Current & Previous Scholars:

**Joseph Alge MD, PhD**  
*Discovery of Graft-Versus-Host Disease Biomarkers by Proteomic Analysis of Plasma Exomes*  
Mentor: John Arthur, MD, PhD  
Fellow, Pediatric Nephrology  
Baylor College of Medicine

**Melissa Allen, MD**  
Mentor: Kevin Delaney, MD, MBA  
Fellow, Pediatric Orthopedics  
Baylor College of Medicine

**Kelly Anderson, PhD**  
*Optimizing Post-Stroke Motor Learning Treatment Conditions*  
Mentor: Michelle Woodbury, PhD, OTR/L  
Assistant Professor, Occupational Therapy  
Eastern Carolina University

**Jazmine Arroyo**  
Mentor: Bonnie Martin-Harris, PhD

**Daniel Baer**  
*Mild Cognitive Impairment and Alzheimer’s Disease: Progression in Brain Function and Etiological Links*  
Mentor: Andrew Lawson, PhD  
Pre-doctoral Candidate  
MUSC

**John Barrows**  
*Personalized Therapy for BRCA 1-mutant Tumors*  
Mentor: David Long, PhD  
Pre-doctoral Candidate  
MUSC

**David Bastian**  
*Targeting JAK2 to Control T-Cell Alloreactivity and Graft-versus-Host Disease*  
Mentor: Xue-Zhong Yu, MD, MS  
Pre-doctoral Candidate  
MUSC

**Alyson Black**  
*High-Throughput Glycoprotein Biomarker Discovery by MALDI Mass Spectrometry Imaging of Antibody Arrays for Serum Biomarkers of Hepatocellular Carcinoma*  
Mentor: Anand Mehta, PhD  
Pre-doctoral Candidate  
MUSC

**Andrea Boan, PhD**  
Mentor: Daniel Lackland, PhD  
Assistant Professor, Pediatrics
Raymond Boaz
Multivariate Air Pullutant Exposure Prediction and Characterization
Mentor: Andrew Lawson, PhD
Pre-doctoral Candidate
MUSC

Mary (Catherine) Bridges
The Adherens Junctions Suppress Pro-Tumorigenic Colon Cell Transformation Via Long Non-Coding RNAs
Antonis Kourtidis, PhD
Pre-doctoral Candidate
MUSC

Catherine Bridges
Microglial Contributions to MEF2C Haploinsufficiency Syndrome
Mentor: Christopher Cowan, PhD
Pre-doctoral Candidate
MUSC

Guillermo De Angulo, MD
Mentor: Robert Adams, MD
Clinical Instructor, Pediatrics
Weill-Cornell

Danielle Desjardins, MD, PhD
Mitochondrial Dysfunction in Degenerative Pathologies
Mentor: Zsolt Ablonczy, PhD
Resident, Anesthesiology & Perioperative Medicine
Oregon Health & Science University

Maria Dipiro, PhD
Aerobic Exercise to Treat Depression Following Incomplete SCI
Mentor: James Krause, PhD
Post-doctoral Scholar, Rehabilitation Research
MUSC

Ravyn Duncan
Enhancing Anti-myeloma T Cell Activity by Inhibiting FOXP3 Function
Mentor: Nathan Dolloff, PhD
Pre-doctoral Candidate
MUSC

Clayton “Tyler” Ellis, MD
Effect of Seat Belt Use and Impact of Mandatory Seat Belts Laws on Motor Vehicle-Related Health and Economic Outcomes
Mentor: Nester Esnaola, MD
Fellow, Colorectal Surgery
University of Massachusetts Medical School

Victor Fresco, PhD
Fibulin-1 Dysregulation of Fgf8 Signaling in DiGeorge Syndrome
Mentor: W. Scott Argraves, PhD
Caroline Fugle, PhD  
*The Role of TGFβ in B-Cell Biology and Autoimmunity*  
Mentor: Zihai Li, MD, PhD  
Post-doctoral Scholar, Surgery  
MUSC  

Kendrea Garand, PhD  
*Quantifying Normal Swallow Physiology Across the Adult Lifespan*  
Mentor: Bonnie Martin-Harris, PhD  
Assistant Professor, Speech Pathology & Audiology  
University of South Alabama  

George “Russell” Glenn, MD, PhD  
*Assessment of Ischemic Stroke with Advanced Diffusion Magnetic Resonance Imaging*  
Mentor: Jens Jensen, PhD  
Intern, Internal Medicine  
Emory University  

David Gray, MD  
*Cost of Care for Systemic Lupus Erythematosus: Effect of Disability*  
Mentor: Jim Oates, MD  
Physician, Rheumatology/Internal Medicine  
BayCare  

Jordan Gruber, PhD  
*The Role of Dihydroxyquinoline (DHQ) in Pseudomonas Aeruginosa Pathogenicity*  
Mentor: Yong-Mei Zhang, PhD  
Microbial Business Manager  
DuPont  

Myroslawa Happe  
*Age-related Changes in B-cells Impact Immune Responses to Pneumococcal Vaccination in Aging HIV+ Individuals*  
Mentor: Maria Anna Westerink, MD  
Pre-doctoral Candidate  
MUSC  

David Hartmann  
A Potential New Role for Pericytes in Functional Hyperemia  
Mentor: Andy Shih, PhD  
Pre-doctoral Candidate  
MUSC  

Charles Hatcher, MD  
Mentor: Michelle Macias, MD  

Daniel Herr  
*Elucidating the Effects of Class I and Iia HDACs on GATA4 Regulation in Heart Failure*  
Mentor: Donald Menick, PhD  
Pre-doctoral Candidate  
MUSC  

Casey Holmes, MD
Neuroprotective Role of Melatonin Receptors in Spinal Cord Injury
Mentor: Steven Rosenzweig, PhD
Resident, Family Medicine
Self-Regional Healthcare

Jennifer Hunnicutt, PhD
Central and Peripheral Neuromuscular Adaptations as Indicators of Functional Recovery Following Anterior Cruciate Ligament Reconstruction
Mentor: Chris Gregory, PhD
Post-doctoral Scholar, Orthopedics
Emory University

Stephanie Jones
Understanding Nicotine Dependence and Smoking Cessation Failure: the Role of Genetic Variation
Mentor: Linda Kelemen, MSc, ScD
Pre-doctoral Candidate
MUSC

Serena-Kaye Kinley-Cooper
Enhancing Motor Recovery Following MCAo in Aged Rats
Mentor: Deanna Adkins, PhD
Pre-doctoral Candidate
MUSC

Joy Kirkpatrick
Use of KDM4B Inhibitors for Prevention of Periodontal Disease Progression
Mentor: Patrick Woster, PhD
Pre-doctoral Candidate
MUSC

Craig Kutz, MD, PhD
Targeting Epigenetic Enzymes as Potential Therapeutics in Cardiac Ischemia-Reperfusion Injury
Mentor: Patrick Woster, PhD
Resident, Emergency Medicine
University of California San Diego

Daniel Lench
Interaction of Depression and Sensorimotor Function: A Study Comparing Healthy Individuals and Chronic Stroke Patients
Mentor: Colleen Hanlon, PhD
Pre-doctoral Candidate
MUSC

Anthony Leonard, MD, PhD
Mitochondrial Protective Mechanisms in the Neurodegenerative Process of Retinita Pigmentosa
Mentor: Craig Beeson, PhD
Resident, Ophthalmology
Washington University School of Medicine

Sarah Logan, PhD
Psychotropic Therapy for Children with Autism Spectrum Disorders
Mentor: Joyce Nicholas, PhD
Post-doctoral Scholar, Public Health Sciences
MUSC

**Jordan Magarik, MD**
Mentor: Daniel Lackland, PhD
Resident, Neurological Surgery
Vanderbilt

**Katlyn McGrattan, PhD**
*Validation of a Noninvasive Assessment Method for Feeding and Swallowing Impairment in Infants with Cardiac Conditions*
Mentor: Bonnie Martin-Harris, PhD
Post-doctoral Scholar, Otolaryngology
MUSC

**Danira Medunjanin**
*Survival and Healthcare Patterns of Elderly Veterans with Advanced CKD*
Mentor: Kelly Hunt, PhD
Pre-doctoral Candidate
MUSC

**Kristin Midgett, PhD**
*The Effects of PFOS (Perfluorooctane sulfonic acid) on the Immune System and its Possible Role in Triggering Systemic Lupus Erythematosus (SLE)*
Mentor: Diane Kamen, MD, MSCR

**Xinh-Xinh Nguyen**
*The Role of Lysyl Oxidase in Systemic Sclerosis*
Mentor: Carol Feghali-Bostwick, PhD
Pre-doctoral Candidate
MUSC

**Charles Reese III**
*Monocyte/Fibrocyte Lineage in Fibrotic Disease: Universal and Tissue-Specific Features*
Mentor: Stanley Hoffman, PhD
Pre-doctoral Candidate
MUSC

**Owen Reeves, PharmD**
*Dosing with d-Methylphenidate (Focalin) in Humans with Avoid the PK/PD Interactions dl-Methylphenidate (Ritalin) has with Alcohol* *
Mentor: Kennerly Patrick, PhD
Pharmacist, Publix
Greenville, SC

**Brian Riesenberg**
*Role of Platelets in Dampening Antitumor Immunity*
Mentor: Yi Yang, PhD
Pre-doctoral Candidate
MUSC

**Douglas Roberts-Wolfe**
*LTP in the Nucleus Accumbens Shell in Cocaine Extinction*
Mentor: Peter Kalivas, PhD
Halley Rycenga
*The Role of p97 in DNA Crosslink Repair*
Mentor: David Long, PhD
Pre-doctoral Candidate
MUSC

Clarence "Trey" Schiltz, PharmD
*Incidence and Impact of Cardiovascular Disease on Graft Function and Survival in Kidney Transplant Recipients: What is the Role of Race?*
Mentor: Kenneth Chavin, MD, PhD
District Leader, CVS Pharmacy
Charlotte, NC

Steven Schutt
*Identifying the Role and Immunobiological Mechanisms of Fli-1 Mediated Pathogenicity in Chronic Graft-versus-Host Disease*
Mentor: Xue-Zhong Yu, MD
Pre-doctoral Candidate
MUSC

Jennifer Scott, MD, PhD
*Estrogen Receptor Alpha Modulation of Type I Interferon Production in Plasmacytoid Dendritic Cells Derived from Lupus Patients*
Mentor: Gary Gilkeson, MD
Resident, Internal Medicine
MedStar Health

Jamie Speiser, PhD
*Random Forest Prognosis Model for Repeatedly Measured Binary Patient Outcomes*
Mentor: Valerie Durkalski-Mauldin, PhD
Assistant Professor, Biostatistical Sciences
Wake Forest University

Brandi Stevens, MD
*Determining the Role of PBDEs and PFAAs as Environmental Triggers of Autoimmunity in Genetically at-risk Individuals*
Mentor: Diane Kamen, MD
Assistant Professor, Pediatric Rheumatology
Riley Hospital for Children

Danielle Stevens
Prenatal and Early Life Exposures and Subsequent Cardiometabolic Risk
Mentor: Kelly Hunt, PhD
Pre-doctoral Candidate
MUSC

Erik Strungs
Mentor: Louis Luttrell, MD, PhD
Pre-doctoral Candidate
MUSC
April Taylor-Clift, PhD  
Mentor: Michael Saladin, PhD  
Clinical Psychologist, Trauma Recovery  
James A. Haley Veterans Affairs Hospital

Jonathan Turner  
Design of Novel Penicillin Binding Protein 2 (PBP2) Inhibitors as Drug Candidates for Penicillin- and Cephalosporin-Resistant Neisseria Gonorrhoeae  
Mentor: Christopher Davies, PhD  
Pre-doctoral Candidate  
MUSC

Caroline Vrana-Diaz  
Gender Equity and HIV Self-testing in Kenya and Uganda  
Mentor: Jeffrey Korte, PhD  
Pre-doctoral Candidate  
MUSC

Patricia Watkins, MD, PhD  
Mentor: Joseph Jenrette, MD  
Fellow, Neonatology  
University of Iowa

Jason Wheeler, MD  
Chemotherapy Sensitivity of Esophageal Adenocarcinoma  
Mentor: Carolyn Reed, MD  
Resident, Internal Medicine  
Cleveland Clinic

Lee Wheless, MD, PhD  
Mentor: Anthony Alberg, PhD  
Resident, Dermatology  
Vanderbilt

Carly Williams  
The Regulation of c-Casitas B-Lineage Lymphoma (c-Cbl) by Hormonally Up-regulated Neu-associated Kinase (HUNK) in Epidermal Growth Factor Receptor (EGFR) Degradation in Triple-Negative Breast Cancer (TNBC)  
Mentor: Elizabeth Yeh, PhD  
Pre-doctoral Candidate  
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