

## Department of Physiology Open Labs 2023-24

PI	Accepting Students	Rotations	Research Blitz	Poster Session	Lab Descriptions
<b>Bieberich, Erhard</b>	Yes	1, 2, 3, 4	No	Yes	Lipid biochemistry, stem cell research, brain development, neurodegeneration
<b>Blair, Cheavar</b>	Yes	1, 2, 3, 4	Yes	Yes	Understanding the impact of cellular stress in the heart using Human Induced Stem Cell-Derived Cardiomyocytes, live-cell imaging, and CRISPR technologies
<b>Campbell, Kenneth</b>	Maybe	1, 2, 3, 4	Yes	Yes	Heart failure, computer modeling, and Biospecimens
<b>Daugherty, Alan</b>	Maybe	1, 2, 3, 4	Yes	Yes	Molecular Mechanisms of Human Vascular Diseases
<b>Frolenkov, Gregory</b>	Yes	1, 2, 4	Yes	Yes	Cellular and Molecular Mechanisms of Hearing
<b>Fry, Christopher</b>	Yes	1, 2, 3, 4	Yes	Yes	Regulation mechanisms of skeletal muscle plasticity
<b>Gensel, John</b>	Yes	1, 2, 3, 4	Yes	Yes	Neuroinflammation in Spinal Cord and Brain Injury
<b>Graf, Gregory</b>	Yes	1, 2, 3	Yes	Yes	Novel proteins and pathways that directly influence risk factors for metabolic diseases
<b>Helsley, Nate</b>	Yes	1, 2, 3, 4	Yes	Yes	How fatty acid metabolism impacts obesity, atherosclerosis, and chronic liver diseases
<b>Hubbard, Brad</b>	Yes	1, 2, 3, 4	Yes	Yes	Understanding the underlying mechanisms of and therapeutic strategies for traumatic brain injury
<b>Johnson, Lance</b>	Maybe	1, 2, 3, 4	Yes	Yes	ApoE, brain metabolism and cognition
<b>Macauley, Shannon</b>	Maybe	3, 4	Yes	Yes	How alterations in brain metabolism relate to sleep impairment, vascular dysfunction, and inflammation in Alzheimer's disease
<b>Nikolova-Karakashian, Mariana</b>	Maybe	1, 2, 3, 4	No	Yes	Role of Sphingolipid Signal Transduction Pathway in Animal Aging
<b>Patel, Samir</b>	Maybe	3, 4	No	Yes	Characterizing rodent model of sepsis survivor following spinal trauma and targeting mitochondrial dysfunction to treat spinal injury
<b>Satin, Jonathan</b>	Yes	1, 2, 3, 4	Yes	Yes	Heart function, heart remodeling and ion channels
<b>Sheppard, Mary</b>	Yes	3, 4	Yes	Yes	Cardiovascular, congenital aortopathies and arteriopathies
<b>Spassieva, Stefanka</b>	Yes	1, 2, 3, 4	No	Yes	Sphingolipid neurotoxicity, Chemotherapy-induced peripheral neuropathy
<b>Velez-Ortega, A. Catalina</b>	Yes	1, 2, 3, 4	Yes	Yes	Inner ear sensory organelles; cytoskeleton remodeling
<b>Wen, Yuan</b>	Maybe	3, 4	No	Yes	Ribosomes and translation in aging, Computation and bioinformatics, Single cell/nucleus and spatial sequencing