RSNA Research & Education Foundation
New Grants Approved for Funding

2024

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.

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

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

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

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, MSTR│
University of Pennsylvania
Dual-Tracer Multiparametric PET to Better Characterize Cancer

Benjamin Pulli, MD│
Stanford University
Intra-arterial Microenvironment Sampling in Acute Ischemic Stroke Patients Treated by Endovascular Thrombectomy

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, MScEng│
Children's Hospital of Philadelphia
Center for Diagnostic Imaging in Child Maltreatment: Improving fracture detection through machine learning

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.

Asim K. Bag, MBBS, MD, EDiNR│
St. Jude Children's Research Hospital
Linking Altered Sleep Patterns with Neuroinflammation

Guilherme Cunha, MD│
University of Washington
Liver MR Elastography and Gadoxetate-Enhanced MR Imaging for the Diagnosis of Veno-Occlusive Disease in Patients Undergoing Oncologic Treatment: A Pilot Study

Ramy El Jalbout, MD, MSc DABR│
CHU Sainte-Justine
Development of Quantitative Measure of Red Blood Cell Aggregation on Ultrasound to Detect Complications of Sickle Cell Disease in Children

David Fetzer, MD│
University of Texas Southwestern Medical Center
Validation of Ultrasound Liver Fat Quantification Techniques by Novel Lipid Microparticle Phantoms

Louis Gagnon, MD, PhD│
Laval University
Deep Learning Segmentation of Cellular Tumor From Multishell Diffusion MRI

Chenchan Huang, MD │
New York University
Improving Risk Prediction for Malignancy in Pancreatic Cystic Lesions

Abhilash S. Kizhakke Puliyakote, MS, PhD│
University of Iowa
Standardization of UTE MRI for Lung Texture Analysis

RESEARCH RESIDENT/FELLOW 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.

Caroline Adams, MD, PhD│
University of Pennsylvania
Impact of Biological Sex and Age on Safety and Efficacy of Blood-Brain Barrier Opening by Focused Ultrasound

Maureen Aliru, MD, PhD│
University of Texas Southwestern Medical Center
Ligand-Independent Targeting of Tumor Cells for Cancer Treatment

Leou Ismael Banla, MD, PhD│
Massachusetts General Hospital
Promoting Tumor-Specific Immune Activation Using Radiation-Triggered Payload Release

M. Bechel, MD, PhD│
Emory University
Information Technology Interventions To Improve Follow-up for Incidental Pulmonary Nodules on CT

Kaustav Bera, MD│
University Hospitals Cleveland Medical Center
MR Fingerprinting for the Evaluation of Chronic Allograft Nephropathy: Reproducibility of the Technique and Correlation With Renal Function and Histopathology

Luke Bonham, MD│
University of California, San Francisco
Evaluation of Glutamatergic Physiology in Frontotemporal Dementia Using Astrocytic Glutamate Transporter (EAAT2) PET and Glutamate Proton Magnetic Resonance Spectroscopy

John Cooper, MD, PhD│
Washington University in St. Louis
Trem-1 Pet for the Characterization of Myeloid Inflammation After TBI in Mice

Anna Dornisch, MD, MAS│
University of California, San Diego
Comparison of Semi-Quantitative and Quantitative MRI of Localized, Clinically Significant Prostate Cancer to Histopathology in Development of Focal Boost Radiation Treatment Planning Strategies

Stephanie Odette Dudzinski, MD, PhD│
MD Anderson Cancer Center
Using Perfluorocarbon Nanoparticles 19F MRI to Characterize Space Radiation Induced Acute Pro-Inflammatory Response and Anti-Inflammatory Effects of Radiation Mitigating Thrombin Peptide to Extend Healthy Life in Space

Iris Eke, MD, PhD│
Stanford University
Imaging and Transcriptomic Biomarkers for Prediction of Response to Low-Dose Radiotherapy in Follicular Lymphoma.

Ruoqi Gao, MD, PhD│
University of Texas Southwestern Medical Center
Targeted Delivery of a Nanoparticle-Loaded Sting Antagonist Into Microglia as a Novel Therapeutic for Alzheimer's Disease

Jacqueline Godbe, MD, PhD│
Washington University in St. Louis
Development of a Nanofiber Pet Radiotracer Which Binds CD28 for Imaging Multiple Myeloma

Adam Jay Grippin, MD, PhD│
MD Anderson Cancer Center
Restoration of LKB1 Expression To Sensitize Tumors to Chemoradiation

Saumya Gurbani, MD, PhD│
Emory University
Combined MR Spectroscopy and Chemical Exchange Saturation Transfer Imaging at 7T

Sanna Herwald, MD, PhD│
Stanford University
Prediction of Clinical Abscess Drainage Outcomes and the Efficacy of Potential Viscosity-Modifying Biochemical Treatments by Measuring Quantitative Abscess Fluid Viscosity

Meng-Lun Hsieh, DO, PhD│
University of Texas Southwestern Medical Center
Impact of Radiation on Macrophages and Mesenchymal Progenitor Cells in Preventing Heterotopic Ossification Formation

Lohith Kini, MD, PhD│
University of California, San Francisco
Guiding Lesional and Non-Lesional Epilepsy Surgery Through a Multi-Modal, Network Approach

Talya Laufer, MD│
Thomas Jefferson University
Investigating the Role of Lipid Metabolism and Stromal ApoE in Mediating Radioresistance of Pancreatic Cancer

Vitor Fernandes Martins, MD, PhD│
University of California, San Diego
Novel Quantitative Magnetic Resonance-based Evaluation of Fat Depot Reduction in Adults with Obesity Undergoing Bariatric Surgery

Johanna Ospel, MD, PhD│
Foothills Medical Centre, University of Calgary
Validating Advanced Imaging Assessment for Stroke Outcome Prediction (AI-STROKE)

Ian Pan, MD│
Brigham and Women's Hospital
Artificial Intelligence for Longitudinal Segmentation and Tumor Risk Prediction of IDH-mutant Gliomas

Adrian A. Sánchez, MD, PhD│
Washington University in St. Louis
Impact of Digital Breast Tomosynthesis Technical Factors on Artificial Intelligence Algorithm Performance in Breast Cancer Screening

Tician Schnitzler, MD│
University of California, San Francisco
Qualitative and Quantitative Imaging Biomarkers of Interstitial Lung Abnormality (ILA) That Predict Progression to Ipf (Interstitial Pulmonary Fibrosis)

Delaram Shakoor, MD│
Hospital for Special Surgery
MR Neurography & Quantitative Muscle MRI for Evaluation of Complicated Peripheral Facial Nerve Palsy

Davis Vigneault, MD│
Stanford University
Developing a Fully Automated Pipeline for High-Fidelity Modelling, Measurement, and Longitudinal Comparison of Abdominal Aortic Aneurysms

Amy J. Wisdom, MD, PhD│
Massachusetts General Hospital
Immunologic and Radiologic Characterization of a Novel Genetically Engineered Mouse Model of Glioblastoma

Sophie Y. Wong, MD│
University of California, San Diego
The Assessment and Quantification of Regional Myocardial Function on Coronary CTA Using a Deep Learning Approach

James Yu, MD, MSCS│
University of Texas Southwestern Medical Center
Development of Learning-Based Simultaneous Localization and Mapping (SLAM) for Real-Time Ar-Guided Biopsies.

Wenhui Zhou, MD, PhD│
Stanford University
Deep Learning-Based Preoperative Tumor Margin Assessment for Personalized Surgery in Lobular Breast Cancer

Shuhua Zheng, DO, PhD │
Northwestrn University
Targeted Degradation of Survivin with PRTOACs For Glioblastoma Radiosensitization

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.

Mehrshad Bakhshi│
McGill University
Gaze Deviation in Acute Ischemic Stroke

Adrianna Carter, BS, MS│
University of California, Davis
Predicting Lung Shunt Fraction in Yttrium-90 Radioembolization of Hepatic Carcinoma Using Contrast-Enhanced CT

Devina Chatterjee│
University of Maryland
Noninvasive Detection of Vulnerable Atherosclerotic Plaque using Perivascular Fat Attenuation on Coronary CT Angiography

Kasha Chen│
California University of Science and Medicine
Assessing Performance of Novel Unsupervised Generalized Deep Learning Model for Perinephric Fat Volume Quantification on Contrast Enhanced Abdominal Computed Tomography Imaging

Miriam Chisholm│
Duke University
Beyond Race: Examining the Association Between CT-based Body Composition and Socioeconomic Factors to Better Understand Observed Differences in Body Composition by Race

Nathan Chong│
Dalhousie University
A Randomized Controlled Trial Investigating Personal Keepsakes as a Tool to Reduce Intraprocedural Patient Anxiety During Thyroid Biopsies in Interventional Radiology

Julia Ding│
Emory University
Developing 3D Intravascular Ultrasound Guidance for Recanalization of Central Venous Occlusions

Cindy Folefack│
University of California, San Francisco
Quantification of Pleural Loculations with MRI as a Model for Future Study of Pleural Fibrinolytics Efficacy

Lawrence Huang│
Rhode Island Hospital
Associations of Pulmonary Artery Elasticity with Vascular Changes in Pulmonary Hypertension

Ibukunoluwa Ibrahim│
University of California, San Francisco
Outcomes of Combined TACE and Thermal Ablation vs Radioembolization for Early-Stage HCC: A Propensity Matched Retrospective Analysis

Amy MiHyun Jang│
University of Pennsylvania
Identifying Biomarkers for Prognosis and Treatment Selection in Neuroendocrine Tumors

Peter Kaplinsky│
Memorial Sloan Kettering Cancer Center
Using Transfer Learning for Early Detection of Transforming Lung Adenocarcinoma

Justin Leu│
University of Washington
Use of Natural Language Processing (NLP) to Predict Risk of Skeletal-Related Events (SRE) Among Patients With Bone Metastases and Improve Access To Evidence-Based SRE Prevention

Connor Mayes│
Mayo Clinic
Improving Radiology Reporting Accuracy: Use of GPT-4 to Reduce Errors in Reports

Michael Mohnasky│
University of North Carolina at Chapel Hill
Development of an Artificial Intelligence Algorithm to Analyze Ideal Ablation Zone Coverage and Predict Clinical Outcome in Image-guided Cryoablation for Renal Cell Carcinoma

Vishnu Murthy, BA│
University of California, Los Angeles
Quantitative 3 Tesla Multiparametric MRI Parameters, Radiomics Features, and Deep Learning to Predict Upgrading from Biopsy-Confirmed Histopathology to Whole-Mount Histopathology in Patients with Clinically Significant Prostate Cancer

Travis Tu Nguyen│
University of California, Los Angeles
Correlating Pre-Ablation Metabolic Signatures with Post-Ablation Recurrence in Hepatocellular Carcinoma

Ayden Olsen│
University of Chicago
Microscopy MRI of the Inner Ear

Meghana Pagadala│
University of California, San Diego
Analyzing Radiation Impact on Brain Metastases Immune Microenvironments through Spatial Transcriptomics

Meet Patel│
University of Saskatchewan
Harnessing AI for Enhanced Disease Screening in CT Imaging

Swathi Pavuluri│
Rutgers University
Automated Radiomic Analysis of FDG PET/MR Imaging Data for Predicting Clinical Outcomes in Cardiac Sarcoidosis

Justin Rhee│
Brown University
Streamlining Kidney Ablation Procedure Planning via Automated Segmentation of Kidney Tumors

Sana Shah│
University of California, Irvine
The Value of Emergency Pelvic Imaging for Acute Pelvic Pain for Reproductive Age Patients, a Retrospective Review with Cost-Benefit Analysis

Jonathan Shih│
University of California, San Francisco
MRI Brain after Pediatric Cardiac Arrest: Descriptive and Quantitative Patterns of Injury in Association with Neurologic Outcome

Sierra Silverwood│
University of Washington
A Longitudinal Assessment of Remote IMRT/VMAT Training Curriculum in Low- and Middle-Income Countries

Hayden Smith│
Emory University
Using Reader Eye Tracking To Measure the Impact of an Adaptive Learning-Based Educational Module on Interpreting Imaging Studies Depicting Cerebellopontine Angle Masses

Vineethsubbu Somasundaram|
Brown University
Predictive Modeling for Recurrent Pulmonary Embolism: A Multimodal Approach for Personalized Medicine

Siva Sreedhar|
Northwestern University
MRI Evaluation of Atrioventricular Mechanical

Armin Tavakkoli|
Dartmouth-Hitchcock Medical Center
Evaluating the Therapeutic Potential of FLASH Irradiation in Brain Tumor Treatment

EDUCATION GRANTS

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.

Dhara Kinariwala, MD|
University of Missouri
ScanBright: A Mobile Learning Resource for Radiology Residents using Gameification and Adaptive Learning

Katrina McGinty, MD|
University of North Carolina at Chapel Hill
Virtual MRI Education in Low Resource Settings

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.

Farouk Dako, MD, MPH|
University of Pennsylvania
Empowering Healthcare: Advancing Medical Imaging Education in LMICs through AI and Imaging Training Initiatives

RSNA/AUR/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.

Wasif Bala, MD|
Emory University
Using Eye Tracking To Measure the Impact of an Adaptive Learning-Based Educational Intervention on Interpreting Volumetric Imaging Studiesusing Eye Tracking To Measure the Impact of an Adaptive Learning-Based Educational Intervention on Interpreting Volumetric Imaging Studies

Jeffrey Weinstein, MD, FSIR|
Beth Israel Deaconess Medical Center
Integration of Hand Motion Analysis for Monitoring Technical Skills Acquisition Within High-Fidelity Interventional Radiology Endovascular Simulation Training