Undergraduate Research Scholars 2018-2019

Scholars	Faculty Mentor	Faculty Mentor Department	Title of Research Project
Daniel Ahn	Dr. Richard Wirz	Mechanical and Aerospace Engineering	Automated High-Speed Video Analysis of Electrospray Emission Modes
Itzetl Avila	Dr. William Lowry	Molecular, Cell & Developmental Biology	Unraveling the Role of G-protein-coupled Receptor Signaling/CREB Pathway in Hair Follicle Stem Cells
Jone Bacinskaite	Dr. Katsushi Arisaka	Physics & Astronomy	Exploring the role of saccades and gamma band oscillations in virtual binocular rivalry.
Shreya Banerjee	Dr. Luisa Iruela-Arispe	Molecular Biology Institute	The role of the human gene RASA1 as a sensitizer in vascular malformations
Maggie Bui	Dr. Edward De Robertis	Biological Chemistry	Loss of APC Leads to an Increase in Wnt Signaling Mediated Endocytosis
John Chapman	Dr. Ellen Sletten	Chemistry And Biochemistry	Functionalized PFC Nanoemulsions for Site-specific Drug Delivery
Gunvant Chaudhari	Dr. Carlos Portera-Cailliau	Neurology	Using Machine Learning to Study Altered Neural Circuitry in Fragile X Syndrome
Shelley Cheng	Dr. Smadar Naoz	Physics & Astronomy	Predicting the companion of the binary star system Par 1802 in the Orion Nebula
Jessica Chern	Dr. Peter Bradley	MIMG	Novel Components of the Toxoplasma Gondii Inner Membrane Complex
Rachel Colbath	Dr. Mark Frye	Integrative Biology & Physiology	Exploring the role of octopaminergic neurons in odor induced object tracking
Armo Derbarsegian	Dr. Samantha Butler	Neurobiology	The role of Smad1 on neuronal differentiation in mouse embryonic stem cells
Emma Edmond	Dr. Dana Leanne Jones	Molecular, Cell & Developmental Biology	The crosstalk between tricellullar junction proteins in Drosophila melanogaster.
Rochelle Ellison	Dr. Stephen Young	Medicine-Dept Administration	Characterization of cholesterol efflux to high-density lipoproteins via macrophage-derived particles
Kristen Fernandez	Dr. Jeffrey H Miller	MIMG	Antibiotic induced frameshift mutagenesis in E. Coli
Jonathan Fox	Dr. Andrew Goldstein	Molecular, Cell & Developmental Biology	Multiplexed Proteomic Analysis of the Prostate Microenvironment and its Role in Carcinogenesis
Mimi Giang	Dr. David Engman	Pathology & Laboratory Medicine	Comparing the ECM Components of Heart Tissue in Autoimmune and Infectious Myocarditis
Isabella Goetting	Dr. Stuart Brown	Physics & Astronomy	Investigating strain gradients from uniaxial strain measurements through the use of NMR
Andrew Gordeev	Dr. Zhongbo Kang	Physics And Astronomy	Jet Production in High Energy Collisions
Xianyu Hao	Dr. Julian Martinez	Human Genetics	Growth regulation of low protein diet in Drosophila Melanogaster
Holly Huang	Dr. Dennis Slamon	Medicine-Dept Administration	Developing novel therapeutic antibodies targeting proteins overexpressed in cancer cells
Matthew Ji	Dr. Albert Lai	Neurology	The Effect of Succinate and Fumarate on m6A Methylation and Glioma Cell Proliferation
Juka Kim	Dr. Gal Bitan	Neurology	A Novel-Medium throughput Screening Method for Oligomerization Inhibitors in Proteinopathies
Laura Le	Dr. Madhuri Wadehra	Pathology & Laboratory Medicine	Steroid hormone regulation of epithelial membrane protein 2 (EMP2) expression in the breast
Michael Le	Dr. Carlos Portera-Cailliau	Neurology	Functional Remapping of the Mouse Somatosensory Cortex After Ischemic Stroke
Emily Lee	Dr. Daniel Kamei	Bioengineering Department	Simplified DNA Purification Using Aqueous Two-Phase Systems in Hydrogels
Jonathan Lee	Dr. Sriram Kosuri	Chemistry And Biochemistry	Improving the Dynamic Range of the Next-Generation Bacterial 2-Hybrid (NGB2H) System
Rex Lee	Dr. Stanley Thomas Carmichael	Neurology	Targeting CCR5 to Improve Functional Recovery after Stroke
Jaqueline Lopez	Dr. Alison Frand	Biological Chemistry	A Novel Biological Oscillator in the Molting Cycle of C.Elegans
Tiffany Lu	Dr. Alvaro Sagasti	Molecular, Cell & Developmental Biology	The role of cell-cell junctions in microridge morphogenesis
Andrew Ly	Dr. Ting-Ting Wu	Molecular & Medical Pharmacology	Characterizing Kaposi's Sarcoma-associated Herpesvirus Open Reading Frame 54 Interaction with HERC3
Ashlee Macalino	Dr. Alcino Silva	Neurobiology	Neural Mechanisms that Underlie Spatial Learning and Memory Deficits in Noonan Syndrome
Nathan Mallipeddi	Dr. Siavash Kurdistani	Biological Chemistry	Investigating the New Extraordinary Role of Histones in Iron Homeostasis
Anissa Medina	Dr. Susan Bookheimer	Psychiatry/Biobehavioral Science	The Interplay Between Sensory Over-Responsivity and Anxiety in Autism Spectrum and Anxiety Disorders
Markus Min	Dr. Paul Barber	College Office Of The Deans	A comparison of community assessments using eDNA and traditional trawl survey methods

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Keira Monuki	Dr. Paul Barber	College Office Of The Deans	The Effects of Depth on eDNA Signatures to Inform a Community Science Monitoring Project
Deanna Necula	Dr. Alcino Silva	Neurobiology	Selective Microglial Pruning During Memory Linking
Hamilton Oh	Dr. Hanna Mikkola	Molecular, Cell & Developmental Biology	The Role of Critical Transcriptional Regulator LMO2 During Hematopoiesis
Vera Ong	Dr. Isaac Yang	Neurosurgery	Predictive Analysis of 30-Day Readmission Rates at a Single Large Academic Neurosurgery Service
Kelsey Ouyang	Dr. Jenny Kim	Medicine-Dermatology	In Vitro Competition and Relative Fitness of Cutibacterium Acnes Strains
Claire Page	Dr. Yi Tang	Chemical And Biomolecular Engineering	Enzymatic Characterization of the Final Steps of the Biosynthetic Pathway of Hypoxysordarin
Melissa Papuc	Dr. Luisa Iruela-Arispe	Molecular Biology Institute	Elucidating the underlying mechanisms of VEGF and NOTCH signaling
John Pham	Dr. Antoni Ribas	Medicine-Dept Administration	Identifying Genes that Regulate the Anti Tumor Response of Interferon Gamma in Melanoma Cells
Divya Prajapati	Dr. Luisa Iruela-Arispe	Molecular Biology Institute	Mechanistic Characterization of Candidate Drugs against Pancreatic Cancer Cell Extravasation
Irena Roy	Dr. Michael Teitell	Pathology & Laboratory Medicine	Evaluating the Impact of Oxidative Phosphorylation Shift on Early Cell Fate Determination
Alexander Soohoo	Dr. Yi Tang	Chemical And Biomolecular Engineering	Development of new platform for heterologous expression in Penicillium species
Joanna Su	Dr. Dana Leanne Jones	Molecular, Cell & Developmental Biology	The role of Headcase in the Copper Cell Region of Drosophila melanogaster
Abby Thurm	Dr. William Gelbart	Chemistry And Biochemistry	Synthesis and use of defective-interfering RNA as an antiviral technique for yellow fever virus
Alex Tran	Dr. Jessica Wang	Medicine-Cardiology	Investigating the Effects of a Novel LAMP-2 Variant and the Role of LAMP-2 in Danon Disease
Jerry Trinh	Dr. Huiying Li	Molecular & Medical Pharmacology	Genome Assembly of Virulent Propionibacterium avidum in Periprosthetic Joint Infections
Jerry Wang	Dr. Daniel Geschwind	Neurology	Title. Integration of Functional Genomics in Autism Spectrum Disorder (ASD)
Vahe Yacoubian	Dr. John Adams	Orthopedic Surgery	Impact of Vitamin D3 and 25D3 Supplementation on Patient Microbiota, Immune and Bone Health
Tianxiao Yang	Dr. David Eisenberg	Chemistry And Biochemistry	Determining the structural origins of Tau strains
Matthew Yap	Dr. Scott Kitchen	Medicine-Hematology-Oncology	Generating Gene Modified Dendritic Cells to Enhance the Anti-HIV Response
Matthew Ye	Dr. Paul Weiss	Chemistry And Biochemistry	Determining the Role of Spin Polarization in Enantioselectivity
Jessica Yen	Dr. Steven Dubinett	Medicine-Dept Administration	The Role of EZH2 on Epithelial-Mesenchymal Transition in Non-Small Cell Lung Cancer
Allison Yoon	Dr. Zhefeng Guo	Neurology	Structural studies of Abeta42 oligomers with EPR spectroscopy
Philip Zhou	Dr. Atsushi Nakano	Molecular, Cell & Developmental Biology	The Role of the Cell Cycle in Cardiomyocyte Development