



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.

2021 Cycle 1

Award Start Date: July 1, 2021

Pre-R01 Award

Foluso Ademuyiwa, MD, MPH, MSCI

Reducing racial disparities in genetic testing for breast cancer in African American women

Taeho Kim, PhD

MRI augmented X-ray imaging-guided adaptive radiotherapy for pancreatic cancer (MAX-guided ART)

Guangfu Li, PhD, and David DeNardo, PhD, in collaboration with the University of Missouri in Columbia

Identification of ubiquitin ligases and substrates specifically interacting with a new pancreatic cancer suppressor ABTB2

Angela Mazul, PhD, MPH

Predicting head and neck cancer outcomes using partial epithelial-to-mesenchymal transition biomarker

Jose Zevallos, MD, MPH, and Jin Zhang, PhD

HPV genomic structural subtypes in oropharyngeal squamous cell carcinoma

Team Science Award

Milan Chheda, MD (principal investigator); Michael Diamond, MD, PhD; Tanner Johanns, MD, PhD; Gavin Dunn, MD, PhD; Kenneth Murphy, MD, PhD; Allegra Petti, PhD; Hong Chen, PhD; Albert Kim, MD, PhD; Robyn Klein, MD, PhD; Jian Campian, MD, PhD; Erik Herzog, PhD; Joshua Rubin, MD, PhD; and Jingqin (Rosy) Luo, PhD

Washington University Glioblastoma Team Science: An integrated and collaborative approach to develop new therapies for glioblastoma

Established Clinical Trial Award

Cynthia Ma, MD, PhD

Characterizing cancer cell intrinsic and immunologic phenotypes of estrogen receptor positive and HER2 negative breast cancer resistant to endocrine therapy and CDK4/6 inhibitor



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. Houston, 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 Johanns, 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 Johanns, 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

Kyunghee 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



2018 Cycle 1
Award Start Date: July 1, 2018

Pre-R01 Award

Milan Chheda, MD

The role of ZFH4 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



2017 Cycle 2
Award Start Date: January 1, 2018

Pre-R01

Grant Challen, PhD

The Role of Interferon Gamma Signaling in the Clonal Evolution of Pre-Leukemic Stem Cells

Jaebok Choi, PhD

IFN γ R 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



2016 Cycle 1
Award Start Date: July 1, 2016

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-lncRNA-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



2015 Cycle 2
Award Start Date: January 1, 2016

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



2015 Cycle 1
Award Start Date: July 1, 2015

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