

2023 Lab Assignments

Names	Host	Project
Georgiette Adejayan, NIH University of Connecticut 2024	Travis Thomson, PhD	<i>Viral-Like Travel: A study of viral-like movements of the retrotransposon Copia</i>
Nichole Agwu, NIH Boston University 2024	Eduardo Torres, PhD	<i>Inhibition of De Novo Sphingolipid Synthesis Disrupts Nuclear Envelope Integrity of RPE-1 Cells</i>
Minjun Ahn, SURE University of Massachusetts Amherst 2025	Darren Lee, PhD	<i>The Role A2Ar has on the Induction of Regulatory T cells in Uveitis</i>
Annika Bajaj, SURE Amherst College 2025	Cole Haynes, PhD	<i>Perturbation in the Extracellular Matrix Induces the Mitochondrial Unfolded Protein Response</i>
Melissa Ballin Cardona, NIH Macalester College 2025	Samuel Behar, MD, PhD	<i>Optimizing An Immunoassay to Detect Bacillus Calmette-Guérin-Elicited Antibodies</i>
Gabriel S.J. Barreto D'Silva, NIH Wake Forest University 2024	J. Kevin Donahue, MD	<i>Mechanism Study: How Does AdCain Reduce Hypertrophy in Atrial Fibrillation</i>
Samantha Belculfine, NIH University of Massachusetts Amherst 2023	Milena Bogunovic, MD, PhD	<i>Characterization of Enteric Neurons in Inflammatory Bowel Disease</i>
Emma M. Boudreaux, SURE University of Maine College of NSFA 2025	Erik Sontheimer, PhD	<i>Prime Editing with Cas9 Nuclease sRGN3.1</i>
Ashley N. Bradshaw, NIH New Mexico Institute of Mining and Technology 2025	Josue FloresKim, PhD	<i>Characterization of LytR, a novel factor required for antibiotic resistance in Streptococcus pneumoniae</i>
Kayla M. Carmona-Swisher, NIH University of Massachusetts Dartmouth 2024	Hayla Sluss, PhD	<i>Genetic Interaction Between p53 and MDM2 and MDMX</i>
Gabriel E. Cruz-Fernández, NIH University of Puerto Rico Mayaguez 2024	Accalia Mai-Wan Fu, PhD	<i>Characterization of Pancreatic Islet and Macrophage Interactions in Diabetes</i>
Grace H. Dodd, NIH Wellesley College 2025	Elizabeth Shank, PhD	<i>Investigating antagonism and coculture-specific antibiotic production in Bacilli</i>
Camryn L. Foster, SURE Colgate University 2025	Lee J. Quinton, PhD	<i>Developing an In vitro model for lung-liver communication preceding pneumonia</i>
Sammy D. Gómez Medina, NIH University of Puerto Rico Piedras 2024	Jie Song, PhD	<i>Micrococcal Nuclease Triggered On-demand Release of Ampicillin for Staphylococcus aureus-associated Titanium Implant Infection Prevention- Abstract</i>
Adrián E. González Santiago, NIH University of Puerto Rico Cayey 2024	Michael Brodsky, PhD	<i>Reduction of Short Tandem Repeat sequences using Paired Caspr-Cas9 Nickases</i>
Emma S. Hayes, NIH Massachusetts College of Pharmacy and Health Science 2024	Javier Irazoqui, PhD	<i>Optimization of Fluorescence and Survival of C. elegans in S. aureus Strain USA300: A Platform for High Throughput Screening</i>
Mara Keahilani Hon, SURE Columbia University 2025	Jeffrey Nickerson, PhD	<i>Exploring the LINC Complex's role in nuclear structure and gene expression by confocal microscopy and CUT&Tag epigenomic profiling</i>
Theodore Hsiao, SURE University of Maryland College Park 2025	Andrea Roboldi, PhD	<i>IgA+ B cells preferentially upregulate gut homing receptors a4b7 and CCR9</i>
Kyle Hur, NIH Amherst College 2025	Gang Han, PhD	<i>Optimizing the superfluorescent properties of room-temperature nanoparticles</i>
Mohamed A. Ibrahim, NIH Thomas Jefferson University 2025	Francesca Massi, PhD	<i>Exploring The Impact Of Site-Specific Labeling Techniques on the Structure and Function of Profilin-1</i>
Bogdan Ivanov, SURE Pennsylvania State University 2024	Kuang Shen, PhD	<i>Investigating the Interactions between JIP3 and Kinesin using Cryo-EM</i>
Racheal K. Lefevre, NIH Fitchburg State University 2023	Lucio Castilla, PhD	<i>Determining The Mechanism By Which Nanoparticles Enter Into Leukemic Cells</i>
Melina Lian, NIH University of Southern California 2025	Robert C. Brewster, PhD	<i>Characterizing TF Function on σ28 Promoters of Titratable Strengths</i>

Karina J. Magnus, NIH Columbia University 2024	Zaida Ramirez, PhD	<i>Analyzing Scarf1 Expression Levels in Relation to SLE-like Disease Progression in Mouse Models</i>
Adrián Márquez Hernández, NIH University of Puerto Rico Cayey 2024	Mary Munson, PhD	<i>Elucidating VPS45 binding interactions and the competition between associated proteins</i>
Ana G. Marroquin Tercero, NIH California State Polytechnic University, Pomona 2024	Ryan W. Logan, PhD	<i>Validating a transgenic mouse line designed for cell type-specific knockdown of the circadian transcription factor Npas2</i>
Patricia I. Morales-Iglesias, NIH University of Puerto Rico Rio Piedras 2024	Anthony Imbalzano, PhD	<i>Peptidyl arginine deiminase (Padi) enzymes regulate the skeletal muscle differentiation through canonical BAF complex</i>
Ndongwa Pemba, NIH Agnes Scott College 2025	Milka Koupenova, PhD	<i>Antiviral Changes in Megakaryocytes: RIG-I vs TLR7</i>
David S. Pilson, NIH Morehouse College 2025	Jillian M. Richmond, PhD	<i>A novel mouse model of Cutaneous Lupus Erythematosus generates Anti-Nuclear Antibodies</i>
Nicolle Rodriguez, NIH Dominican University 2024	Stuart Levitz, PhD & Charles Specht, MD	<i>Exploring pathogenic potency: Comparative analysis of clinical Cryptococcus strains</i>
Sarah F. Rodriguez, NIH University of Texas Austin 2024	Marcus Ruscetti, PhD	<i>Modification of SASP from Docetaxel-Induced Senescence by IFNβ enhances therapeutic efficacy</i>
Rosmery Rosario Cueto, NIH Universidad del Este 2024	Ann M. Rothstein, PhD	<i>Cell Specific Activation of TLR9 in DNase II Deficient Mice</i>
Jonathan P. Schowalter, NIH University of New Orleans 2025	Michael J. Lee, PhD	<i>Histone Deacetylase Inhibitor-Induced Lethality is Dependent on Acetate Availability</i>
Raheem S. Sheikh, SURE CUNY Hunter College 2025	Joac Wu, PhD	<i>The Role of Protein Arginine Methyltransferase 5 (PRMT5) in Non-Alcoholic Fatty Liver Disease (NAFLD)</i>
Chelsey C. Southwell, SURE Southwestern University 2024	Nikolaus Grigorieff, PhD	<i>Exploring Cryo-EM Methods to Resolve the Rotavirus SLP Structure</i>
Varun Vardhan R. Tummalapalli, SURE University of Southern California 2025	Jin Zhang, PhD	<i>Characterizing the effects of stress on taste cells</i>
Julie A. Vazquez Almodovar, NIH Inter American University of Puerto Rico San German 2025	Chan Zhou, PhD	<i>Transcriptomics analysis reveals novel long non-coding RNA in COVID-19 neurotropism</i>
Catharine F. H. Wingle, NIH Thomas Jefferson University 2024	Sumeda Nandadasa, PhD	<i>Primary cilia are essential for umbilical cord smooth muscle cell differentiation and elongation</i>
Stanley S. Yuan, SURE University of Texas Austin 2024	Marcus Ruscetti, PhD	<i>Calcineurin increases cell cycle arrest duration in C. albicans</i>