

TOPICAL GUIDE TO UBRP CONFERENCE POSTERS

Presenters listed in alphabetical order by last name within each topic

ANIMAL SCIENCE

Poster #	Presenter Name	Poster Title	Faculty Mentor	Location
78	Kayla Reddy	Acetic Acid Protects <i>Drosophila melanogaster</i> From Parasitoid Wasps	Todd Schlenke	2nd Floor Outside

BEHAVIORAL AND SOCIAL SCIENCE

Poster #	Presenter Name	Poster Title	Faculty Mentor	Location
14	Caity Cegavske	Emotion Regulation vs. Internal Focus as Predictors of Negative Mood State Recovery	Jessica Andrews-Hanr	1st Floor Outside
21	Camille DeMarcus	Enhancing Engagement in Technology Based Mental Health Care for Cancer Patients: A Scoping Review	Karen Weihs	1st Floor Outside
45	Sun Woo Kim	How do observers divide visual attention between interacting social partners?	Katalin Gothard	S230
88	Siena Schoelen	An Exploration of Chunking in School-Aged Children	Mary Alt	S215

BIOCHEMICAL SCIENCE AND BIOENGINEERING

Poster #	Presenter Name	Poster Title	Faculty Mentor	Location
8	Elizabeth Browne	Tuning the Reactivity of Aryl Diazonium Ion (ADI) Probes to Biological Systems of Interest	John Jewett	1st Floor Outside
42	David Jurkowitz	Lipid Environment Effects on Metarhodopsin Equilibrium Under Osmotic Stress	Michael Brown	S230
64	Sami Muslmani	COVID-19-Associated Cytokine Storm in Mechanical Circulatory Support: An In Vitro Study	Marvin Slepian	S225
94	Mansi Singh	Frequencies Observed in Obstructive Sleep Apnea influence Platelet Activity	Marvin Slepian	2nd Floor Outside
105	Carlos Urrea-De La Puerta	The Effect of Dissolved Oxygen in Recombinant Keratin Synthesis for Biomimetic Coatings	Minkyu Kim	2nd Floor Outside

CELLULAR AND MOLECULAR BIOLOGY

Poster #	Presenter Name	Poster Title	Faculty Mentor	Location
3	Geethika Ameneni	Bisphosphonate effects on quiescent bone-disseminated tumor cells in a pre-clinical model of bone metastatic ER+ breast cancer	Janet Funk	1st Floor Outside
6	Michael Becenti	The Role of Nitric Oxide Synthase 2 in Triple-Negative Breast Cancer	Ronald Heimark	1st Floor Outside
12	Nicole Carmiol	Quantifying phenotypic outputs of Protein Kinase A in <i>S. cerevisiae</i> in response to nutrient inputs	Andrew Capaldi	1st Floor Outside
13	Joshua Castillo	Investigating PIKFYVE as a therapeutic target in TDP-43 proteinopathy using <i>Drosophila</i> models of ALS	Daniela Zarnescu	1st Floor Outside
24	Isabella Feldmann	Determining the Role of Ras Family GTPase Rap1 in Regulating mTORC2 Function in Cell Migration	Pascale Charest	1st Floor Outside
26	Love Foster-Malave	Measuring the Impact of MTI-101 on Integrin Subunit Localization in Prostate Cancer Cell Lines Using Immunofluorescence	Cynthia Miranti	1st Floor Outside
34	Paolo Guerra	Defining Genetic Interactions Between RNA Helicases Ded1 and eIF4G1	Timothy Bolger	1st Floor Outside
36	Grace Hala'ufia	Quantifying Dementia-Relevant Behavioral Phenotypes in a <i>Drosophila</i> Model of TDP-43 Proteinopathy	Daniela Zarnescu	1st Floor Outside
37	Anne Haskins	3 hydroxyanthranilic acid inhibits bacterial growth to increase pathogen resistance in aging <i>Caenorhabditis elegans</i>	George Sutphin	S230
41	Advait Jeevanandaam	Human Papillomavirus attenuates the innate DNA sensor cGAS to downregulate antiviral response	Samuel Campos	S230
43	Elijah Keeswood	Loss of Integrin Function Blocks 3D Invasion Phenotypes	Anne E. Cress	S230
44	Dong Kyun Kim	Forming filaments with enzymes: a potential mechanism for plants to adjust to stressful environmental conditions	Frans Tax	S230
50	Brent Lee	Investigating sphingomyelinase activity of New World Sicarius Phospholipase D (PLD) toxins	Matthew HJ Cordes	S230
51	Hyeon Seung Lee	CDHR3 Research on RV-C Binding for CRS Exacerbations	Eugene H. Chang	S230
54	Brooke Linden	VTC5 is a Novel Regulator of TORC1 in <i>Saccharomyces cerevisiae</i>	Andrew Capaldi	S230
59	Chloe Mikolajczyk	Identifying the Functions of Solute Carrier Proteins	Deeptha Bhattacharya	S230
60	Bassam Mitri	PKA target motif as potential determining factor in substrate phosphorylation pattern	Andrew Capaldi	S225

61	Atley Moberly	The Role of G2L1 in Microtubule and Actin-based Insulin-Stimulated Delivery of Glucose Transporter 4 to the Plasma Membrane	Paul Langlais	S225
62	Nicholas Mortimore	Metabolism: Key Dysregulated Pathways in a <i>Drosophila</i> Model of ALS	Daniela Zarnescu	S225
63	Isabelle Mundo	Effects of Torin and Rapamycin on mTOR Activity in Non-Transformed Breast Epithelial Cells	Pascale Charest	S225
70	Eva Orozco	Investigating the Relationship between Age, Stress, and Stress Granule Dynamics in <i>Drosophila</i>	Daniela Zarnescu	S223
74	Will Peterson	Early results from a new automated screening platform for <i>C. elegans</i>	George Sutphin	S223
75	Bhumika Phanindra	Tight Junction Proteins and Secondary Bile Acids role in Amplifying Necrotizing Enterocolitis	Melissa Halpern	S223
76	Danielle Philo	Analysis of antibody repertoire following SARS-CoV-2 infection through patient-derived monoclonal antibodies	Deepta Bhattacharya	S223
79	Jared Rhodes	Evaluation of cSNX1.3 peptide in EGF-dependent cancer phenotypes	Joyce Schroeder	2nd Floor Outside
80	Hannah Quick	Investigating Tc-eve enhancer function in contrasting models of segmentation	Lisa Nagy	2nd Floor Outside
85	Andrea Savu	Ca ²⁺ Spark Activity is Not Changed in Cerebral Artery Smooth Muscle Cells from the 5x-FAD Mouse Model of Alzheimer's Disease	Paulo W. Pires	S215
87	Zachary Schlamowitz	Can Math Cure Cancer? Mathematically Modeling Treatment of EGFR-Mutant Lung Cancer	Andrew Paek	S215
90	Ali Shaikh	Determining the Relation between MTA and HDAC Proteins in the NuRD Complex	Catharine L. Smith	S215
92	Ashwin Siby	Probing Ded1-Ded1 interactions in vivo using a bimolecular complementation assay	Timothy Bolger	S215
96	Cassandra Smith	Antagonism of eosinophil Toll-like receptors 2 and 4 by pulmonary surfactant lipids, palmitoyl-oleoyl-phosphatidylglycerol and phosphatidylinositol	Julie Ledford	2nd Floor Outside
98	Alexandra Sundman	Medically Important Phospholipase Toxins May Have Evolved from a Nonvenom Enzyme with Similar Catalytic Activity	Matthew Cordes	2nd Floor Outside
99	Niall Thorns	The Impact of haa-1 Knockdown Initiated at Different Stages of Life on lifespan in <i>C. elegans</i>	George Sutphin	2nd Floor Outside
102	My Duyen L. Tran	Stress Alters the Expression of Rasputin, a Critical Stress Granule Component in Aging Fruit Fly	Daniela Zarnescu	2nd Floor Outside
103	Dorothy Tung	GPR143 Signaling Alters Intracellular Trafficking of Photoreceptor Outer Segments	Brian S. McKay	2nd Floor Outside
107	Suetmui Yu	Regulation of ZIP8 by Manganese	Ningning Zhao	2nd Floor Outside

EARTH AND ENVIRONMENTAL SCIENCES

Poster #	Presenter Name	Poster Title	Faculty Mentor	Location
25	Sydney Field	Implications of <i>Helicobacter pylori</i> infectivity following exposures to arsenic	Marc Verhoughstraete	1st Floor Outside
30	Parker Geffre	Using a Novel Sensor for Detection of Subsurface Volatile Organic Compounds	Laura Meredith	1st Floor Outside
39	Shelby Herrick	Arsenic Represses Airway Epithelial Mucin Expression by Affecting Retinoic Acid Signaling Pathway	Yin Chen	S230

ENGINEERING, ROBOTICS, AND COMPUTER SCIENCE

Poster #	Presenter Name	Poster Title	Faculty Mentor	Location
1	Hrithik Aghav	Effects of Wing Bristles and Wing Flexibility on the Aerodynamics of the Smallest Flying Insects	Laura Miller	1st Floor Outside
18	Leamon Crooms IV	Build Amino Acid and Nucleotide Dataframe (BAAND); a Bioinformatic Resource to Facilitate Human Leukocyte Antigen Research Investigators	Steven J Mack	1st Floor Outside
91	Hasina Shir	Feasibility of Non-Imaging Second Harmonic Generation to Identify Early Ovarian Cancer in a Murine Model	Jennifer Barton	S215
93	Vanessa Silbar	Automated robotic system expansion for monitoring <i>Caenorhabditis elegans</i>	George Sutphin	S215

HEALTH AND BIOMEDICAL SCIENCE

Poster #	Presenter Name	Poster Title	Faculty Mentor	Location
2	Makenna Aitken	Tissue Compression Design in Optical Coherence Elastography for Early Detection of Cancer	Jennifer Barton	1st Floor Outside

4	Amal Anilkumar	Identifying Cardiac Wall Strain to Assess Chronic Heart Failure in a Swine Model	Steven Goldman	1st Floor Outside
5	Shruti Attreya	RAGE Against the Infection: Determining the Role of the Receptor for AGE (RAGE) in <i>Toxoplasma Gondii</i> Infection	Anita Koshy	1st Floor Outside
7	LeCario Benashley	Paclitaxel Treatment Effects on Neurofilament Light Chain, a Possible Biomarker of Chemotherapy Induced Peripheral Neuropathy (CIPN)	Jennifer W. Bea	1st Floor Outside
11	Rhea Carlson	Diffusion MRI validation by polarized light imaging in healthy human and Alzheimer's Disease post-mortem hippocampus	Elizabeth Hutchinson	1st Floor Outside
20	Charbel Curiel	The Renal And Cardiovascular Effects of Exercise in the DOCA-Salt Rat Hypertension Model	Christopher Banek	1st Floor Outside
22	Angela Ding	Characterization of the ZSDS Model and Treatment of Oligofructose	Frank Duca	1st Floor Outside
23	Amy Fan	Investigating a degradation mechanism of Trp398* mutant Leiomodin 2	Carol C. Gregorio	1st Floor Outside
29	Cynthia Ge	The Self-Assembled Nanostructure Of Human Keratin For The Biomimetic Coating Application	Minkyu Kim	1st Floor Outside
32	Karina Gonzalez	Mixing Chemistry with Nanotechnology to Rewrite the Modern Recipe for Cancer Chemotherapeutics	Jianqin Lu	1st Floor Outside
46	Shyanne King	Determining the Role of Nuclear EGFR in Driving Metastatic Breast Cancer	Joyce Schroeder	S230
47	Rachel Knight	Development of a Highthroughput Screening Assay for a Glyoxase II Inhibitor	James Galligan	S230
58	Maile McSwain	Investigating the Effect of Di-n-butyl Phthalate on Ovarian Follicle Counts	Zelieann Craig	S230
68	Vivian Nguyen	Modeling structural adaptation and pruning of blood vessels connected in parallel: implications for control of capillary density	Timothy Secomb	S225
71	Kayleigh Paddock	Noise-induced sleep disruption reduces orexin, orexin 1 receptor, and heme-regulated inhibitor mRNA in female rats	Jennifer Teske	S223
83	Ferris Saad	Understanding Methodology for Computed Tomography and Magnetic Resonance Image Segmentation of Body Composition for Future Prediction of Cancer Prognosis	Jennifer W. Bea	2nd Floor Outside
95	Kiah Sleiman	Impairing GC Migration of Th17-derived Tfh cells	Hsin-Jung Joyce Wu	2nd Floor Outside

MICROBIOLOGY

Poster #	Presenter Name	Poster Title	Faculty Mentor	Location
73	Chloe Park	Role of a Putative Copper Transporter Gene (TGME49_249200) in <i>Toxoplasma gondii</i> Encystment	Anita Koshy	S223

NEUROSCIENCE

Poster #	Presenter Name	Poster Title	Faculty Mentor	Location
10	Hannah Burns	Age-Related Differences in Resting-State Cognition: An Adapted Think-Aloud Paradigm	Jessica Andrews-Hanr	1st Floor Outside
15	Carly Chellman	S6K and 4EBP-1 effect on the lifespan of TDP-43 ALS Models	Daniela Zarnescu	1st Floor Outside
17	Cecilia Coloma-Roessle	Dose-Dependent Effects of TMEM184b on Neuromuscular Junction Maintenance	Martha Bhattacharya	1st Floor Outside
19	Lauren Cruz	Real World Goal Setting and Follow-through in Young and Older Adults	Matthew Grilli	1st Floor Outside
27	Gabriela Franca	RNAscope to Quantify Transcription of 5HT2A Receptor in Prefrontal Cortex of Rats with Spared Nerve Injury	Arthur Riegel	1st Floor Outside
31	Amanda Gong	How in utero and neonatal nicotine exposure (DNE) alters GABAAR- α 1 expression on hypoglossal motor neurons (XIIMN)	Ralph Fregosi	1st Floor Outside
35	Joshua Hack	Predicting Disease Severity Outcome in SCN8A-DEE Patients	Michael Hammer	1st Floor Outside
38	Giovanni Hernandez-De La Pena	The amplitude and frequency of respiratory motor output could be altered by cotinine in the brainstem spinal cord preparation from neonatal rats	Ralph Fregosi	S230
48	Heather Kwapiszeski	Immune Alterations in Choroid Plexus of ALS and other Neurodegenerative Diseases	Nadine Bakkar	S230
49	Elizabeth Hanh Le	The Effects of APOE4 Genetic Polymorphism on Ischemic Stroke Recovery	Kristian Doyle	S230
53	Lane Lewis	A Novel CUR Decomposition Algorithm with Applications to Neural Data Analysis	Kevin Lin	S230
56	Jesus Lujan	Testing the Therapeutic Potential of Glycosylated Pituitary Adenylate Cyclase-Activating Polypeptide in the Context of Parkinson's Disease	Lalitha Madhavan	S230
66	Kris Narisawa	Evaluation of possible sleep disruption in mouse models of migraine-like pain induced by nitroglycerin or dural inflammatory mediators	Frank Porreca	S225
67	Nhat Nguyen	Studying gene-environment interactions in Parkinson's disease	Lalitha Madhavan	S225

77	Collin Preszler	Automated Slice Extraction and Segmentation for Registration of Multimodal Images for Hemodynamic Analysis	Elizabeth Hutchinson	S223
81	Rudolph Rodriguez	Cancer Survivor with Chemobrain Displays Improvement in Memory after Brain Stimulation	Ying-hui Chou	2nd Floor Outside
82	Anakaren Romero-Lozano	Enhanced Cerebrospinal Fluid Transport under Dexmedetomidine in Rat is Detectable using T2 Relaxometry and Tensor-Based Morphometry	Elizabeth Hutchinson	2nd Floor Outside
84	Chaitanya Sanghadia	TBI-Induced and Age-related Neuroinflammation Intersect at 6-Months Post-Injury	Theresa Thomas	S215
97	Christopher Sterzinar	Can Rats 'Read' a Map?	Jean-Marc Fellous	2nd Floor Outside
100	Sayujya Timilsena	Spatial Navigation in a Dynamic Environment	Jean-Marc Fellous	2nd Floor Outside

PHARMACOLOGY / VIROLOGY

Poster #	Presenter Name	Poster Title	Faculty Mentor	Location
9	Thai Bui	Terpenes from <i>Cannabis sativa</i> Synergize with Opioids to Produce Enhanced Pain Relief in Chemotherapy-Induced Peripheral Neuropathy	John Streicher	1st Floor Outside
16	Kerry Chou	Systemic Isoform-Selective Heat Shock Protein 90 Inhibitors Improve the Therapeutic Index of Morphine	John Streicher	1st Floor Outside
28	Anna Gabrielsen	Novel T-Type Calcium Channel Modulating Compounds Reduce Depolarization Induced Calcium Influx in DRG Sensory Neurons	Rajesh Khanna	1st Floor Outside
52	Brianna Lent	Identification of the Site of Action of Cannabis Terpenes in Relieving Neuropathic Pain	John Streicher	S230
55	Braden Lopez	Investigating Ryanodine Receptor 2 (RyR2) Effect on Drug Conditioned Place Preference in Rats	Arthur Riegel	S230
57	Kyleigh Masterson	Novel compound found in <i>Parthenium incanum</i> reduces calcium density in sensory neurons as potential treatment for chronic pain	Rajesh Khanna	S230
65	Cassandra Myers	Genetic Polymorphisms in Patients with Non-Alcoholic Steatohepatitis	Nathan Cherrington	S225
69	Chidinma Ogbonnaya	Acetaminophen Alters the Integrity of the Blood-Brain Barrier through Disruption of Claudin-5 at the Tight Junction	Patrick Ronaldson	S225
72	Grace Parekh	The Effects of E-cigarette Vaping on Respiratory Function and Bone Composition in Mice	Todd Vanderah	S223
40	Elizabeth Reddell	Acetaminophen Alters the Integrity of the Blood-Brain Barrier through Disruption of Claudin-5 at the Tight Junction	Patrick Ronaldson	S230
86	Hillary Schiff	Biased PAR2 antagonist C781 limits allergen-induced acute asthma response in vivo	Scott Boitano	S215
89	Caleb Seekins	Determining the Site of Analgesic Action of Terpenes from <i>Cannabis sativa</i> Using Intracerebroventricular Injection	John Streicher	S215
104	Esteban Ureña	Retigabine Produces Dose-Dependent Changes in the Self-administration of Cocaine but not on Sucrose	Arthur Riegel	2nd Floor Outside
106	Meiven Yang	Mapping Host-Virus Interactions Important to HCMV Latency	Felicia Goodrum	2nd Floor Outside

PLANT SCIENCE

Poster #	Presenter Name	Poster Title	Faculty Mentor	Location
33	Justin Grigory	Distinct Growth Phenotypes Affect Nitrogen Cycling in Bioenergy Crop Sorghum	Laura Meredith	1st Floor Outside
101	Isaiah Toth	Selfing Sisters: Exploration of the Mechanism of Self-Incompatibility in Sister <i>Capsella</i> Species	Mark Beilstein	2nd Floor Outside