

Department of Medicine faculty with current grants from R and K mechanisms as of July 2021.

Investigator	Division	Project	Grant
Gerald S. Bloomfield	Cardiology	Pathways to cardiovascular disease prevention and impact of specialty referral in under-represented racial/ethnic minorities with HIV	R01
Marat Fudim	Cardiology	Congestion Phenotypes and Splanchnic Nerve Modulation in Chronic Heart Failure	K23
Michael D. Gunn	Cardiology	Generation of antibodies specific for optimal non-HRP2 malaria diagnostic antigens	R21
Christopher Holley	Cardiology	SnRNA-guided modifications of mRNA	R01
Christopher Holley	Cardiology	The Role of RNA Modifications in Heart Failure	R01
William E. Kraus	Cardiology	Skeletal Muscle Molecular Drug Targets for Exercise-induced Cardiometabolic Health	R01
Robert J. Lefkowitz	Cardiology	Molecular Regulation of Cardiovascular 7 TM Receptors	R01
Yongmei Liu	Cardiology	A Longitudinal Epigenetic Study of Atherosclerosis	R01
Robert W. McGarrath III	Cardiology	The Branched Chain Ketoacid Dehydrogenase Kinase-Phosphatase System as a New Regulatory Node in Myocardial Fuel Section	K08
Manesh R. Patel	Cardiology	BEST-VIVA Registry (vCLI)	R01
Howard A. Rockman	Cardiology	Mechanisms of Maladaptation in Heart Failure	R01
Paul B. Rosenberg	Cardiology	STIM1 and metabolic flexibility	R01
Svati H. Shah	Cardiology	Clinical and Molecular Epidemiology of High Risk Coronary Plaque	R01
Svati H. Shah	Cardiology	Inflammatory and Metabolic Biomarkers in Cardiovascular Complications with SARS-CoV-2	R21
Sudha Shenoy	Cardiology	Regulation of Vascular Inflammatory Signaling by the Deubiquitinase USP20	R01
Jonathan A. Silber	Cardiology	Anti-Atherogenic Mechanisms of Drebrin	R01
Mary E. Klotman	Chair's Office	The Genitourinary Tract as a compartment and reservoir for HIV	R01
S. Munir Alam	DHVI	Antigen recognition and activation of B-cell receptors of HIV-1 broadly neutralizing antibodies	R01
Mattia Bonsignori	DHVI	Immunogen Design Strategies To Direct HIV-1 Broadly Neutralizing Antibody Maturation By Probability-Based Targeting Of Critical Mutations	R56
Jonathan Campbell	Endocrinology	Mechanisms of insulin secretion mediated by alpha cells	R01
Jonathan Campbell	Endocrinology	Novel metabolic actions of GIP	R01
Mark Herman	Endocrinology	The Role of ChREBP in Fructose Induced Metabolic Disease	R01
Matthew D. Hirschev	Endocrinology	Post-Translational and Epigenetic Control of Branched-Chain Amino Acid Metabolism	R01
Matthew D. Hirschev	Endocrinology	Determining the Sub-Cellular Organelles that Link Lipid Signaling and Epigenetics	R21
Richard H. Lee	Endocrinology	Metabonomic & Radiographic Markers of Fracture Risk Among Older Adults with Diabetes	K23
Deborah Muoio	Endocrinology	Mechanisms of lipid-induced bioenergetic stress in muscle	R01
Diego Bohorquez	Gastroenterology	The efferent synapse in enteroendocrine cells	R21
Anna Mae Diehl	Gastroenterology	TNF Alpha and Recovery from Alcoholic Liver Injury	R01
Anna Mae Diehl	Gastroenterology	Hedgehog Signaling and Adult Liver Regeneration	R01
Rodger A. Liddle	Gastroenterology	The role of gut endocrine cells in Parkinson's Disease	R01
Rodger A. Liddle	Gastroenterology	Mechanisms of mechanically-induced acute pancreatitis	R01
Rodger A. Liddle	Gastroenterology	Mechanisms of Pancreatic Fibrosis	R01
Rodger A. Liddle	Gastroenterology	Metabolic regulation of pancreatitis	R01
Jatin Roper	Gastroenterology	Inhibition of CaMKK2 sensitizes rectal cancers to radiation therapy	R21
Keisha Bentley-Edwards	General Internal Medicine	Religion, Spirituality and CVD Risks: A Focus on African Americans	R01
Nrupen Bhavsar	General Internal Medicine	Addressing Bias from Missing Data in EHR Based Studies of CVD	K01
Nicole Depasquale	General Internal Medicine	Supporting Patients and Family Care Partners to Manage Chronic Kidney Disease Together	K01
Nia Mitchell	General Internal Medicine	Changes in Weight and Physical Function for Older African American Women in National, Peer-Led, Community-Based Weight Loss Program	R01
Christopher B. Bowling	Geriatrics	Functional Limitations and Disability Among Middle-Aged Adults	R01
Christopher B. Bowling	Geriatrics	Sustained blood pressure control and progression of multimorbidity	R01
Daniel Parker	Geriatrics	Healthy Skeletal Muscle, Healthy Brain: Are Kynurenine Metabolites the Link?	R03
Juliessa M. Pavan	Geriatrics	Deprescribing Central Nervous System Medications in Hospitalized Older Adults	K23
Patrick M. Sullivan	Geriatrics	A Novel Animal Model of Late Onset Alzheimer's Disease	R21
Gregory A. Taylor	Geriatrics	Role of IRGM proteins in immunity to enteric bacteria	R01
Gregory A. Taylor	Geriatrics	IRGM proteins as regulators of inflammation	R01
Nelson J. Chao	Hematologic Malignancies and Cellular Therapy	Patient-centered home-based hematopoietic stem cell transplantation	R01
Yubin Kang	Hematologic Malignancies and Cellular Therapy	Targeting sphingosine kinase 2 for the treatment of multiple myeloma	R01
Yubin Kang	Hematologic Malignancies and Cellular Therapy	Effects of PPAR agonists on response to immunomodulatory agents in patients with multiple myeloma	R21
Dorothy Sipkins	Hematologic Malignancies and Cellular Therapy	Defining the Rules of Breast Cancer Cell Traffic Through Bone	R01
Dorothy Sipkins	Hematologic Malignancies and Cellular Therapy	Defining and targeting a novel pathway for central nervous system leptomeningeal metastasis	R01
Anthony D. Sung	Hematologic Malignancies and Cellular Therapy	Home-based Autologous Hematopoietic Stem Cell Transplantation to Improve Outcomes and Decrease Costs	R01
Anthony D. Sung	Hematologic Malignancies and Cellular Therapy	Hematopoietic Stem Cell Transplantation Combined with CSF1 Inhibition to Attenuate the Pathogenesis of Alzheimer's Disease	R03
Anthony D. Sung	Hematologic Malignancies and Cellular Therapy	Evaluating Effects of Age-related Microbiota Modulations in Hematopoietic Stem Cell Transplant Patients	R21
Gowthami Arepally	Hematology	Complement and CR2/CD21 in the Immune Pathogenesis of HIT	R01
Gowthami Arepally	Hematology	Complement and Thrombosis in HIT	R01
Grace M. Lee	Hematology	Variability in neutrophil activation	R03
Grace M. Lee	Hematology	Neutrophil Activation Phenotypes in Healthy Subjects and Implications for Bacterial Clearance	R21
James White	Hematology	The AMPK/ULK1/p27Kip1 axis regulates autophagy and cell survival in aged satellite cells	K01
James White	Hematology	Assessing healthspan and epigenetics in aged mice after prolonged exposure to young circulation	R21
Andrew Alspaugh	Infectious Diseases	Coordinated Regulation of Virulence Genes in <i>C. neoformans</i>	R01
Andrew Alspaugh	Infectious Diseases	Metal Homeostasis in Yeast	R01
Arthur W. Baker	Infectious Diseases	Combined Use of Statistical Process Control and Whole Genome Sequencing to Detect and Investigate Nontuberculous Mycobacterial Clusters and Outbreaks	K08
Maria Biasi	Infectious Diseases	Targeting the HIV-1 reservoir with a combination of an IDLV-SiVag therapeutic vaccine and Fo-engineered bnAbs	R56
Vivian H. Chu	Infectious Diseases	Bridging the Gap to Enhance Clinical Research Program (BIGGER)	R25
Vance G. Fowler Jr.	Infectious Diseases	Mentoring Patient Oriented Research in Antibiotic-Resistant Bacteria	K23
Feng Gao	Infectious Diseases	Dissection of polyreactivity and neutralization activity of HIV-1 Abs	R01
Greg Gray	Infectious Diseases	Swine Influenza Virus Transmission in Confined Animal Feeding Operations, China	R01
Thuy Le	Infectious Diseases	Mapping of the IgM and IgG antibody responses to <i>Talaromyces marneffii</i> infection in mice and humans - Deciphering acute from reactivated or latent infections	R21
Susanna Naggle	Infectious Diseases	Identification of Novel Bioactive Lipid Metabolites for Predicting Liver-related Outcomes in Persons Co-Infected with HIV and HCV	R01
Nwora L. Okeke	Infectious Diseases	A Clinic-Based Behavioral Intervention to Reduce Cardiovascular Disease Risk in Persons Living with HIV	K23
John Perfect	Infectious Diseases	Evolution of <i>Cryptococcus neoformans</i> Strains from Patients with HIV/AIDS	R01
Wendy A. Prudhomme - O'Meara	Infectious Diseases	Malaria diagnostic testing and conditional subsidies to target ACTs in the retail sector: the TESTsmART trial	R01
Matthew P. Rubach	Infectious Diseases	Viral Zoonoses and Severe Febrile Illness in Northern Tanzania	K23
Matthew Rubach	Infectious Diseases	Sepsis Characterization in Kilimanjaro	R01
Steve Taylor	Infectious Diseases	Malaria chemoprevention in children with sickle cell anemia in Western Kenya	R01
L. Gayani Tilkeeratne	Infectious Diseases	Novel Diagnostics to Improve Antimicrobial Stewardship for Acute Respiratory Tract Infections in Resource-Limited Settings	K23
Andrew Armstrong	Medical Oncology	Targeting convergent oncogenic signaling during AR inhibition to overcome metastasis and immune evasion in prostate cancer	R01
Gerard C. Blobe	Medical Oncology	Role of ALK4 in Regulating Receptor Trafficking and Pancreatic Cancer Biology	R01
Gerard C. Blobe	Medical Oncology	Role for TbetaRIII Shedding in the Tumor Microenvironment	R01
Brent A. Hanks	Medical Oncology	Investigating the PD-L1-NLRP3 signaling axis as a tumor intrinsic mechanism of adaptive resistance to anti-PD-1 antibody immunotherapy	R37
Kevin C. Oeffinger	Medical Oncology	EMPOWER Study: Promoting BC Screening in Women Who Survived Childhood Cancer	R01
Kevin C. Oeffinger	Medical Oncology	Onco-primary care networking to support TEAM-based care - the ONE TEAM Study	R01
Steven Patierno	Medical Oncology	Race-Related Alternative Splicing: Novel Targets in Prostate Cancer	R01
Allison E. Ashley-Koch	Nephrology	Identifying novel clinical, genetic and proteomic risk factors for sickle cell nephropathy.	R21
Steven D. Crowley	Nephrology	The interleukin-1 receptor regulates crosstalk between myeloid and renal tubular cells in hypertension	R01
Mary H. Foster	Nephrology	Gene-Environment Collaboration in Autoimmune Disease	R01
Gentzon Hall	Nephrology	The Role of Interleukin-15 Receptor-alpha Variants in the Pathogenesis of FSGS	K08
Rasheeda K. Hall	Nephrology	Deprescribing for Older Dialysis Patients	K76
Xunrong Luo	Nephrology	Modeling concurrent cytomegalovirus infection and transplantation tolerance	R01
Laura P. Svetkey	Nephrology	Duke CTSA (KL2)	KL2
Crystal C. Tyson	Nephrology	Diet and Hypertension Management in Chronic Kidney Disease	K01
Christina M. Wyatt	Nephrology	Impact of early antiretroviral therapy on kidney disease outcomes	R01
Christopher Cox	Pulmonary	PCplanner	R01
Zachary R. Healy	Pulmonary	Characterization of CMV-specific T cell responses in immunocompromised hosts	K99
Jennifer L. Ingram	Pulmonary	Mechanisms that Direct Airway Remodeling in Obese Asthma	R01
Jennifer L. Ingram	Pulmonary	Matrix Metalloproteinase-19 as a Mediator of Airway Fibrosis in Obese Allergic Asthma	R21
Bryan D. Kraft	Pulmonary	Role of S-nitrosothiols in Akt1 signaling and pneumonia resolution	K08
Patty Lee	Pulmonary	TLR4-MEDIATED EPIGENETIC AND SENESCENCE MECHANISMS IN EMPHYSEMA	R01
David M. Murdoch	Pulmonary	Magnetically directed single cell transcriptome analysis in HIV latency	R01
David M. Murdoch	Pulmonary	A Systems Biology Approach to HIV-associated Neurocognitive Impairment: Role of Drug Abuse and Neuroinflammation	R01
David M. Murdoch	Pulmonary	Pathogenesis of Neuroinflammation and Neurocognitive Impairment in HIV-infected Young Adult Cannabis Users	R01

Scott M. Palmer	Pulmonary	Proof of concept treatment interventions in a rodent model of the rare disease bronchiolitis obliterans	R21
Claude A. Plantadosi	Pulmonary	Mitochondrial quality control and alveolar damage resolution after acute lung injury	R01
Robert M. Tighe	Pulmonary	CXCL10/CXCR3 regulation of ozone-induced epithelial permeability	R01
Yen Rei Yu	Pulmonary	Role of Resident Monocytes in the Pathogenesis of Pulmonary Arterial Hypertension	K08
Brian Andonian	Rheumatology	Accelerated Metabolic Aging in Rheumatoid Arthritis Immune cells and Skeletal Muscle: A Pilot Study	R03
Kim M. Huffman	Rheumatology	Weight loss and exercise to improve rheumatoid arthritis cardiovascular risk	R21
Kim M. Huffman	Rheumatology	ENHANCING THE CALERIE NETWORK TO ADVANCE AGING BIOLOGY	R33
Virginia B. Kraus	Rheumatology	Epigenetic Mechanisms Promoting Longevity	R01
Virginia B. Kraus	Rheumatology	Extracellular Vesicle Analyses to Develop Aging and Resilience Biomarkers	R01