

ROI REPORT

2017 Update

7:1 ROI

Within 5 years of investment, every \$1 donated to cancer research from Pedal the Cause has on average earned an additional \$7 in federal funding

Your Pedal the Cause dollars at work:



Todd Fehniger, MD, PhD
*7x Pedal the Cause
Rider & Fundraiser*

Todd Fehniger, MD, PhD received a \$200,000 award from the Siteman Investment Program* (SIP) in 2015 for his project titled “Memory-like natural killer (NK) cells for cancer immunotherapy.” For patients with AML not eligible to receive a BMT, Dr. Fehniger’s team has developed a new approach (cytokine-induced memory-like, or CIML, differentiation) which involves activating immune cells (NK cells) to enhance their ability to kill leukemia cells when transferred into a patient. The goal of his SIP project was to improve the understanding of how these CIML NK cells are generated, and how they are able to better eliminate leukemia, with hopes that they could make this treatment even more effective in the future. With promising results in the laboratory, **Dr. Fehniger recently received a \$2 million grant from the National Cancer Institute** to complete a first-in-human phase 1/2 clinical trial to test this novel approach for patients with AML not eligible for a BMT.

Ryan Fields, MD received a \$793,000 Cancer Frontier Fund* Team Science award in 2013 for his project titled “Identifying Mechanisms of Metastasis to Improve Outcomes in Metastatic Colorectal Cancer (mCRC).” Standard treatment of mCRC is non-specific, toxic chemotherapy. Our lack of understanding of mechanisms of tumor metastasis has prevented the identification and specific targeting of pathways necessary for the cancer to spread. In this project, Dr. Fields’ team performed a comprehensive analysis of 10 patients’ tumors with mCRC. This unprecedented analysis utilizing cutting-edge genomic techniques yielded a “mountain” of data to analyze to find out why some tumors spread and others do not. Each of the project goals have been completed and Dr. Fields’ team are in the final phase of manuscript preparation describing the clonal evolution of mCRC. These findings will challenge current paradigms of how cancers spread and evolve and may alter the staging and treatment methodologies that are current practice. To continue their research **Dr. Fields has received a subsequent \$1.3 million award from the National Cancer Institute**, and team member, Christopher Maher, PhD, **received a \$792,000 American Cancer Society Research Scholar Award.**



Ryan Fields, MD
*3x Pedal the Cause Rider
& Podium Fundraiser*



Joseph Ippolito, MD, PhD
*Pedal the Cause
Virtual Rider & Fundraiser*

Joseph Ippolito, MD, PhD received a \$100,000 award from the Siteman Investment Program* (SIP) in 2016 for his project titled “Characterizing the Effects of Sexual Dimorphism on Glioma Metabolism.” Glioblastoma Multiforme (GBM) is an extraordinarily aggressive cancer that comprises over half of all brain tumors. Within 1 year, Dr. Ippolito’s team has successfully identified sex differences in brain tumor metabolism in both animal models and clinical samples that can be detected using multiple clinical imaging modalities (CT, MRI, PET). In response, they have developed imaging strategies in the laboratory to detect these differences at the clinical level. **In August 2017, Dr. Ippolito’s findings were published in JCI: Insight and he received a National Cancer Institute award to continue his research in metabolic imaging of gliomas.**