MD
Dartmouth College
Sustainable Transformation in Breast Imaging and Radiology (SUSTAIN)

Michael Markl, PhD
Northwestern University
Development of A Sequence-Specific MRI Energy Consumption Prediction Mode

Azadeh Tabari, MD
Massachusetts General Hospital
Creating a Greener Outpatient MRI Facility: Enhancing Sustainability and Energy Efficiency through Fast Imaging Techniques and Workflow Optimization

Michael E. Zalis, MD, FACR
Massachusetts General Hospital
Mitigating Breast Imaging Scope 3 Emissions Through AI for Intelligent Supply Chain Management

Emerging Issues Topic: Advancing Artificial Intelligence (AI) Driven innovations through Multimodal Data Integration as applied to Radiology screening exams or to Incidental Findings on exams performed for other reasons

Manisha Bahl, MD
Massachusetts General Hospital
Enhancing Breast Cancer Screening with Ontology-Driven Multimodal AI

Robert D. Boutin, MD
Stanford University
From Images to Insights: Leveraging AI-Driven CT Analysis to Improve Diagnosis and Management of Life-Altering Diseases

Deborah J. Rubens, MD
University of Rochester Medical Center
New System for Rapid and Automatic Screening of Metabolic Associated Fatty Liver Disease Without a Radiologist or a Sonographer
GE HealthCare/RSNA Emerging Issuses Grant