



SCTR PILOT PROGRAM

GRANT AWARDEES

The SCTR pilot grants program supports innovative research spanning the translational spectrum — from basic science to population health — including patient-centered and community-engaged research.

Categories

[Discovery](#)

[Team Science](#)

[Telehealth](#)

[Collaborative K/T](#)

[High-Innovation High-Reward](#)

[COVID-19](#)

Discovery Pilot Awards

2017-2018 **Targeting gut microbiota to treat sepsis**

Hongkuan Fan, PhD
Department of Pathology & Laboratory Medicine
College of Medicine
Medical University of South Carolina

Development of monoclonal antibodies to inhibit Neuropilin-2b-dependent metastasis

Robert Gemmill, PhD
Department of Medicine
College of Medicine
Medical University of South Carolina

Developing brain stimulation as a treatment for pain in opiate dependent individuals

Colleen Hanlon, PhD
Department of Psychiatry & Behavioral Sciences
College of Medicine
Medical University of South Carolina

The mechanism of decreased inflammatory responsiveness on monocytes in HIV-infected long-term non-progressors (LTNPs)

Wei Jiang, MD
Department of Microbiology & Immunology
College of Medicine
Medical University of South Carolina

Diabetes, modified lipoproteins, and preeclampsia

Timothy Lyons, MD
Department of Medicine
College of Medicine
Medical University of South Carolina

Understanding Thiol Based Protein Modifications to Engineer Robust Anti-Tumor T cells

Shikhar Mehrotra, PhD
Department of Surgery
College of Medicine
Medical University of South Carolina

Vascular specific Akt3 is neuroprotective

Robin Muise-Helmericks, PhD
Department of Regenerative Medicine and Cell Biology
College of Medicine
Medical University of South Carolina

The Impact of PD-1 inhibition of T cell Memory Phenotype in Patients with Oral Cancer

David Neskey, MD, MSCR
Department of Otolaryngology
College of Medicine
Medical University of South Carolina

The role of CAL-101 on the microbiome and cancer immunotherapy

Chrystal Paulos, PhD
Department of Microbiology & Immunology
College of Medicine
Medical University of South Carolina

Inverse correlation between mitochondrial health and retinal degenerative disease

Baerbel Rohrer, PhD
Department of Ophthalmology
College of Medicine
Medical University of South Carolina

Correlating 4D flow MRI-derived shear stress to fenestration number in a tissue model of type B aortic dissection may predict false lumen thrombosis

Jean Marie Ruddy, MD
Department of Surgery
College of Medicine
Medical University of South Carolina

Senescence and olfactory dysfunction in aging

Rodney Schlosser, MD
Department of Otolaryngology
College of Medicine
Medical University of South Carolina

Care-coordination Approach to Learning Lupus Self-Management (CALLS)

Edith Williams, PhD
Department of Public Health Sciences
College of Medicine
Medical University of South Carolina

Design and testing of novel HUNK inhibitors

Elizabeth Yeh, PhD
Department of Pharmacology
College of Medicine
Medical University of South Carolina

Preeclampsia in minority pregnant women with Type 2 diabetes

Jeremy Yu, MD, PhD
Department of Medicine
College of Medicine
Medical University of South Carolina

2018-2019 **Copy-number analysis of understudied black women ovarian cancers**

Joseph Delaney, PhD
Department of Biochemistry & Molecular Biology
College of Medicine
Medical University of South Carolina

2019-2020 **Parcellating Cortical Functional Networks in Preclinical Alzheimer's Disease**

Andreana Benitez, PhD
Department of Neurology
College of Medicine
Medical University of South Carolina

Invention of biodegradable antibiotic eluting device for prevention of surgical site infection in total joint replacement

Josef Eichinger, MD
Department of Orthopaedics & Rehabilitation
College of Medicine
Medical University of South Carolina

Using functional genomics and computational biology to reverse engineer human breast cancer cells

Steve Ethier, PhD
Department of Pathology & Laboratory Medicine
College of Medicine
Medical University of South Carolina

Development and pilot implementation of a novel mobile health app for post-operative wound triage

Heather Evans, MD
Department of Surgery
College of Medicine
Medical University of South Carolina

Classifying groups of HIV-infected individuals at-risk for falling out of care to identify tailored, feasible, and effective interventions to promote retention

Virginia Fonner, PhD, MPH
Department of Psychiatry and Behavioral Medicine
College of Medicine
Medical University of South Carolina

Initial Development and Pilot Testing of the Use of Automatic Clinical Summaries in Pediatric Primary Care to Identify Risk and/or Exposure to Child Abuse and Neglect

Rochelle Hanson, PhD
Department of Psychiatry & Behavioral Sciences
College of Medicine
Medical University of South Carolina

Maternal, infant, and early childhood outcomes of mothers with OUD: Comparing outcomes of mothers engaged and non-engaged in medication assisted treatment utilizing Medicaid data

Angela Moreland, PhD
Department of Psychiatry & Behavioral Sciences
College of Medicine
Medical University of South Carolina

Circuit dissection of brain-stimulation-induced plasticity in stroke recovery

Takashi Sato, PhD
Department of Neurosciences
College of Medicine
Medical University of South Carolina

Molecular and neuronal circuit mechanisms underlying stress-induced mood dysfunction

Makoto Taniguchi, PhD
Department of Neurosciences
College of Medicine
Medical University of South Carolina

2020-2021 **miRNAs as early biomarkers of aggressive variant prostate cancer**

Victoria Findlay, PhD
Department of Pathology and Laboratory Medicine
College of Medicine
Medical University of South Carolina

Racial/ethnic disparities in systemic lupus erythematosus (SLE) among women: examination of genetics and clinical factors

Mara Lennard Richard, PhD
Department of Medicine
College of Medicine
Medical University of South Carolina
Angela Malek, PhD
Department of Public Health Services
College of Medicine
Medical University of South Carolina

Anti-Warburg Small Molecules Regulating VDAC in Cancer

Eduardo Maldonado, DVM, PhD
College of Pharmacy
Medical University of South Carolina

Combinatorial non-neuronal cell therapies for the treatment of pain and subsequent opiate addiction

Mike Scofield, PhD
Department of Anesthesia and Perioperative Medicine
College of Medicine
Medical University of South Carolina

Effect of Maternal Vitamin D Status during Lactation on Milk and Infant Microbiome and Immune Status

Carol Wagner, MD
Department of Pediatrics
College of Medicine
Medical University of South Carolina

2021-2022 **Novel Targets for Vascular Cognitive Impairment and Dementia (VCID): Linking Endothelin A (ETA) Receptors and Endothelial Tau Pathology**

Yasir Abdul, PhD
Department of Pathology & Laboratory Medicine
College of Medicine
Medical University of South Carolina

High-Fat Diet and Endothelial Tau Hyperphosphorylation: A Plausible Link Between Vascular Contributions and Dementia

Onder Albayram, Ph.D.
Department of Microbiology and Immunology
College of Medicine
Medical University of South Carolina

Novel epigenetic pharmacotherapies for AUD and SUD

Ethan Anderson, Ph.D.
Department of Neurosciences
College of Medicine
Medical University of South Carolina

Increasing return-to-home for hospitalized older adults experiencing delirium through enhanced caregiver support

Jennifer Dulin, MD, MPH
Department of Medicine
College of Medicine
Medical University of South Carolina

Co-engineering stem cell-derived beta cells and regulatory T cells for type 1 diabetes

Leonardo Ferreira, Ph.D.
Department of Microbiology and Immunology;
Regenerative Medicine & Cell Biology
College of Medicine
Medical University of South Carolina

Prospective cognition in temporal lobe epilepsy

Ezequiel Gleichgerrcht, MD, PhD
Department of Neurology
College of Medicine
Medical University of South Carolina

Single cell profiling of resident brain cells in a mouse model of oral microbial dysbiosis and amyloid response

Wei Jiang, MD, MS
Department of Microbiology & Immunology
College of Medicine
Medical University of South Carolina
Eric Daniel Hamlett, PhD
Department of Pathology and Laboratory Medicine
College of Medicine
Medical University of South Carolina

Effect of Lambda Interferon Receptor (IFNLR1) Modulation on Myeloid Cells and HIV

Eric Meissner, M.D., Ph.D.
Department of Microbiology and Immunology
College of Graduate Studies
Medical University of South Carolina

The role of SUPT6H in DNA damage and oral tumorigenesis

Viswanathan Palanisamy, PhD
Department of Biochemistry & Molecular Biology
College of Medicine
Medical University of South Carolina

Metabolic effects of Lysine in salt sensitive hypertension

Oleg Palygin, PhD

Department of Medicine

College of Medicine

Medical University of South Carolina

Development of an EHR-based intervention to facilitate risk-stratified breast cancer screening

Sarah Price, MD, PhD

Department of Family Medicine

College of Medicine

Medical University of South Carolina

Caitlin Allen, PhD, MPH

Department of Public Health Sciences

College of Medicine

Medical University of South Carolina

Altered Iron Sulfur Cluster Trafficking as a Novel Driver of NAFLD

Don Rockey, MD, PhD

Department of GI & Hepatology

College of Medicine

Medical University of South Carolina

Preventing Cancer Relapse in Brain Tumor Patients

Jezabel Rodriguez Blanco, PhD

Department of Pediatrics

College of Medicine

Medical University of South Carolina

Costs Associated with Acute Kidney Injury in the Neonatal Intensive Care Unit: Analysis of Data from the Pediatric Health Information Systems Database

Heidi Steflik, MD, MSCR

Department of Pediatrics

College of Medicine

Medical University of South Carolina

Brinton Daniel, PhD

Department of Healthcare Leadership and Management

College of Health Professions

Medical University of South Carolina

Rib Fixation in Adult Deformity Corrective Surgery as Preventative Measure for Proximal Junctional Kyphosis/Failure

Hai Yao, PhD

Department of Neurosurgery

College of Medicine

Medical University of South Carolina

Stephen Kalhorn, MD

Department of Neurosurgery

College of Medicine

Medical University of South Carolina

Team Science Pilot Awards

2018-2019 **Establishing reliability of a novel quantification model for classifying narrative observations of teamwork behaviors in healthcare clinical units**

Dusty Annan, EdD
Medical University of South Carolina

The Relationship between Clinical Service Delivery Models and Provider Perceptions of Teamwork

Stacey Maurer, PhD
Department of Psychiatry & Behavioral Sciences
College of Medicine
Medical University of South Carolina

2019-2020 **Evaluation of individual and team-composition predictors of teamwork performance using a standardized teamwork challenge**

Kimberly Kascak, MS
Academic Affairs
Medical University of South Carolina

2020-2021 **Team REACH: Building a Transdisciplinary Collaboration for Integrated HIV/PTSD Care to Address Mental Health and Risk Reduction**

Nada Goodrum, PhD
Department of Psychiatry & Behavioral Sciences
College of Medicine
Medical University of South Carolina

Telehealth Pilot Awards

2019-2020 **Iterative intervention development and feasibility testing of a smoking cessation e-visit for individuals experiencing homelessness**

Cristin Adams, DO
Department of Family & Preventive Medicine
College of Medicine
Medical University of South Carolina

Improving Pediatric ADHD Management with Virtual Check-ins: A Study of Utilization and Acceptability

Claire Macgeorge, MD, MSCR
Department of Pediatrics
College of Medicine
Medical University of South Carolina

Stressors of Inter-ICR Transfer: Family Centered Care through Telehealth

Nandita Nadig, MD
Department of Medicine
College of Medicine
Medical University of South Carolina

A comparison of standard office based postpartum BP monitoring to a text based remote self BP monitoring program in the management of maternity patients with a hypertensive disorder of pregnancy

Renata Sawyer, MD
University of South Carolina

2020-2021 **Telehealth Management of Complex ADHD**

Silvia Pereira-Smith, MD
Department of Pediatrics
College of Medicine
Medical University of South Carolina

Health Chat: Connecting with Underserved Adolescents to Monitor Healthy Lifestyle Goals via Mobile Health

Christine San Giovanni, MD, MSCR
Department of Pediatrics
College of Medicine
Medical University of South Carolina

2021-2022 **BioWare to Enhance Treatment for Alcohol Use Disorder
and Posttraumatic Stress Disorder**

Amber Jarnecke, PhD

Department of Psychiatry & Behavioral Sciences
College of Medicine
Medical University of South Carolina

**Adapting A Program of SUPPORT for telehealth delivery
in Advanced Lung Disease**

Kathleen Lindell, PhD, RN

Department of
College of Nursing
Medical University of South Carolina

Collaborative K/T Pilot Awards

2021-2022 **PTSD induced alterations of cardiac homeostasis**

Kristine DeLeon-Pennell, PhD

Department of Pathology and Laboratory Medicine
College of Medicine

Alexa Corker

Doctoral Student

College of Graduate Studies

Medical University of South Carolina

Examining the Neural Processes Underlying Social Reward for Individuals with PTSD and Trauma-resilient Individuals

Amber Jarnecke, PhD

Department of Department of Neuroscience
College of Medicine

Medical University of South Carolina

Kyle Blidy, MS

Doctoral Student

College of Graduate Studies

Medical University of South Carolina

Antisense Oligonucleotides against Npas4 long non-coding enhancer RNA as a novel therapeutic for Substance Use Disorder

Constanza Keller, BS-PhD

Department of Neurosciences and Psychiatry
College of Medicine

Medical University of South Carolina

Rose Marie Akiki

Doctoral Student

College of Graduate Studies

Medical University of South Carolina

The role of calretinin in the vmPFC in stress-related anxiety

Jennifer Rinker, PhD

Department of Neuroscience
College of Medicine

Medical University of South Carolina

Krysten O'Hara, MS

Doctoral Student

College of Graduate Studies

Medical University of South Carolina

High-Innovation High-Reward Pilot Awards

2018-2019 **Optimizing Zeriscope for PTSD Clinical Studies**

Robert Adams, MD
Department of Neurology
College of Medicine
Medical University of South Carolina

Characterization of race specific primary prostate cancer cell lines for commercialization

David Turner, PhD
Department of Pathology & Laboratory Medicine
College of Medicine
Medical University of South Carolina

2020-2021 **Investigation into the impact of variable temperature and flow rates during pulsatile perfusion on the aortic endothelium**

Satish Nadig, MD, PhD
Department of Surgery
College of Medicine
Medical University of South Carolina

The Safety Adjunct for Vascular Extremity occlusion during Resuscitation

T. Konrad Rajab, MBBC
Department of Surgery
College of Medicine
Medical University of South Carolina

Improving the Diagnosis of Non-alcoholic Fatty Liver Disease in Primary Care Patients with Abnormal Liver Function Tests Through Predictive Modeling

Andrew Schreiner, MD, MSCR
Department of Medicine
College of Medicine
Medical University of South Carolina

COVID-19 Pilot Awards

2019-2020 **COVID-19 Biorepository Start-up**

Patrick Flume, MD
Department of Medicine
College of Medicine
Medical University of South Carolina

2020-2021 **Diagnostic predictive potential of microbiota in COVID-19**

Alexander Aleksenyenko, PhD
Department of Public Health Sciences
College of Medicine
Medical University of South Carolina
Stephane Meystre

Colonizing microbiome as a determinant of COVID-19 outcome: A Pilot Study

Alexander Alekseyenko, PhD
Department of Public Health Sciences
College of Medicine
Medical University of South Carolina
Stephane Meystre, PhD, MD, MS
OnePlanet Research Center

Drug discovery against SARS-CoV-2 PLPro

Christopher Davies, PhD
Department of Biochemistry & Molecular Biology
College of Medicine
Medical University of South Carolina

Regulation of SARS-CoV-2 replication by hnRNP E1

Philip Howe, PhD
Department of Biochemistry & Molecular Biology
College of Medicine
Medical University of South Carolina

Expanding SARS-COV2 Epitope Reactive T cells for Immunotherapy

Shikhar Mehrotra, PhD
Department of Surgery
College of Medicine
Medical University of South Carolina

Immunogenetics of COVID-19

Janardan Pandey, PhD
Department of Microbiology and Immunology
College of Medicine
Medical University of South Carolina

Evaluation of splatter and Aerosols during dental procedures Using a Novel Aerosol containment device and standard devices

Walter Renne, PhD
College of Dentistry
Medical University of South Carolina

The impact of pre-existing T cell and antibody responses against common human coronaviruses on SARS-CoV2 infection in humans

Mark Rubinstein, PhD
Department of Surgery
College of Medicine
Medical University of South Carolina
John Wrangle, MD
Department of Medicine
College of Medicine
Medical University of South Carolina