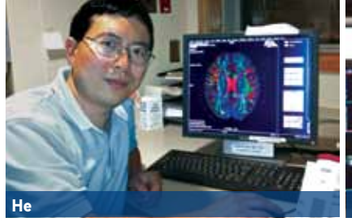
RSNA R&E Foundation Announces 2013 Grant Recipients

The RSNA Research & Education Foundation funded 83 grant projects totaling over $3 million, setting new records for the second consecutive year and the highest in the Foundation's history. The Foundation's Board of Trustees thanks the Vanguard companies, individuals and private practices whose generous contributions have made the following grants possible.


Ippolito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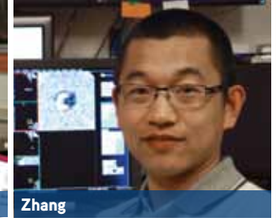
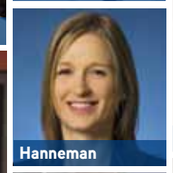

Zhang


Bradbury


Wang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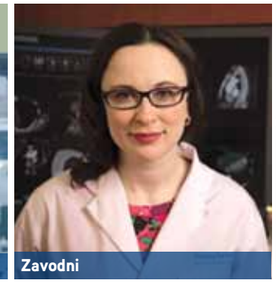
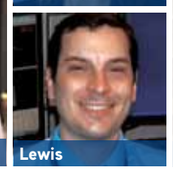
Kim


Hope


Zavodni


Lewis


Fetzer

RESEARCH SCHOLAR GRANT

Joseph Erinjeri, M.D., Ph.D.
Memorial Sloan-Kettering Cancer Center
Modulating Inflammation to Improve Treatment Response Following Thermal Ablation of Tumor
GE Healthcare

James Ernest Hansen, M.D.
Yale School of Medicine
Targeting Glioblastoma with a Lupus Autoantibody

Xiang He, Ph.D.
University of Pittsburgh
MR-based Non-invasive Functional Renal Imaging in Acute Kidney Injury

Wolf E. Heberlein, M.D.
University of Arkansas for Medical Science
IRE-based Multi-modality Loco-regional Tumor Therapy for Pancreatic Cancer

Michael Hope, M.D.
University of California, San Francisco
Comprehensive Hemodynamic Assessment of Valve-related Aortic Disease with Cardiac Magnetic Resonance
Mallinckrodt

Jerry Jaboin, M.D., Ph.D.
Washington University Medical Center
Conditionally Replicative Viroradiotherapy for Recurrent and Aggressive Meningioma Tumors

Charles Y. Kim, M.D.
Duke University Medical Center
Trans-arterial Embolization of Hypervascular Liver Tumors with Electrically Conductive Particles for Modulation of Percutaneous Radiofrequency Ablation Zone Size and Configuration
GE Healthcare

Hee Kyung Kim, M.D.
Cincinnati Children's Hospital
MR Quantification of Muscular Fat in Duchenne Muscular Dystrophy: Integrating T2 Relaxation Time Mapping and MR Spectroscopy
SIEMENS

Tae Kim, Ph.D.
University of Pittsburgh
Magnetic Resonance imaging of Early Biomarker for Hypertension-Induced Cerebrovascular Alterations
AGFA HealthCare

Kenneth S. Lee, M.D.
University of Wisconsin
Quantitative Imaging of the Tendon: Use of Ultrasound Shear Wave Elastography as a Biomarker to Predict Tendon Rupture

John Lewis, Ph.D.
Dana-Farber/Brigham and Women's Cancer Center
Development of 3D Fluoroscopic Imaging During Radiotherapy for Reconstruction of Delivered Dose Distributions
Carestream

Sean Sunghun Park, M.D., Ph.D.
Mayo Clinic, Rochester
11C-Choline PET/CT Image-Guided Stereotactic Ablative Radiotherapy (IG-SABR) in Oligometastatic Prostate Cancer

Junqian Xu, Ph.D.
Icahn School of Medicine at Mount Sinai
Development of Whole Spinal Cord Functional Assessment with Multiband Magnetic Resonance Imaging

Anna E. H. Zavodni, M.D., M.H.Sc.
Sunnybrook Health Sciences Centre
University of Toronto
CT Myocardial Tissue Characterization: Utility in CTA Bypass Graft Assessment
AGFA HealthCare

Michael M. Zeineh, M.D., Ph.D.
Stanford University
Multimodal MRI to Detect Brain Injury in Athletes
ASNR/RSNA Research Scholar Grant

Jeff L. Zhang, Ph.D.
University of Utah
Real-time Monitoring of Renal Hypoxia and Hypoperfusion with Quantitative MRI

Katherine Zukotynski, M.D.
Brigham and Women's Hospital
Predictive Value of 18F-FDG PET/CT and 18F-NaF PET/CT in Castrate-resistant Prostate Cancer

RESEARCH SEED GRANT

Soterios Gyftopoulos, M.D.
New York University School of Medicine
US-MRI Correlation for Healing of Rotator Cuff Repairs using Vascularity and Tendon Elasticity
TOSHIBA Leading Innovation

Elizabeth M. Hecht, M.D.
Columbia University College of Physicians and Surgeons
Utility of Macromolecular DCE MRI and Diffusion Weighted Imaging as Biomarkers for Vascular Permeability and Desmoplasia in Pancreatic Adenocarcinoma
PHILIPS

Joseph Edward Ippolito, M.D., Ph.D.
Washington University in St. Louis
Metabolic Characterization of the Neuroendocrine Cancer GABA Shunt

June-Goo Lee, Ph.D.
University of Pittsburgh
Assessing the Progression of Knee OA by Morphologic Analysis of OAI MR
HITACHI Inspire the Next

Elliot Brian Levy, M.D.
National Institutes of Health
Integrated Imaging Strategy to Phenotype Recurrence after Chemoembolization
FUJIFILM

Roberta Marie Strigel, M.D., M.S.
University of Wisconsin
Hyperpolarized 13Carbon Magnetic Resonance Spectroscopic Imaging and Dynamic Contrast Enhanced MRI of Breast Cancer in a Mouse Model: Imaging the Metabolic Characteristics of Malignancy

Sarah Beth White, M.D.
Northwestern University
Feinberg School of Medicine
Nano Photothermal Ablation for Colorectal Liver Metastases

Chadwick Lewis Wright, M.D., Ph.D.
The Ohio State University
Wexner Medical Center
PET/CT-derived Hepatopulmonary Shunt Fraction Following Yttrium-90 Radioembolization
PHILIPS

RESEARCH FELLOW GRANT

David T. Fetzer, M.D.
University of Pittsburgh Medical Center
Advanced MR Imaging of Liver Fibrosis — T1rho Quantification
Silver Anniversary Campaign Pacesetters Research Fellow Grant

Christoph Alexander Karlo, M.D.
Memorial Sloan-Kettering Cancer Center
Development of a Prognostic, Imaging-inclusive Model for Improved Prediction of Disease-free Survival in Patients with Renal Cell Carcinoma
Ralph Schlaeger Charitable Foundation Research Fellow Grant

Ashkan Akhavan Malayeri, M.D.
Johns Hopkins University
Application of a Novel High Resolution 3D MRI Sequence [SPACE] for Evaluation of Left Atrial Edema and Morphology in Pulmonary Vein Isolation

John Nicholas Morelli, M.D.
Johns Hopkins University
MR-guided Vertebral Cryoablation in a Porcine Model with Structural and Thermographic Monitoring

Bashir Akhavan Tafti, M.D.
University of California, Los Angeles
Irreversible Electroporation (IRE)-mediated Ablation of Breast Cancer

Yingbing Wang, M.D.
Massachusetts General Hospital
Validation of Molecular Imaging with 18F Sodium Fluoride PET and 18F FDG PET for Monitoring of Response to Therapy in Multiple Myeloma
SIEMENS

RESEARCH RESIDENT GRANT

Christopher Matthew Bradbury, M.D., Ph.D.
Washington University in St. Louis
Characterization of Novel Radiosensitizers Identified in a Bioluminescent Glioblastoma-stromal Interaction Screen

Karen Buch, M.D.
Boston Medical Center
A Microfabricated Pressure Sensor Prototype for Continuous, Wireless Portal Vein Pressure Monitoring
RSNA Presidents Circle Research Resident Grant

Daniel S. Chow, M.D.
Columbia University Medical Center
Comparison of Optical Imaging and Diffusion/Perfusion-weighted Magnetic Resonance Imaging During Acute Stroke to Improve Clinical Image Interpretation and Decision Making
TOSHIBA Leading Innovation

Gabriel C. Fine, M.D.
University of Washington
A Slow-offrate Modified Aptamer (SOMAmer)-Based Approach to Visualize EGFR in a Tumor-Bearing Animal Model: A PET-based Molecular Imaging Proof-of-Principle Study

Kate Hanneman, M.D.
Toronto General Hospital,
University of Toronto
Quantification of Diffuse Myocardial Iron Overload Related Interstitial Fibrosis with Cardiac Magnetic Resonance Imaging in Patients with Transfusion-dependent Anemias

H. Benjamin Harvey, M.D., J.D.
Massachusetts General Hospital
Assessing Clinical Outcomes of High-risk Obstetrical Patients Identified In Ultrasound Screening Programs in Resource-limited Areas of Rural Kenya
TOSHIBA Leading Innovation

David Horowitz, M.D.
Columbia University Medical Center
The Role of the TGFBI Gene in Human Mesothelioma Pathogenesis and Response to Therapy

Martin T. King, M.D., Ph.D.
Stanford University Medical Center
Non-invasive Detection of Surgical Margins with Cerenkov Luminescence Imaging in Head and Neck Cancer

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Amie Y. Lee, M.D.
University of Washington
Utilization Patterns and Concordance of Breast MRI BI-RADS Assessments and Management Recommendations in Community Practice

Christopher D. Malone, M.D.
University of California San Diego
Ultrasound Detection of Hydrogen Peroxide and its Validation with F-19 MR Imaging

Zachary S. Morris, M.D., Ph.D.
University of Wisconsin
Synergy of Radiation and Immunotherapy in the Treatment of Melanoma

Evan Charles Osmundson, M.D., Ph.D.
Stanford University
Cell-free DNA as a Biomarker for Pancreatic Adenocarcinoma after Primary Local Therapies

Bradford Alan Perez, M.D.
Duke University School of Medicine
Evaluating the CXCR4 Signaling Pathway in Mediating the Response of Primary Cancers to Radiation Therapy

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Rahul Anil Sheth, M.D.
Massachusetts General Hospital
Harvard Medical School
Translational Optical Molecular Imaging for Percutaneous Biopsy of Focal Hepatic Lesions

COOK MEDICAL

Corey W. Speers, M.D., Ph.D.
University of Michigan
Developing Novel Radiosensitizing Targets for the Management of Treatment Refractory Breast Cancer

Daniel E. Spratt, M.D.
Memorial Sloan-Kettering Cancer Center
Non-invasive Molecular Imaging to Monitor Androgen Receptor Activity in Prostate Cancer Post Radiation Therapy

Vinita Takiar, M.D., Ph.D.
The University of Texas,
M.D. Anderson Cancer Center
Using Combinatorial Adaptive Response Therapy (CART) to Increase the Therapeutic Efficacy of Radiation Therapy

PHILIPS

Amanda June Walker, M.D.
Johns Hopkins University
Investigation of PD-1 Blockade and Hypofractionated Radiation in Lung Cancer to Enhance the Abscopal Effect

Kristina Young, M.D., Ph.D.
Oregon Health & Science University
Targeted Alteration of the Tumor Immune Environment to Increase Chemoradiosensitivity in Rectal Cancer

PHILIPS

RESEARCH MEDICAL STUDENT GRANT

Mediha Ahmad, B.A., B.S.
The University of Texas
MD Anderson Cancer Center
Do Borderline Resectable Pancreatic Cancer Patients Treated with Neo-adjuvant Chemoradiation Therapy Benefit from Radiation Dose Escalation to High Risk Margins?

Nabeel U. Ali, B.S.
Massachusetts General Hospital
An Automated Computational Algorithm for Detection of the Napkin-Ring Sign: A Coronary High-risk Plaque Marker In CT Angiography

Samuel F. Bakhoum, Ph.D.
Geisel School of Medicine at Dartmouth
Examining the Consequences of Radiation-induced Errors in Chromosome Segregation in Dividing Cells

Lauren Colbert, B.A.
Emory University
DNA Damage Response Genes as Biomarkers for Gemcitabine Sensitivity in Pancreatic Cancer

Dania Daye, B.S.
Perelman School of Medicine at the University of Pennsylvania
Investigating the Role of L-[5-11C]-Glutamine as a Novel PET Tracer for Breast Cancer Prognostication

Matthew DeSalvo, B.S.
Massachusetts General Hospital
Altered Structural Connectivity and Network Organization in Unilateral Mesial Temporal Lobe Epilepsy

Jeffrey Dinh, B.S.
The University of Texas
MD Anderson Cancer Center
Synaptic and Epigenetic Mechanisms of Radiation Induced Cognitive Impairment

Alex El-Ali, B.S.
Columbia University College of Physicians and Surgeons
Development of Quantitative In Vivo Naeuroimaging Biomarkers as Clinical Outcome Measures in Childhood Acute Ischemic Stroke

Preeya Goyal, B.A.
Northwestern University
Feinberg School of Medicine
Assessment of Chronic Liver Disease and Liver Fibrosis: Comparison of MR Elastography and Acoustic Radiation Force Impulse Imaging

Atheeth Hiremath, B.S.
University of Maryland School of Medicine
Patient Perceptions of Participation in RSNA Image Sharing Project: A Preliminary Survey

Julian C. Hong, M.S.

Stanford University (Julian is enrolled at The University of Wisconsin School of Medicine and Public Health)
Optimal Operating Parameters for Pleuridirectional High-energy Agile Scanning Electron Radiotherapy (PHASER)

Matthew Janko, B.S.
University of Massachusetts Medical School
Evaluation of Topical Immunomodulatory Therapy on Interleukin-1-dependent Radiodermatitis Using Multiple Imaging Modalities

Brice Allen Kessler, B.S.
University of North Carolina
School of Medicine
PET/MR for the Evaluation of Lymphoma

Ashley Knight-Greenfield, B.A.
Icahn School of Medicine at Mount Sinai
Hepatic Flow Quantification With 4D Phase Contrast MRI: Correlation with Hepatic Venous Pressure Gradient Measurement

Canon

Kevin Kotamarti, B.S.
The University of Texas
MD Anderson Cancer Center
Nanoshells for Detection and Ablation of Post-surgical Tumor Margins

Jennifer LaRoy, B.A.
Medical College of Wisconsin
Cost and Morbidity Analysis of Chest Port Insertion: Interventional Radiology vs. Surgical Implantation

Ashley Mingshin Lee, B.S.
Massachusetts General Hospital
(Ashley is enrolled at Duke University School of Medicine)
Value of Resting Myocardial CT Perfusion for Management of Patients with Acute Chest Pain and Intermediate Risk for Acute Coronary Syndrome

PHILIPS

Aaron D. Losey, M.S.
University of California, San Francisco
A New Magnetically Guided Endovascular Catheter for Interventional MRI: Evaluation of Navigation In Vivo at 1.5T

Holly Nichols, B.S.
Duke University
Development of a CT-based Novel Calcium Scoring System of the Lower Extremity Arterial System for Prediction of Outcomes of Endovascular Therapies for Peripheral Arterial Disease

FUJIFILM

Ahmad Parvinian, B.S.
University of Illinois at Chicago
Pharmacokinetic Study of Sorafenib Chemoembolization in a Rabbit VX2 Tumor Model

Fauzia Shaikh, B.A.
Columbia University College of Physicians and Surgeons
Using Contrast Enhanced Ultrasound to Assess the Efficacy of Akt Inhibition as a Radiosensitizer in Experimental Neuroblastoma


Litmanovich


Takiar


Knight-Greenfield

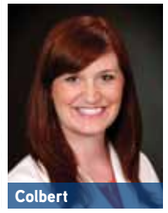

Morris


Bakhoum


Nichols


Perez


DeSalvo


Colbert


Subramaniam


Wang

Alexander Yowei Sheu, B.S.
Northwestern University
Feinberg School of Medicine
Transcatheter Intraarterial Delivery of Heparin, Protamine, and Ferumoxytol Nanocomplex-labeled Natural Killer Lymphocytes to Hepatocellular Carcinoma

Pablo A. Valdes, Ph.D.
Geisel School of Medicine at Dartmouth
Multiparametric MRI Biomarker Predictive of Early Treatment Outcome in Recurrent GBM

Canon

Margaret Jane Wong, B.S., M.Eng.
University of California, San Francisco
Color Enhanced Four-material Decomposition of Complementary Contrasts Delivered Simultaneously at Dual-energy CT

Kailin Yang, Ph.D.
Cleveland Clinic Lerner College of Medicine of Case Western Reserve University
Radiosensitization of Glioblastoma Stem Cells by Targeting High-affinity Glucose Uptake

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

Diana Litmanovich, M.D.
Beth Israel Deaconess Medical Center
Development of a Longitudinal Radiology Curriculum Integrated into the Medical Student Primary Clinical Year

EDUCATION SCHOLAR GRANT

Daniel William Golden, M.D.
The University of Chicago
Development of an Introductory Structured Didactic Radiation Oncology Curriculum for Medical Students Pursuing a Career in Radiation Oncology

PHILIPS

DEADLINES FOR 2014 GRANT APPLICATIONS

The application process for 2013 R&E Foundation grants opens this month.
Deadlines are:

- January 10, Education Grants
- January 15, Research Grants
- February 1, Research Medical Student Grant

Posters outlining R&E Foundation research and education grant programs, as well as programs for which international RSNA members are eligible, will be mailed this month to department chairs and are available for download at RSNA.org/Grants_and_Awards.aspx. Posters will also be available at RSNA 2013 in the R&E Foundation Pavilion in RSNAServices. Learn more about applying for R&E grants at RSNA.org/Foundation.

Saurabh Jha, M.D.
University of Pennsylvania
Technology Assessment for Radiology Residents—a Curriculum to Understand the Economics of Imaging and How to Value a Diagnostic Test
GE Healthcare

GE

Chun-Der L. Li, M.D. and Tessa Cook, M.D., Ph.D.
Hospital of the University of Pennsylvania
High-fidelity Simulated Environment for Assessment of Radiology Residents Prior to Independent Call
AUR/RSNA Education Scholar Grant

Sarabjeet Singh, M.D., M.M.S.T.
Massachusetts General Hospital, Harvard Medical School
Web-based Protocol and Radiation Optimization for CT with InteraCTive Education (PRACTICE) Program
Derek Harwood-Nash

Priscilla Slanetz, M.D., MPH and Ronald L. Eisenberg, M.D., J.D.
Beth Israel Deaconess Medical Center
Development of a Peer Observation Teaching Program to Enhance Radiology Resident Teaching Skills

Rathan M. Subramaniam, M.D., Ph.D., M.P.H.
Johns Hopkins University
Curriculum Development for Hybrid Molecular Imaging and Evidence Based Clinical Practice
GE Healthcare

GE

Carolyn Wang, M.D.
University of Washington
Evidence Based Development of a High-fidelity Simulation Team Training Program for Contrast Reaction Management