2020 IMPACT REPORT

PEDAL THE CAUSE

BIG TEN BICYCLING
OUR MISSION

is to provide critical funding for cancer research at Siteman Cancer Center and Siteman Kids at St. Louis Children’s Hospital through our annual cycling challenge. It is our hope that research funded by Pedal the Cause will ultimately lead to a cure for cancer.

100% of participant-raised donations fund innovative cancer research at:

SITEMAN CANCER CENTER

SITEMAN Kids

AT ST. LOUIS Children’s HOSPITAL
Washington University Physicians

SINCE 2010:

28,182 RIDERS

349,000+ DONATIONS

7,300 VOLUNTEERS

$32,083,109 RAISED IN TOTAL

168 CANCER RESEARCH PROJECTS

130 ADULT

38 PEDIATRIC

PEDIATRIC TOTAL INCLUDES TWO PIECES OF CRITICAL EQUIPMENT USED FOR CANCER RESEARCH

$3,005,498 RAISED IN 2020

7:1 ROI

FOR EVERY $1 PEDAL THE CAUSE DONATES TO CANCER RESEARCH, AN ADDITIONAL $7 ON AVERAGE IS OBTAINED IN FEDERAL FUNDING

100% of participant-raised donations fund innovative cancer research at: SITEMAN CANCER CENTER and SITEMAN Kids.
2020 PEDAL THE CAUSE
Funded Research Projects

SITEMAN CANCER CENTER

Restoring PDAC responsiveness to immunotherapy by targeting conventional dendritic cells
Goal: To test whether a novel combination therapy in PDAC patients will prime the patient’s immune system to attack cancer cells and drive tumor protective immunity during and after pancreas cancer surgery
Principal Investigators: David DeNardo, PhD and William Hawkins, 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
Goal: To test if the drug uproleselan can reduce the severity of injury to the GI tract and lessen GI symptoms for multiple myeloma patients following chemotherapy
Principal Investigator: Geoffrey Uy, MD

The role of RAMS11 in metastatic colorectal cancer
Goal: To study how a particular molecule from a newly discovered class of molecules (called IncRNAs) acts to alter normal cell function promotes colorectal cancer metastasis chemotherapy resistance
Principal Investigators: Ryan Fields, MD and Chris Maher, PhD

Gene dosage effects and silent cancer mutations in minor splicing factor ZCRB1
Goal: To understand how gene regulation and protein production is altered in cancer cells by dissecting the importance of specific RNA motifs in the ZCRB1 gene, a gene which is known to further control the production of cancer-related genes
Principal Investigator: Sergej Djuranovic, PhD

Sex Differences in Transcriptional Heterogeneity
Goal: To understand why males get cancer more often than females and why they don’t respond as well to therapy
Principal Investigator: Josh Rubin, MD, PhD

Examining cognitive decline in mice following a clinically mimetic brain irradiation protocol
Goal: To study the effects of radiation therapy on brain function and cognition to gain a comprehensive understanding of radiation-induced brain injury
Principal Investigators: Stephanie Perkins, MD; Adam Bauer, PhD; Timothy Mitchell, PhD; and, Francisco Reynoso, PhD

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
Goal: New clinical trial to better understand how an advanced imaging technology called resting-state function MRI can be used to improve radiotherapy planning to reduce its negative impact on brain function for glioma patients
Principal Investigator: Jiayi Huang, MD, MSCI

A personalized neoantigen vaccine in patients with newly diagnosed glioblastoma using a novel DNA-based platform
Goal: New clinical trial to determine the safety and immunogenicity of a novel personalized vaccine approach in newly diagnosed glioblastoma
Principal Investigator: Tanner Johanns, MD, PhD

Developing an Academic and Community Practice Collaborative Care Model for Metastatic Breast Cancer Care
Goal: To implement and evaluate a coordinated care model for metastatic breast cancer patients in the St. Louis region to improve collaboration between academic and community oncology practices
Principal Investigator: Ashley J. Housten, OTD, MSCI

The Theranostic approach to chemo-resistant multiple myeloma through VLA-4 imaging and nanotherapeutic targeting
Goal: To develop proof-of-concept evidence related to the therapeutic response and effectiveness of a new targeted combination nanotherapy for patients with multiple myeloma
Principal Investigators: Gregory Lanza, MD, PhD and Monica Shokeen, PhD
2020 PEDAL THE CAUSE
FUND RESEARCH PROJECTS

SITEMAN CANCER CENTER (CONT.)

Developing new therapies and delivery strategies for glioblastoma
Goal: To develop treatments that will become the new standard of care for patients with glioblastoma
Principal Investigators: Milan Chheda, MD

Evaluation of Diffusion Basis Spectrum Imaging to Non-Invasively Diagnose Prostate Cancer
Goal: To test the accuracy of a newly developed imaging tool in correctly predicting prostate cancer grade in patients non-invasively
Principal Investigator: Eric Kim, MD

Leader Cell Development in Cancer Invasion
Goal: To determine the contribution of multiple environmental signals within breast tumors to metastasis
Principal Investigators: Gregory Longmore, MD and Amit Pathak, PhD

Predicting neoadjuvant treatment response of locally advanced rectal cancer
Goal: To accurately assess and predict rectal cancer patients’ response to neoadjuvant radiation and chemotherapy and to select the best surgical strategy for each individual patient
Principal Investigator: Quing Zhu, PhD

Targeting CD44ICD as a Mediator of Pancreatic Cancer Growth and Stemness
Goal: To develop ways to block a newly discovered pancreatic cancer signaling pathway that drives cancer growth and resistance to therapy
Principal Investigator: Brian Dieckgraefe, MD, PhD

SITEMAN KIDS AT ST. LOUIS CHILDREN’S HOSPITAL

Genetic and Epigenetic Differences between Pediatric and Adult Acute Myeloid Leukemia
Goal: To develop new strategies to model and treat pediatric acute myeloid leukemia (AML). AML therapies are extremely toxic, and they have not evolved much in the past several decades. This lack of progress underscores a need for newer, rationally designed pediatric AML therapies.
Principal Investigator: Jeff Magee, MD, PhD

Regulation of SYK kinase activity in normal B cells and pre-B cell leukemia
Goal: To determine how SYK signaling is regulated in normal B cells and in pre-B cell leukemia, which will provide new insight into disease development and maintenance.
Principal Investigator: Jeffrey J. Bednarski, MD, PhD

The Legacy Program
Goal: To gain a better understanding of why children have not survived their brain tumor diagnosis and to help neurosurgeons have a better understanding of where to biopsy their patients.
Principal Investigator: Joshua B. Rubin, MD, PhD

Equipment Purchase: FACSAria Fusion
With funds raised by Pedal the Cause, the FACSAria Fusion cell sorter has been identified and purchased as an equipment upgrade vital to pediatric cancer research. A fully integrated advanced cell sorter and biosafety solution for research laboratories, the machine features high-performance cell analysis and is capable of high speed and single cell sorting on up to sixteen parameters.

A full description of all funded projects can be found at pedalthecause.org/research
THANK YOU

In the midst of a pandemic, you rallied around our cause to raise more than $3 million for cancer research in 2020.

Your support funds the best and the brightest in cancer research, saving lives and fueling new treatments and cures.

Thank you for being part of the Pedal Family and bringing us all closer to a world without cancer.