

**2013-2014 - UROP Recipients**

Student and Department	Faculty Mentor	Co-PI #1	Co-PI #2	Co-PI #3	Title
Rachel Ancar* - Biology	Bradley Stith	Jordan Long	Ngoc Vu		The Stimulation of Calcium Release by Phosphatidic Acid in Fertilization
Renee Albiston - Art History	Maria Elena Buszek				Historical Research to Benefit the Monuments Men Foundation
Pratibha Anand* - Business	Georg Gadow	Natalie Kellett			Enhanced Sustainability Initiatives for Cost Savings at a Large Teaching Hospital
Job Bacon-Maldonado - Biology	Christopher S. Miller				Gauging the Impact of Triclosan on the Human Microbiome
David Bergkamp - Chemistry	Richard Allen				Quantification of glutamatergic synaptic proteins in two regions of the rat brain following cocaine self-administration and concurrent NMDA antagonism
Caleb Carr* - Bio Medical Physics	Randall Tagg	Michael Bollinger	Riley Ruse	Megan Perez	Rescue Helicopter Research Project
Yu Jung Choi* - Chemistry	Marino J. E. Resendiz	Krzysztof Gibala	Beatrice Guillermo		Photochemical Reactivity of Oxidative Lesions in RNA and their Link to Disease
Heather Dirkmaat - Biology	Michael Greene				Arterial Calcification in Pre-Menopausal Women
Nicholas Gross* - Electrical Engineering	Mark Golkowski	Elnora Fuentes			Autonomous Portable Low Frequency Receiver and Display (APRAD)
Kristie Han - Biology	Clyde J. Wright				Preventing Persistent Pulmonary Hypertension of the Newborn (PPHN) through inhibition of Endothelin-1
Alexandra Harrison - Chemistry	Alan Vajda				Estrogen mixture effects on brain monoamines in adult male fathead minnows
Lenka Hellerova - Nursing	Scott Harpin				Understanding Healthcare Utilization by Homeless Youth
Jeremy Judge - Physics	Alberto Sadun				Coordinated Observations of TeV Blazars
Catherine Kern - Psychology	Joan Bihun				Effect of Age on Academic Motivation and Engagement: A Comparison in Post-Secondary Education

Katarina King - BFA Painting	Melissa Furness				Guerneville, CA Artist Residency
Thanh Liu - Biology/Ethnic Studies	Clyde J. Wright				Cells' Transcriptional Response to Hyperoxia in vivo
Michael McCuaig - Psychology	Jim Grigsby				Effects of Training on an Attentional Focus Technique on the Accuracy of Free Throw Shooting
Jack Moen - Biology/Chemistry	Jerry Schaack				Analysis of Human Cytokine Expression in Tubercle Bacillus
Isabella Ramos - Public Health	Kalynn Schulz				The effects of prenatal and adolescent stress on adult behavioral outcomes with relevance to mental illness
AnneMarie Rossi - Education	Barbara Dray				The Academic and Behavioral Impacts of Teaching Mindfulness to Elementary Students
Shannon Peterson* - Mechanical Engineering	Luis Rafael Sanchez Vega	Abrar Satar			An interferometer based experimental technique to evaluate large strains and springback on sheet metal
Nicholas Shine - Electrical Engineering	Tim Lei				Neuro-Science Brain Game
Meghan Shuman - Psychology	Heather Kennedy				Examining the Effects of Music Therapy on Mood States of Patients in a Pediatric Psychiatric Hospital Setting
Renae Stede - Biology/Public Health	Aaron Johnson				Drosophila Muscle Morphogenesis
Logan Thompson - Integrative Biology	Zhiyong Jason Ren				Biological Mining of Desalination Wastes for Mineral Extraction
Joseph K. Vasquez - Chemistry	Jefferson Knight				'Measurements of Synaptotagmin 7 Lateral Diffusion in Supported Lipid Bilayers and Association with Membrane Curvature
Heather Worrell - Sociology	Paula Fomby				The Continuation of the Commercialization of Intimate Life and the Abduction of Feminism: Arlie Russell Hochschild's Study of Women's Advice Books Two Decades Later

## 2014-2015 UROP Recipients

Student	Faculty Mentor	Title
Jacob Altholz - Bioengineering	Richard Weir	Development of a High-speed, low-torque Interconnect for Anthropomorphic Fingers in a Partial Hand Prosthesis
Curtis Bean - BFA	Patricia Hallock	Art of War Project
Liana Boggs - Biology	Diana F. Tomback	Soil Sampling and Sky Exposure from Leeward Microsites in Treeline Ecotones
Christal Davis - Chemistry	Hai Lin	Steered Molecular Dynamics Simulations of the EcCIC Chloride Transport Protein
Susanna Diller - Geography	Casey Allen	The Relationship of Social Media and Area Marketing in Promoting Boybands
Rebecca D'Occhio - Anthropology	Julien Riel-Salvatore	Analysis of Neanderthal and Homo sapien Artificat Distribution and Settlement Patterns in Liguria, Italy
Stephen Edwards - Sculpture	Rian Kerrane	Marble, Marble XXVI Symposium: An Exploration in Stone
Joshua Fowler - Psychology	David Scott Albeck	The Genetic Component to Altruism and Event-Related Potentials for Visually Evoked Responses
Desmond Hamilton - Chemistry	Scott Reed	Amphipathic Alpha-Helical Binding Properties Studied Using Lipid Coated Gold Nanoparticles
Raleigh Jonsher - Psychology	Sondra Bland	The effect of 2-AG behavior: through pharmaceutical inhibition of mag-I
Hanna Kozlowski - Biology	Chirstopher Phiel	Characterization of the Novel Long Non-Coding RNA, LINC00486
Jordan Long - Biology	Bradley Stith	The Mechanism of Activation of Membrane raft, gamma type of Phospholipase C during Fertilization
Kelsi Miles - Geography	Brian Page	The New Denver City Beautiful
Anna Nguyen - Public Health	Timberley Roane	Metal Detoxification and Remediation of Acid Mine Drainage by the Bacterium, Pseudomonas sp. S8A
Brian Peters - Chemistry	Bruce Mandt	Determination of dopamine concentration detected with fast-scan cyclic voltammetry
Issamar Pichardo - Geography	Deborah Thomas	Understanding Latino Community Recovery after the September 2013 Colorado Flash Floods
Skyler Saleh - Electrical Engineering	Dan Connors	Mobile SLAM - Enabling 3D Depth Mapping Everywhere
Eric Rupert - Physics	Douglas Shepherd	Single-molecule localization using graphics card programming
Scott Schelp - Psychology	Erik Oleson	In Vivo Optogentic Manipulation of Dopamine During Food Predictive Cue Behavioral Tasks in Th-Cre Rats
Evan Shapiro - Bio-Medical Physics	Douglas Shepherd	Investigating the allergic reponse molecular pathways using physics, biology, and analytical chemistry
Denise Swack - Geography	Peter Anthamatten	Assessing Adult Physical Activity Opportunities through Community Engagement using BMI and Resource Mapping

Justin Townsend - Chemistry	Marino Resendiz	Synthesis and Incorporation of Photoactive Probes to Study RNA Structure and Reactivity
Jennie Tran - BFA Film & Television	Jessica McGaugh	"Art Ed."
Kenneth Valles - Integrative Biology	Amanda Charlesworth	Zygote Arrest Proteins: Pioneering Perspectives in Mammalian Embryogenesis
Freddie Washington - Architecture	Kirsten Coe	Urban Bath Shelter
Tim Wick - Geography	Frederick Chambers	Climate Variability and Potential Changes in the Yampa River Basin
Da Wu - Economics	Laura M. Argys	Assimilation of Chinese Immigrants in the United States
Heidi Yen - Biology	Aaron Johnson	Characterizing a novel Serine/Threonine Kinase during Myogenesis

**2015-2016 UROP Recipients**

Student and Department	Faculty Mentor	Co-PI #1	Co-PI #2	Co-PI #3	Co-PI #4	Title
Ashley Bouck - Geography	Christy Briles					Product Labeling and Geographic Origins of Colorado Honey
Ryan Brody - Bioengineering	Daewon Park					Synthesis of hydroxyapatite nanoparticles surface functionalized with PNIPAAm and hyaluronic acid
Kara Brown - Visual Arts	Maria Buszek					Art History and Practice at the Venice Biennale
Taylor Coomer - Biology	Erik Oleson					The pharmacotherapeutic potential of disruption of eCB and HCRT neuromodulation of dopamine neural activity in the co-morbid diagnosis of schizophrenia and drug-addiction
Nicklaus Deevers - Biology	Annika Mosier					The Impact of Nutrient Pollution on Ammonia-Oxidizing Microbial Communities Residing in Freshwater Ecosystems
Marissa DeLima - Biology	Jeff Knight					Purification and Analysis of Toxoplasma gondii protein domains involved in membrane fusion
Fassil Eyayou - Psychology & Philosophy	Benjamin Greenwood					Effects of MDMA during fear extinction on the relapse of fear
Jazmin Fontenot - Biology	Sondra Bland	Matthew Ishiki	Raleigh Jonscher			The Effect of Isolation Rearing on Glutamate in the Medial Prefrontal Cortex
Fryinger, Brittany - Intl. Studies & Spanish	Andres Lema-Hincaple	Amber Ford	Caitlyn Scharmer			A Small Puppet Theater Company for Spanish-Speaking Kids and Parents
Christina Garza - Public Health	Hai Lin					Combined QM/MM dynamics simulations of proton transfer in E. coli CIC chloride ion transport protein
Kimberlie Grady - English	Drew Bixby					In Search of the Rare
Nathaniel Gray - Psychology	Benjamin Greenwood	Toni Nicastro				Activation of Nigrostriatal Dopamine Pathway to Strengthen Extinction and Reduce Fear Renewal Across Contexts
Desmond Hamilton - Chemistry	Scott Reed					Gold Nanoparticles Coated with a Lipid Membrane Will Be Utilized to Form Sucrose Filled Reservoirs That Can Be Released with the Addition of Melittin

Jack Henderson - Chemistry	Hai Lin	Dante Merrill				Interplays of Membrane and Ligand Docking of Granuphilin C2A Domain: A Molecular Dynamics Study
Abigail Luman - Biology	John Swallow					The Effects of Social Isolation on Aggressive Behaviors and Neurochemistry in Stalk-eyed Flies
Angelica O'Toole-Fehlmann - Psychology	Jim Grigsby	Kristi Nelson				Effects of internet Peer Support groups on Individuals with Borderline Personality Disorder
Adam Rauff - Bioengineering	Dana Carpenter					Investigating the Effects of Weight-Bearing Function on Bone Microstructure
Chloe Sanders - Psychology, Economics	Christopher Phiel	Sanjana Garimella				Investigating Gsk-3-Dependent mRNA Methylation
Olga Serenchenko - Geography	Christy Briles	Christopher Anderson				Exploring Vietnamese History Through a Charcoal Lens
Chris Temple - Electrical Engineering	Dan Connors	Jonathan Baker	Gavin Johnson	J.P. Manza	Stephen Smith	Unlocking Brainwaves for Assistive Limb Control
Hai Tran - Chemistry & Biology	Jefferson Knight					Investigating the Kinetics of Membrane Targeting Synaptotagmin1 C2 Domains
Joey Verbeke - Music	Jeff Merkel					Augmented Immersion - An Interactive Art Installation