

Graduates with Distinction in Biology

Jeremy L. Aguilar, From SNP to signaling: Genetic modifiers of odorant receptor activation by onion and garlic compounds

Aiza Akhtar, PLK1 as a therapeutic vulnerability in aggressive variant prostate cancer

Siddharth Amirneni, A gut sense for dietary protein

Sanjana Anand, Evi1 is necessary for late activation of delta-notch signaling in sea urchin embryos

Anjali Bandi, PD-associated α -synuclein pathology in mouse models

Maddie Beard, The effect of cleat position on joint kinematics and power output in cycling

Shloka Bhakta, Nrf2-mediated regulation of endothelial morphology and function in the cardiovascular system

Sayuri Bhatia, From fish to mouse: Cross-species activity of the zebrafish LEN enhancer during regeneration

Charlotte Caddell, Differential influence of plastic additives on the health of marine mammal cells

Faith Caesar, The persistence of 'Forever Chemicals': Assessing the cellular consequences of acute and chronic perfluorooctanoic acid (PFOA) exposure in liver and kidney cells

Darwin Cai, AI-Guided design to improve affinity of a conformation-selective nanobody for the β_2 AR

Sophia Kelly Cai, The effect of PCSK9 inhibition on enhancing the immune response in lung cancer

Emma Cao, Dominant resistance marker-based transformation method for *Mucor* species

Kayla Cao, Swallowing the bitter pill: A gut sense for medicine

Katherine Carlson, Functional and genetic characterization of hypoplastic left heart syndrome induced pluripotent stem cell models reveals impaired BMP signaling underlying reduced cardiomyocyte differentiation and proliferation

Claudia Carugati, Dietary protein absorption in the developing gut: Insights into the mechanism of endocytosis of zebrafish Lysosome-Rich Enterocytes

Daniel Chang, Functional characterization of genes of unknown function in *Cryptococcus neoformans*

Kyra Ye Chen, Lineage plasticity in small cell lung cancer upon resistance to targeted therapy

Inhee Cho, Sugar-induced changes in gut-brain pathways

Ryan Chou, Altered CSF1R regulation reduces the quality of microglial differentiation routes during retinal degeneration

Sahil Choudhri, The role of *Piezol* in intestinal epithelial regeneration after radiation injury

Jean Chung, Investigating genetic susceptibility to ozone exposure

Sarah Croog, The *Cryptococcus neoformans* STRIPAK complex regulates growth, developmental transitions, and virulence

Malia Dickhens, Investigating immune populations in the meninges during *Cryptococcus neoformans* infection

Jane Ding, The role of astrocytic δ -catenin in regulating astrocyte layer specificity and circuit development

Chiara Federico, Regulation of system Xc- by Divarasib

Morgan Feng, Utilizing the DD-tag system and near-haploid HAP1 cells to model endogenous CDK12 disruption

Abigayle Fernandez, Mechanisms of PFAS toxicity in *Caenorhabditis elegans*: Validating genetic variation that contributes to susceptibility in wild strains

Maia Goel, Comparative population genomics of non-model primates to investigate the role of chromosomal inversions in reproductive isolation

Sarah Gorbatov, Characterizing how lipoprotein lipase regulates lipid metabolism in zebrafish

Ashi Jain, Characterizing the ETS/COP1 axis as a critical therapeutic vulnerability in *CIC::DUX4* sarcoma proliferation and differentiation

Pauline Ann Valino Jonglertham, Genetic control of dorsal closure: morphological mutations in embryogenesis found in Df(3R)10 and Df(3R)62 of chromosome 3R deficiency screen

Ananya Kamath, Biomechanics of chapati kneading: Quantifying wrist load from a repetitive motion

Rajan Karsan, Exploring the transcriptional regulation of the neonate-to-adult intestinal development program

Samantha Keller, Understanding the high medical device infection rate by *S. marcescens*: Biofilm formation as a determining factor

Laila Khan-Farooqi, When GLP-1 analogs fail: Harnessing a gut-brain sensory pathway to reduce sugar preference

Afsa Khawar, UBE2N regulates SPP1 in tumor-infiltrating myeloid cells

Elizabeth Kim, Virus-specific CD8+ T Cell-Astrocyte fusion as a long-term fate after CNS infection

Rachel Kim, Development of a humanized mouse model to investigate the urogenital microbiome

Sare Koruk, Examining the impact of C1q and RNA in liquid-liquid phase separation in the context of Alzheimer's disease

Jane Lee, Neuromuscular pathologies contribute to severe respiratory impairment in the mdx;utrn^{-/-} mouse model of Duchenne Muscular Dystrophy

Raphael Lee, Isolation and characterization of conformationally specific nanobodies for the beta 2-adrenergic receptor

Yongjae (Steven) Lee, Understanding DMAP's role in the draining lymph nodes (dLNs)

Sarah Lin, Molecular and clinical features associated with comorbid chronic pain in obesity

Grace MacLean, Investigating the effect of enteroendocrine cell perturbation on zebrafish physiology

Jorge Mato Frontela, Yeast Histone 2B ubiquitination: differential dynamics under respiration and fermentation conditions

Rohinee Mattikalli, Construction and purification of ZIPP radioligand therapeutic for metastatic cancer therapy

Chloe Ann McGeehan, A better cocktail for livers: Combinatorial transcription factors improve iPSC-derived hepatocytes

Will McIntosh, Overcoming the blood-tumor barrier in glioblastoma treatment: Comparing localized, systemic, and targeted delivery of evolocumab (α -PCSK9) in a murine model

Isabella Mendieta, Punicic acid as an anticancer and chemoprotective agent: age-associated alterations in the tumor microenvironment modulate ovarian cancer cell viability

Giuliana Mesarick, Interactions between plastic-derived additives and glucocorticoid signaling in the induction oxidative stress in marine mammal cells

Caroline Metz, Modulation of respiratory physiology by rapamycin in Pompe disease: A whole-body plethysmography study

Sancia Milton, Quantifying of a novel antisense oligonucleotide therapeutic using SplintR ligase

Alexis Mosu, Investigating dysfunctional JAK/STAT signaling in chondrosarcoma

Danira Mukhamedyarova, *Cryptococcus* does not pre-condition microglia to limit PRR-mediated transcriptional responses

Sydney Whyte Nowak, Primary cilia as context-dependent regulators of eph/ephrin signaling

Nestor Nshimiye, Evaluating functional memory T Cell reconstitution following NT-17 therapy in lymphodepleted mice

Tessa Nyhan, Interactive effects of increased temperature and salinity on the Eastern Oyster (*Crassostrea virginica*)

Maura E. Ott, ATP and actions of ATPases in septic erythrocytes

Sushrit Pasumarthy, The effects of pd-11 overexpression on cd8+ t-cell mediated-cytotoxicity in immunogenic cancer cells

Diya J. Patel, Investigation of nuclear and mitochondrial DNA damage repair mechanisms in LRRK2 G2019S Parkinson's disease

Emma Podol, Synaptotagmin 7 protein expression in hippocampal mossy fiber axons following status epilepticus and spontaneous recurrent seizures

Catherine Pyne, Genetic regions influencing dorsal closure in *Drosophila*: Using a 3R deficiency screen to investigate cell sheet morphogenesis

Riley Reeves, Combined environmental and microbial stress alters leaf surface traits and early immune response in *Arabidopsis thaliana*

Ainsley Scheiner, Genetic pathways behind nutritional control of development in *C. elegans*: Postembryonic cell division during starvation following disruption of TOR expression

William Sharp, Alternatively spliced exons modulate tension sensitivity and single channel conductance in human Piezo2

Austin Simpson, Epigenetic resilience in *Ziphius cavirostris*: Cellular responses to chronic aldosterone exposure and acute hypoxia

Garret Smith, Comparative analysis of *ampC* derepression mutation rates in bloodstream isolates of *Enterobacter cloacae* complex and *Serratia marcescens* in a U.S. cohort

David Su, Reversing gene transfer: re-expressing nuclear-encoded proteins from the chloroplast genome

Rachel Tan, Development and application of a high content imaging screen for small molecule inhibitors of the treatment-resistant p95 isoform of HER2

Lila Teitle, Potential therapeutic effects of omega-5 fatty acids in endometriosis

Amanda Treston, Nanobodies as a tool to study β 2AR- β -arrestin signaling complex

Ariana Vaida, Insights into the lung-brain axis in immunity: How microglia and pulmonary neuroendocrine cells respond to influenza A and air pollution

Kenneth Vergel de Dios, The role of cellular adhesion in non-stem cell tissue damage responses in the *Drosophila* hindgut

Eric Wang, Hyperactivating oncogenic ETS transcription factors to target CIC::DUX4 sarcoma

Maddie Weiler, Elucidating the role of fibro-adipogenic progenitor cell-produced *Myostatin* in massive rotator cuff tear induced pathologies of intramuscular fat, fibrosis, and muscle atrophy

Amber White, Variation in podophyllotoxin concentration in *Juniperus virginiana* across ecological factors and fungal endophyte communities

Clare Williams, Restriction of human cytomegalovirus replication in placental trophoblast organoids and the antiviral role of PRAMEF20

Daniel Xie, Investigating the impact of genetic and therapeutic perturbations on subtype plasticity in basal-derived small cell lung cancer

Weixuan Yan, VEGF blockade potentiates immunotherapy in glioblastoma by promoting the formation of tertiary lymphoid structures

Caroline Yoon, Classifying tissue-specific regulatory elements using high-throughput screening data to train machine learning models

Miranda Zhong, Translation control via synthetic intrinsic disorder protein-mediated mRNA sequestration

David Zhu, Wild-type p53 enhances APR-246-induced cytotoxicity via ROS accumulation and caspase-mediated apoptosis in AML cells

Graduate with Distinction Outside the Major:

Jacob Anthony Frieze, Factors affecting Cheloniid cold-stunning in New York 2024 winter