2015-2016 RECIPIENTS OF THE DEGREE DOCTOR OF PHILOSOPHY

Alina Ainbinder, B.Sc. Ort Braude College, M.S. University of Rochester; Pharmacology
Thesis: Structural and Functional Impact of Mitochondrial Ca2+ Signaling in Skeletal Muscle
Advisor: Dr. Robert Dirksen

Alejandro Avilés Reyes, B.S. University of Puerto Rico, M.S. University of Rochester; Microbiology and Immunology
Thesis: Characterization of the Streptococcus mutans Collagen Binding Protein Cnm: From Post-Translational Modification to its Role in Infection
Advisor: Dr. José Lemos

Jonathon Baker, B.S. SUNY Geneseo, M.S. University of Rochester; Microbiology and Immunology
Thesis: Acid and Oxidative Stress Responses in Streptococcus mutans
Advisor: Dr. Robert Quivey

Angela Balliano, B.S. Nazareth College, M.S. University of Rochester; Biochemistry
Thesis: Characterization of ATP-Dependent Chromatin Remodeler-Nucleosome Interactions and Analysis of the Role of HMGB1 in Base Excision Repair
Advisor: Dr. Jeffrey Hayes

Juliann Beaulieu, B.S. Muhlenberg College, M.S. Villanova University, M.S. University of Rochester; Genetics
Thesis: A Novel Extracellular Protease-Mediated Mechanism Regulating FGF Signaling During Branching Morphogenesis
Advisor: Dr. Dirk Bohmann

Sage Begolly, B.A. University of Delaware, M.S. University of Rochester; Toxicology
Thesis: Response of Oligodendrocyte Progenitor Cells to Single Dose and Fractionated Irradiation: Potential Implications for Central Nervous System Radiation Late Effects
Advisor: Dr. M. Kerry O’Banion
Co-Advisor: Dr. John Olschowka

John Bennett, B.S. Western Carolina University, M.S. University of Rochester; Toxicology
Thesis: Lack of Aryl Hydrocarbon Receptor Alters Gene Expressions and Functional Capacity of Murine Hematopoietic Stem Cells
Advisor: Dr. Thomas Gasiewicz
Alison Billroth-MacLurg, B.A. Whittier College, M.S. University of Rochester; Microbiology and Immunology
Thesis: FoxP3+ Regulatory T cell Fate in Inflamed Tissues
Advisor: Dr. Deborah Fowell

Lisbeth Boulé, B.S. Lafayette College, M.S. University of Rochester; Microbiology and Immunology
Thesis: Characterizing the Effects of Developmental Activation of the Aryl Hydrocarbon Receptor on CD4+ T Cell Responses Later in Life
Advisor: Dr. Paige Lawrence

Lauren Brooks, B.A. Virginia Polytechnic Institute, B.S. Virginia Polytechnic Institute, M.S. University of Rochester; Microbiology and Immunology
Thesis: Investigating Novel Antimicrobial Strategies in vitro and in Murine Models of Infection
Advisor: Dr. Stephen Dewhurst

Rahul Chandrasekhar, B.Sc. University of York, M.Sc. Aston University, M.Sc. King’s College of London, M.S. University of Rochester; Pharmacology
Thesis: Unique Regulatory Properties of Heterotetrameric Inositol 1, 4, 5-trisphosphate Receptors Revealed by Studying Concatenated Receptor Constructs
Advisor: Dr. David Yule

Lesley Chapman, B.S. Duke University, Translational Biomedical Science
Thesis: MicroRNA-451 Regulates T Helper Cell Responses
Advisor: Dr. Craig Morrell

Tian Chen, B.S. Nankai University, M.S. University of Toledo, M.A. University of Rochester; Statistics
Thesis: A New Class of Functional Response Models for Robust Regression Analysis
Advisor: Dr. Xin Tu

Benson Cheng, B.S. University of California, M.S. University of Rochester; Microbiology and Immunology
Thesis: Development of Live-Attenuated Arenavirus Vaccines
Advisor: Dr. Luis Martinez-Sobrido

Jonathan Cherry, B.S. Ursinus College, M.S. University of Rochester; Pathology
Thesis: Neuroinflammation and the Glial Response Contribute to Both Beneficial and Pathological Outcomes in Multiple Disease Models
Advisor: Dr. M. Kerry O’Banion
Co-Advisor: Dr. John Olschowka
Adrianne Chesser, B.A. Carleton College, M.S. University of Rochester; Neuroscience
Thesis: Selectively Enhancing the Clearance of Pathological Tau Through the Use of Phytochemical Compounds
Advisor: Dr. Gail Johnson Voll

Amit Chowdhry, B.S. Cornell University, M.A. University of Rochester; Statistics
Thesis: Missing Data in Meta-Analysis
Advisor: Dr. Michael McDermott

Garry Coles, B.S. SUNY Brockport, M.S. SUNY Brockport, M.S. University of Rochester; Genetics
Thesis: KIF7 and Microtubule Dynamics Function to Regulate Cellular Proliferation and Cell Cycle Progression
Advisor: Dr. Kate Ackerman

Andrew Cox, B.S. Southern Nazarene University, M.S. University of Rochester; Microbiology and Immunology
Thesis: Improving the Safety of the Live Attenuated Influenza Virus Vaccine
Advisor: Dr. Stephen Dewhurst

Sarah Cron, B.S. Swiss Federal Institute of Technology, M.S. University of Rochester; Biophysics
Thesis: Investigating an SF 3b 155 Scaffold for UHM-containing Splicing Factors
Advisor: Dr. Clara Kielkopf

Benjamin Cross, B.S. University of Pittsburgh, M.S. University of Rochester; Microbiology and Immunology
Thesis: The Role of PlsX in Fatty Acid Synthesis and Acid Adaptation in Streptococcus mutans
Advisor: Dr. Robert Quivey

Stefanie DeVito, B.S. SUNY Binghamton, M.S. University of Rochester; Biochemistry
Thesis: Contributions of Pyrimidine Biosynthesis to Viral Infection
Advisor: Dr. Joshua Munger

Amali Epa, B.Sc. University of Colombo, M.S. University of Rochester; Pathology
Thesis: The Role of Cellular Cross Talk in Regulating Human Lung Fibroblast to Myofibroblast Differentiation
Advisor: Dr. Patricia Sime

He Fang, B.S. Nankai University, M.S. University of Rochester; Biophysics
Thesis: Structural Transition of the Carboxyl-terminal Domain of Xenopus Linker Histone H1.0
Advisor: Dr. Jeffrey Hayes
Marina Feigenson, B.A. Tel-Aviv University, M.S. Tel-Aviv University, M.S. University of Rochester; Biochemistry
Thesis: Investigating the Role of PFE2 Receptor Subtype 1 in Mesenchymal Stem Cell Differentiation
Advisor: Dr. Regis O'Keefe

Jenna Frame, B.S. University of Rochester, M.S. University of Rochester; Pathology
Thesis: Emergence and Regulation of Hemogenic Endothelium in the Mammalian Yolk Sac
Advisor: Dr. James Palis

Yinghan Fu, B.S. Fudan University, M.S. University of Rochester; Biophysics
Advisor: Dr. David Mathews

Mary Gantz Marker, B.S. Lycoming College, M.S. University of Rochester; Pharmacology
Thesis: Cell-Type and Stimulus-specific Regulation of JUN and BIM by EGLN3 in Multiple Models of Neuronal Death
Advisor: Dr. Robert Freeman

Alison Gaylo, B.S. Bucknell University, M.S. University of Rochester; Microbiology and Immunology
Thesis: Mechanisms of CD4 + T Cell Motility in the Inflamed Dermal Interstitium
Advisor: Dr. Deborah Fowell

Linlin Guo, B.S. China Agricultural University, M.S. University of Rochester; Genetics
Thesis: Interactions between Innate Immune Signaling, Gut Microbiota, and Tissue Regeneration in the Control of Homeostasis in the Aging Fly Intestine
Advisor: Dr. Heinrich Jasper
Co-Advisor: Dr. Dirk Bohmann

Megan Herr, B.S. Daemen College; Epidemiology
Thesis: Antidepressant Use and Risk of Central Nervous System Metastasis
Advisor: Dr. David Rich

Thomas Hilimire, B.S. SUNY Geneseo, M.S. University of Rochester; Biophysics
Thesis: Strategies for Targeting the Frameshift Stimulatory RNA of HIV-1 with Synthetic Molecules
Advisor: Dr. Benjamin Miller

Ji Young Hwang, B.S. Ewha Women’s University, B.B.A. Ewha Women’s University, M.S. University of Rochester; Microbiology and Immunology
Thesis: Functional Role of Inducible Bronchus-Associated Lymphoid Tissue (iBALT) in Allergic Airway Inflammation
Advisor: Dr. Troy Randall
Letitia Jones, B.S. California State University, M.S. California State University, M.S. University of Rochester; Microbiology and Immunology
Thesis: Modeling HIV-1 Induced Blood-Brain Barrier in Mice
Advisor: Dr. Sanjay Maggirwar

Ayse Kizilyer, B.S. Gaziantep University, M.S. Gaziantep University, M.S. University of Rochester; Pathology
Thesis: The Role of Neurotrophin Signaling in Megakaryocyte Differentiation and Platelet Production
Advisor: Dr. Sanjay Maggirwar

Walter Knight, B.A. Cornell University, M.S. University of Rochester; Pharmacology
Thesis: Regulation, Function, and Mechanisms of Cyclic Nucleotide Phosphodiesterase 1C in Pathological Cardiac Remodeling and Dysfunction
Advisor: Dr. Chen Yan

Sara Knowlden, B.S. Rochester Institute of Technology, M.A. Brown University, M.S. University of Rochester; Microbiology and Immunology
Thesis: Lysophosphatidic Acid and Autotaxin Regulate T Cell Migration and Contribute to Allergen-induced Lung Inflammation
Advisor: Dr. Steve Georas

Zackery Knowlden, B.S. Rochester Institute of Technology, M.S. University of Rochester; Microbiology and Immunology
Thesis: The Influence of CD4 T Cell Specificity on Differentiation of the Repertoire and Shaping the Adaptive Immune Response to Influenza Infection
Advisor: Dr. Andrea Sant

Katie Lannan, B.S. Rochester Institute of Technology, M.S. University of Rochester; Microbiology and Immunology
Thesis: Discovery of New Molecules that Regulate Platelet Function
Advisor: Dr. Richard Phipps

Rialnat Lawal, B.S. Rutgers University, M.S. University of Rochester; Pathology
Thesis: Osteolineage Notch Ligand Jagged1 Regulates Bone Homeostasis and Parathyroid Hormone-Dependent Long Term Hematopoietic
Advisor: Dr. Laura Calvi

Yelena Lerman, B.S. University of Rochester, M.S. Chemistry University of Rochester, M.S. Pharmacology University of Rochester; Pharmacology
Thesis: Integrin α3β1 on Neutrophils during Sepsis and TLR-mediated Inflammation: From Function to Immunotherapy Implications
Advisor: Dr. Minsoo Kim
Allison Light, B.A. University of Vermont, M.S. University of Rochester; Pathology
Thesis: The Role of Matrix Metalloproteinases in LH-Induced Ovarian Lipid Steriodogenesis
Advisor: Dr. Stephen Hammes

Dejun Lin, B.S. Nankai University, M.S. University of Rochester; Biophysics
Thesis: Thermodynamics of Antimicrobial Lipopeptides Interaction with Lipid Membranes
Advisor: Dr. Alan Grossfield

Lindy McClelland, B.S. University of Pittsburgh, M.S. University of Rochester; Genetics
Thesis: Role of Tis11 Drosophila Intestinal Stem Cell Function
Advisor: Dr. Heinrich Jasper

Kristina Modjeski, B.S. University of Washington, M.S. University of Rochester; Pharmacology
Thesis: A Role for Glutamate Receptor Interacting Protein 1 in Platelets and T Cells
Advisor: Dr. Craig Morrell

Morgan Monaghan, B.S. Roberts Wesleyan College, M.S. University of Rochester; Biochemistry
Thesis: Identification of A2 Inter-Subunit Interactions in Factor Villa of the Blood Clotting Pathway
Advisor: Dr. Eric Phizicky

Kevin Murphy, B.S. University of Rochester; M.S. University of Rochester; Biochemistry
Thesis: The Non-Histone Protein HMGN1 Alters Core Histone Tail and H1 Interactions to Modify Higher-Order Chromatin Structure
Advisor: Dr. Jeffrey Hayes

Susanne Pallo, B.S. St. Lawrence University, M.S. University of Rochester; Neuroscience
Thesis: The Role of Tau and Amyloid-Beta in Alzheimer's Disease-Related Mitochondrial Dysfunction and Excitotoxicity
Advisor: Dr. Gail Johnson Voll

Adam Pallus, B.S. Union College, M.S. University of Rochester; Neurobiology and Anatomy
Thesis: Head Movement Control in Visual Pursuit
Advisor: Dr. Ed Freedman

Nicole Paris, B.S. Nazareth College, M.S. University of Rochester; Genetics
Thesis: Role of Wilms Tumor 1 and β−Catenin in Embryonic Diaphragm Development
Advisor: Dr. Kate Ackerman

Hen Prizant, B.S. Ort Braude College, M.S. University of Rochester; Pharmacology
Thesis: mTOR-mediated Leiomyoma Growth in Uterine-specific Tsc2-null Mice is Exclusively Dependent on Estradiol Signaling – Implications in the Treatment of Lymphangioleiomyomatosis (LAM)
Advisor: Dr. Stephen Hammes
Emily Resseguie, B.S. Calvin College, M.S. University of Rochester; Toxicology
Thesis: Regulation of Mitochondrial Function by Gentoxic Stress Response Pathways during Hyperoxia Exposure
Advisor: Dr. Michael O’Reilly

Fátima Rivera-Escalera, B.S. University of Puerto Rico, M.S. University of Rochester; Neuroscience
Thesis: The Contribution of CCR2+ Mononuclear Cells and Resident Microglia to Interleukin-1β Mediated Amyloid Beta Plaque Clearance in a Mouse Model of Alzheimer’s
Advisor: Dr. M. Kerry O’Banion
Co-Advisor: Dr. Michael Elliott

Nicole Scott, B.S. Rochester Institute of Technology, M.S. University of Rochester; Genetics
Thesis: Targeting Lysosphingolipid-Induced Lysosomal Impairment as a Critical Point for Therapeutic Intervention in Lysosomal Storage Disorders
Advisor: Dr. Mark Noble

Grayson Sipe, B.S. Lafayette College, M.S. University of Rochester; Neurobiology and Anatomy
Thesis: The Role of P2Y12 in Non-Pathological Microglial Functions during Synaptic Plasticity
Advisor: Dr. Ania Majewska

Massiel Chavez Stolla, B.S. Haverford College, M.S. University of Delaware, M.S. University of Rochester; Pathology
Thesis: Developmental Regulation of Platelet Function
Advisor: Dr. James Palis

Wei Sun, M.B.B.S. China Medical University, M.S. University of Rochester; Neuroscience
Thesis: Studies of Astrocytes Using Gene Expression Analysis
Advisor: Dr. Maiken Nedergaard

Chinmay Surve, B. Pharm. University of Mumbai, M.S. University of Rochester; Biochemistry
Thesis: Stimulation of Neutrophil Migration through the Dynamic Regulation of Signaling by Heterotrimeric G Proteins α1 and βγ Subunits
Advisor: Dr. Alan Smrcka

Thanh Van Tran, B.A. University of Rochester; M.A. University of Rochester; Statistics
Thesis: Threshold Boolean Network Inference and Experimental Design
Advisor: Dr. Anthony Almudevar

Wenzhuo Wang, B.S. University of Washington, M.S. University of Rochester, Microbiology and Immunology
Thesis: Negative Regulation of NTHi-induced Proinflammatory Mediators, IL-8 and GM-CSF, via the MEK/ERK Pathway
Advisor: Dr. Jian-Dong Li
Erin Wasserman, B.A. University of Rochester; Epidemiology
Thesis: Epidemiology and Correlates of Self-Reported Academic Dysfunction Following a Concussion in High School and College Students
Advisor: Dr. Edwin van Wijngaarden

Michael Wilson, B.S. Penn State University, M.S. University of Rochester; Pathology
Thesis: The Role of MECOM Expression in Hematopoietic Stem Cell Regulation and Myeloid Lineage Commitment
Advisor: Dr. Archibald Perkins

Changming Xia, B.E. Harbin Institute of Technology, M.S. University of Minnesota, M.A. University of Rochester; Statistics
Thesis: Generalized Semiparametric Linear Mixed-effects Models
Advisor: Dr. Sarah Thurston
Co-advisor: Dr. Hongyu Miao

Shihao Xu, B.S. Southern Medical University, M.S. University of Connecticut, M.S. University of Rochester; Biochemistry
Thesis: The Impact of Oncogenic Signaling on Metabolic Stress Responses and Human Cytomegalovirus Infection
Advisor: Dr. Joshua Munger

Haobin Ye, B.S. Beijing Forestry University, M.S. Sun Yat-sen University, M.S. University of Rochester; Pathology
Thesis: Unique Physiological and Metabolic Properties of Blast Crisis Chronic Myeloid Leukemia
Advisor: Dr. Craig Jordan

Yongchun Zhang, B.S. Nankai University, M.S. University of Rochester; Biochemistry
Thesis: β-CATENIN Signaling Integrates with BMP and CCN1 Signaling to Regulate Chondrocyte Differentiation and Cartilage Development
Advisor: Dr. Regis O'Keefe