

Ivy Biomedical Innovation Fund Funded Projects

2019-2020

Development of Visual fields Rapid Assessment Device (VRAD)

Nina Solenski, MD, Department of Neurology

Karen Rheuban, MD, Center for Telehealth

Arjun Dirghangi, MD, Department of Ophthalmology

Jeffrey Ashe Allende, Project Manager, Telehealth Operations

Renewal: Targeting AVIL in Glioblastoma

Hui Li, PhD, Department of Pathology

Michael Hilenski, PhD, Department of Chemistry

BJ Purow, MD, Department of Neurology

Development of Positive SpeC7:C13rm Test Kit For Clinicians

Jeffrey Lysiak, PhD, Department of Urology

Kodi Ravichandran, PhD, Department of Microbiology, Immunology and Cancer Biology

Ryan Smith, MD, Department of Medicine – Urology

Scott Purcell, PhD, Lab Director: Reproductive Medicine and Surgery Center of Virginia

George Prpich, PhD, Department of Chemical Engineering

Renewal: Preclinical Testing of Nav1.6 selective Sodium Channel Antagonists for Prevention of Death in Epilepsy (SUDEP)

Manoj Patel, PhD, Department of Anesthesiology

Howard Goodkin, MD, PhD, Department of Neurology

Renewal: Beyond topical Systemic administration of a lead optimized chemokine-derived peptide to combat infections caused by multidrug-resistant bacterial infections

Molly Hughes, MD PhD, Department of Medicine – Infectious Disease

Matthew Crawford PhD, Department of Medicine – Infectious Disease

Lawrence G. Lum, MD, DSc, Department of Medicine –Hematology and Oncology

Rachel Letteri, PhD, Department of Chemical Engineering

2018-2019

Development of an inhibitor of myeloperoxidase (MPO) for the treatment of delayed cerebral injury after aneurysmal subarachnoid hemorrhage

Jose Javier Provencio, MD, Neurology

Danny Theodore, PhD, Neurology

Aminata Coulibaly, PhD, Neurology

RENEWAL: Targeting AVIL in Glioblastoma

Hui Li, PhD, Pathology

Michael Hilinski, PhD, Chemistry

Benjamin Purow, MD, Neurology

RENEWAL: Cady Ventilator Vest

Tricia Cady, RN, Neonatal Intensive Care Unit

Jonathan Swanson, MD, Pediatrics, Medical Director-Neonatal Intensive Care Unit

Rachael Nauman, RN, Neonatal Intensive Care Unit

Timothy Hicks, RRT, Neonatal Intensive Care Unit

Improving End Stage Renal Disease outcomes through a predictive calcimimetic dosing algorithm

Brendan Bowman, MD, Medicine-Nephrology

Donald Brown, PhD, Systems & Information Engineering

Benjamin Lobo, PhD, Systems & Information Engineering

RENEWAL: Combating Multidrug Resistant Bacteria Using Chemokine-Derived Antimicrobial Peptide

Molly Hughes, MD, Medicine-Infectious Disease & International Health

Lawrence Lum, MD Medicine- Hematology and Oncology

Rachel Letteri, PhD, Chemical Engineering

Therapeutic Ultrasound for the Treatment of Degenerative Mitral Stenosis

Austin Robinson MD, Cardiovascular Medicine

John Hossack PhD, Biomedical Engineering

Christopher Kramer MD, Radiology and Cardiovascular Medicine

2017-2018

Combating Multidrug Resistant Bacteria Using Chemokine-Derived Antimicrobial Peptide

Molly Hughes, MD, Medicine-Infectious Disease & International Health

Borna Mehrad, PhD, University of Florida School of Medicine

VADStent

J Hunter Mehaffey, MD, Department of Surgery

Mark Roeser, MD, Surgery

Gorav Ailawadi, MD, Surgery

Irving L Kron, MD, Surgery

David Chen, MS, Biomedical Engineering

Jeffery Holmes, MD/PhD, Biomedical Engineering

John A Kern, MD, Surgery

CADY Ventilator Vest

Tricia Cady, RN, Neonatal Intensive Care Unit

Jonathan Swanson, MD, Pediatrics, Medical Director-Neonatal Intensive Care Unit

Rachael Nauman, Neonatal Intensive Care Unit

Timothy Hicks, RRT, Neonatal Intensive Care Unit

RENEWAL: Preclinical Testing of Nav1.6 Selective Sodium (Na) Channel Antagonists for the Suppression of Epileptic Seizures and the Prevention of SUDEP

Manoj Patel, PhD, Anesthesiology

Mirko Rivara PhD, Pharmacology Universita degli Studi di Parma

A Radiation Therapy Decision Support System

Tyler Watkins, PhD, Radiological Physics

Timothy Showalter, MD, Radiation Oncology

Jeffrey Siebers, PhD, Radiological Physics

Targeting AVIL in Glioblastoma

Hui Li, PhD, Pathology

Michael Hilinski, PhD, Chemistry

Benjamin Purow, MD, Neurology

2016-2017

RENEWAL: Small molecule inhibitors of CBF β -SMMHC for the treatment of inv(16) leukemia

John Bushweller, PhD, Molecular Phys. and Biological Physics

Lucio Castilla, PhD, UMass Medical School

Suppressing the Coupling Water Bath for Improved Guidance in Focused Ultrasound Surgery

Craig Meyer, PhD, Biomedical Engineering

Steven Allen, PhD, Biomedical Engineering

Jeff Elias, MD, Neurosurgery

RENEWAL: Preclinical testing of Nav1.6 selective Sodium Channel Antagonists for the Suppression of Epileptic Seizures and the Epileptic Seizures Prevention of SUDEP

Manoj Patel. PhD, Anesthesiology

Mirko Rivara PhD, Pharmacology Universita degli Studi di Parma

RENEWAL: Small molecule inhibitors of CBF β /RUNX for the treatment of basal-like (triple negative) breast cancer

John Bushweller, PhD, Molecular Phys. and Biological Physics

Lucio Castilla, PhD, UMass Medical School

RENEWAL: Development of a small molecule PTP4A3 inhibitor for the treatment for ovarian cancer

John Lazo, PhD, Pharmacology & Chemistry

Chip Landen, MD, Obstetrics and Gynecology

Preclinical validation and clinical planning studies for self-expanding hydrogel for pelvic brachytherapy: a novel method for vaginal packing and customized radiation therapy

Tim Showalter, MD, MPH Radiation Oncologist

Bruce Libby, PhD, Medical Physicist, Radiation Oncology

2015-2016

Development of a small molecule PTP4A3 inhibitor for the treatment for ovarian cancer

John Lazo, PhD, Pharmacology & Chemistry

Chip Landen, MD, Obstetrics and Gynecology

Exploring the utility of ⁶⁴Cu-mannose coated liposomes as a positron emission tomography (PET) diagnostic imaging agent for traumatic brain injury

James Stone, MD, Radiology and Medical Imaging

Stuart Berr, PhD, Radiology and Medical Imaging

Jiang He, PhD, Radiology and Medical Imaging

Small molecule inhibitors of CBF β /RUNX for the treatment of basal-like (triple negative) breast cancer

John Bushweller, PhD, Molecular Physiology and Biological Physics

Kevin Janes, PhD, Biomedical Engineering

RENEWAL: Small molecule inhibitors of CBF β -SMMHC for the treatment of inv (16) leukemia

John Bushweller, PhD, Molecular Physiology and Biological Physics

Lucio Castilla, PhD, UMass Medical School

Recombinant Bacterial HIV Membrane-Proximal External Region Vaccine

Steven Zeichner, MD, PhD, Pediatrics and Microbiology, Immunology, and Cancer Biology

Wen Yuan, PhD, Infectious Diseases and International Health

Preclinical testing of Nav1.6 selective Sodium Channel Antagonists for the Suppression of Epileptic Seizures and the Prevention of SUDEP

Manoj Patel, PhD, Anesthesiology

Mirko Rivara PhD, Pharmacology Universita degli Studi di Parma

RENEWAL: Targeting the hemoglobin α /eNOS complex for novel anti- hypertensive

Brant Isakson, PhD, Molecular Physiology and Biological Physics

Linda Columbus, PhD Chemistry

Alex Kadl, MD, Pulmonary and Critical Care Medicine