Siteman Investment Program
Research Development Award Recipients

The Siteman Investment Program Research Development Award is designed to provide pilot funding to faculty investigators to support pioneering cancer research and produce data to leverage external peer reviewed funding.

2020 Cycle 2
Award State Date: January 1, 2021

Pre-R01 Award
Sergej Djuranovic, PhD
Gene dosage effects and silent cancer mutations in minor splicing factor ZCRB1

Ryan Fields, MD and Chris Maher, PhD
The role of RAMS11 in metastatic colorectal cancer

Ashley J. Housten, OTD, MSCI
Developing an Academic and Community Practice Collaborative Care Model for Metastatic Breast Cancer Care

Gregory Lanza, MD, PhD and Monica Shokeen, PhD
Theranostic approach to chemo-resistant multiple myeloma through VLA-4 imaging and nanotherapeutic targeting

Stephen Oh, MD, PhD
Functional Interrogation of JAK2 and ASXL1 Mutations in Myeloproliferative Neoplasms

Team Science Award
Alessandro Vindigni, PhD; Grant Challen, PhD; Nima Mosammaparast, MD, PhD; and, Luis Batista, PhD
The Role of DDR in Normal and Malignant Hematopoietic Cells

New Clinical Trial Award
David DeNardo, PhD and William Hawkins, MD
Restoring PDAC responsiveness to immunotherapy by targeting conventional dendritic cells

Geoffrey Uy, MD
Phase II Randomized, Double-Blind, Placebo-Controlled Trial to Evaluate Uproleselan (GMI-1271) for GI Toxicity Prophylaxis during Melphalan-Conditioned Autologous Hematopoietic Cell Transplantation
2020 Cycle 1
Award State Date: July 1, 2020

Pre-R01 Award
Brian Dieckgraefe, MD, PhD
Targeting CD44ICD as a Mediator of Pancreatic Cancer Growth and Stemness

Eric Kim, MD
Evaluation of Diffusion Basis Spectrum Imaging to Non-Invasively Diagnose Prostate Cancer

Quing Zhu, PhD
Predicting neoadjuvant treatment response of locally advanced rectal cancer

Multi-PI Pre-R01 Award
Gregory Longmore, MD and Amit Pathak, PhD
Leader Cell Development in Cancer Invasion

Stephanie Perkins, MD; Adam Bauer, PhD; Timothy Mitchell, PhD; and, Francisco Reynoso, PhD
Examining cognitive decline in mice following a clinically mimetic brain irradiation protocol

Team Science Award
Milan Chheda, MD (PI); Michael Diamond, MD, PhD; Tanner Johanss, MD, PhD; Gavin Dunn, MD, PhD; Kenneth Murphy, MD, PhD; Allegra Petti, PhD; Albert Kim, MD, PhD; Robyn Klein, MD, PhD; Joshua Rubin, MD, PhD; Erik Herzog, PhD; Jian Campian, MD, PhD
Washington University Glioblastoma Team Science: An Integrated and Collaborative Approach to Develop New Therapies for Glioblastoma

New Clinical Trial Award
Jiayi Huang, MD, MSCI
A feasibility study to correlate cognitive changes of IDH-mutant and IDH-wildtype glioma patients after chemoradiotherapy with radiation dose to the resting state networks

Tanner Johanss, MD, PhD
A personalized neoantigen vaccine in patients with newly diagnosed glioblastoma using a novel DNA-based platform
2019 Cycle 2
Award State Date: January 1, 2020

Pre-R01 Award

**Kyunghlee Choi, PhD**
Angiogenic mechanisms enhancing anti-tumor immunity

**Takeshi Egawa, MD, PhD**
Functional characterization of an uncharacterized cytokine, Gm525, as a potential target for cancer therapies

**Roberta Faccio, PhD**
Role of Dkk1 in breast cancer progression and immune suppression

**Stefanie Geisler, MD**
Developing strategies to prevent and treat chemotherapy-induced neuropathy

**Obi Griffith, PhD and Jeffrey Bryan, DVM, MS, PhD, DACVIM (University of Missouri)**
Modeling anti-PDL1 response and resistance in naturally occurring canine cancer

**Andrea Hagemann, MD**
Implementation of the Families Accelerating Cascade Testing Toolkit (FACTT) for Hereditary Breast and Ovarian Cancer and Lynch Syndrome

**Kian Lim, MD, PhD**
Development of Novel ERK Inhibitor-Based Therapeutic Combinations In Pancreatic Cancer Based On Proteo-Transcriptomic Analyses

**Christopher Maher, PhD**
Recurrent long non-coding RNA gene fusions across solid tumors

Multi-PI Pre-R01 Award

**Li-Shiun Chen, MD, MPH, ScD and Aimee James, PhD, MPH**
Implementing multilevel smoking cessation interventions to reduce rural cancer disparity

**Zhongsheng You, PhD and Matthew Walter, MD**
Targeting the Nonsense-mediated RNA decay (NMD) pathway in cancer with aberrant splicing

New Clinical Trial Award

**Mark Schroeder, MD**
Phase I trial of best-in-class JAK inhibitor, baricitinib, as prophylaxis of Graft versus Host disease (GVHD) in patients undergoing allo-HCT for hematologic malignancies
2019 Cycle 1
Award State Date: July 1, 2019

Pre-R01 Award
Luis Batista, PhD
Rescue of HNF4a levels restores hepatocyte function and prevents end-stage liver disease and cancer in patients with impaired telomere maintenance

Colin Flaveny, PhD (Saint Louis University)
Targeting LXR regulation of prostate cancer immunometabolism

Michael Holtzman, MD
Reprogramming epithelial stem cells in triple-negative breast cancer

James Janetka, PhD
The role of pericellular serine proteases in tumor progression and resistance to anticancer therapy

Charles Kaufman, MD, PhD
Defining Transcriptional Regulators of Melanoma Initiation
(Award returned due to funding from the National Cancer Institute)

Jeffrey Magee, MD, PhD
Cooperating mutations and resistance to FLT3-ITD inhibition in pediatric acute myeloid leukemia

Jinsong Zhang, PhD (Saint Louis University)
Lysine acetylation of human histone deacetylase 3 as a new cancer target

Multi-PI Pre-R01 Award
Nima Mosammaparast, MD, PhD and Kory Lavine, MD, PhD
Alkylating Chemotherapies Promote Heart Failure by Targeting Tissue Resident Cardiac Macrophages

New & Established Clinical Trial Award
Jian Campian, MD, PhD
Role of a novel IL-7 agonist, rhIL-7hyFc, in immune reconstitution in patients with gliomas

Russell Pachynski, MD
Personalized Neoantigen Vaccine Immunotherapy for Prostate Cancer

Gregory Vlacich, MD, PhD
A Single-Arm Phase II Study with a Safety lead-in of Magnetic Resonance-Guided Hypofractionated Adaptive Radiation Therapy with Concurrent Chemotherapy and Consolidation Durvalumab for Inoperable Stage IIB and IIIA Non-small Cell Lung Cancer
2018 Cycle 2
Award Start Date: January 1, 2019

Pre-R01 Award
Yin Cao, ScD, MPH
Oral Microbiome, Virome, and Barrett’s Esophagus

Simon Haroutounian, PhD, MSc
Intravenous lidocaine for preventing oxaliplatin-induced peripheral neuropathy (OIPN)

Aimee James, PhD, MPH
Pilot implementation and feasibility assessment: Multilevel intervention to reduce rural colon cancer disparities

Julie Schwarz, MD, PhD
Radio-sensitization by free fatty acid supplementation in cervical cancer

John Welch, MD, PhD
Retinoid therapy in acute myeloid leukemia

Multi-PI Pre-R01 Award
Rebecca Aft, MD, PhD; Mark Watson, MD, PhD; and, Leonel Hernandez-Aya, MD
Genomic Classification and Targeted Immunotherapy of Disseminated Tumor Cells (DTCs) in Breast Cancer Patients

Team Science Award
Todd Fehniger, MD, PhD and Brad Kahl, MD
Advancing Therapies for Incurable Lymphomas via Translational Team Science
Pre-R01 Award
Milan Chheda, MD
The role of ZFHX4 in the glioblastoma tumor propagating cell state

Tahir Rahman, MD
Antipsychotics and Breast Cancer

Ryan Teague, PhD (Saint Louis University)
Obesity as an obstacle to cancer immunotherapy

Brian Van Tine, MD, PhD
Using Arginine Metabolism to Treat Sarcomas

Alessandro Vindigni, PhD (Saint Louis University)
Role of PrimPol in BCRA1-deficient tumors

Multi-PI Pre-R01 Award
Delphine Chen, MD and Andrea Wang-Gillam, MD, PhD
Imaging PARP levels to predict DNA-damaging agent treatment responses in pancreatic cancer

Cynthia Ma, MD, PhD and Jason Held, PhD
NEK9-MAP2K4: A Novel Signaling Axis Promoting Breast Cancer Growth and Chemotherapy Resistance

Joshua Rubin, MD, PhD; Joseph Ippolito, MD, PhD; and, Kwee L. Thio, MD, PhD
Combined ketogenic diet and BCNU for recurrent pediatric brain tumors
Pre-R01
Grant Challen, PhD
The Role of Interferon Gamma Signaling in the Clonal Evolution of Pre-Leukemic Stem Cells

Jaebok Choi, PhD
IFNγR and IL6R Signaling Pathways as Therapeutic Targets to Prevent GvHD While Preserving GvL

David DeNardo, PhD
The Impact of Macrophage Origin on the Pathogenesis of Pancreatic Cancer

Gavin Dunn, MD, PhD
Development of an Immunocompetent Autochthonous Model of Glioblastoma

Kristen Naegle, PhD
Discovering the Role of Phosphorylation in the Pleckstrin Homology Domain

Jacqueline Payton, MD, PhD
Defining the Role of Long Non-Coding RNAs in Lymphoma Pathogenesis

Lukas Wartman, MD
The Role of the Histone Demethylase KDM6A in Acute Leukemia

Multi-PI Pre-R01
Buck Rogers, PhD and Dong Zhou, PhD
Treatment of Metastatic Prostate Cancer with Radioactive PARP Inhibitors

Pre-SPORE/PPG
Tim Ley, MD
Genomics of Acute Myeloid Leukemia
2017 Cycle 1
Award Start Date: July 1, 2017

Pre-R01
Jianguo Liu, MD, PhD, Saint Louis University
Posttranscriptional control of breast tumor growth and metastasis

Lee Ratner, MD, PhD
Role of IRF4 in HTLV-Associated Adult T Cell Leukemia Lymphoma

Michael Rettig, PhD
Development of a Superior Mobilizing Regimen for Hematopoietic Stem Cell Transplantation

Amit Pathak, PhD
Memory-Plasticity Crosstalk in Cancer Cells

Multi-PI Pre-R01
Roberta Faccio, PhD and Roberto Civitelli, MD
Characterization and Tumorigenic Action of Osteolineage Cells in the Breast Cancer Microenvironment

Joel Garbow, PhD; Keith Rich, MD; and, Christina Tsien, MD
Post-XRT Effects in Brain Parenchyma Promote Dramatic Changes in Glioma Phenotype

Pre-SPORE/PPG
Jason Mills, PhD, MD
Mechanisms of Gastrointestinal Adenocarcinoma Tumorigenesis
2016 Cycle 2
Award Start Date: January 1, 2017

Pre-R01 WUSM
James Skeath, PhD
A genetic model of perineural invasion

Steven Teitelbaum, MD
Fatty liver promotes hepatic breast cancer metastasis

Zhongsheng You, PhD
Nonsense-mediated mRNA decay in DNA damage response

Multi-PI Pre-R01
Nima Mosammaparast, MD, PhD and Hani Zaher, PhD
RNA as a target of alkylation chemotherapy in cancer

Terence Myckatyn, MD and Mary Politi, PhD
Optimizing Decision Making about Breast Reconstruction after Mastectomy: A Patient-Centered Approach

Jay Piccirillo, MD; Alex Wong, PhD; Bradley Schlaggar, MD, PhD; and, Lindsay Peterson, MD
Evaluating Cognitive Function and Functional Connectivity in Breast Cancer Survivors Who Received Chemotherapy

Pre-SPORE/PPG
William Gillanders, MD
Siteman Cancer Center Breast Cancer SPORE
Pre-R01 Award

**Jeffrey Bednarski, MD, PhD**
DNA Damage Mediated Checkpoints in Early B Cell Development

**Ron Bose, MD, PhD**
Targeting HER2 activating mutations in Metastatic Breast Cancer

**Christopher Maher, PhD**
The role of onco-IncRNA-230 as an epigenetic regulator of colon cancer metastasis

**Jieya Shao, PhD**
Functional Regulation of DNA Damage Response by the Ubiquitin-Selective Protein Segregase VCP

**Tanya Wildes, MD, MSCI**
Optimizing fall-risk prediction in older adults with cancer

**Sergey Korolev, PhD, Saint Louis University**
Mechanism and inhibition of PALB2 and BRCA2 proteins

Multi-PI Pre-R01

**Kendall Blumer, PhD and Michael Onken, PhD**
Direct pharmacological targeting of Gq/11 in uveal melanoma
Pre-R01
Graham Colditz, MD, DrPH
Premenopausal plasma carotenoids and incident premalignant breast diseases

Joseph Ippolito, MD, PhD
Characterizing the Effects of Sexual Dimorphism on Glioma Metabolism

Albert Kim, MD, PhD
Regulation of glioblastoma stem-like cells by CDC20-Anaphase-Promoting Complex

Kian Lim, MD, PhD
Deactivating the Innate Immune Defense Mechanism of Pancreatic Cancer

Ryan Teague, PhD, Saint Louis University
Exploring T cell diversity as a novel mechanism for cancer immunotherapy

Multi-PI Pre-R01
Jeff Milbrandt, MD, PhD and Aaron DiAntonio, MD, PhD
Axonal maintenance for prevention of chemotherapy-induced peripheral neuropathy

Pre-SPORE/PPG
William Gillanders, MD
Siteman Cancer Center Breast Cancer SPORE

Greg Longmore, PhD
Tumor-Environment Communication Regulating Metastasis
Pre-R01
David DeNardo, PhD
Targeting Focal Adhesion Kinase to Render Pancreatic Cancer Responsive to Immunotherapy

Todd Fehniger, MD, PhD
Memory-like natural killer (NK) cells for cancer immunotherapy

Multi-PI Pre-R01
Matthew Walter, MD and Eric Duncavage, MD
Role of Subclones and Mutations in the Progression of MDS to Leukemia
(Award returned due to private funding from a foundation)

Dale Dorsett, PhD; Alessandro Vindigni, PhD; and, Susana Gonzalo, PhD, Saint Louis University
DNA Replication, Nuclear Architecture and Genome Stability

Pre-SPORE
Jason Mills, MD, PhD
Mechanisms of Gastrointestinal Adenocarcinoma Tumorigenesis