

8th Annual Summer Research Symposium

Thursday, August 5, 2021

10:00-12:30 p.m.



CALIFORNIA STATE UNIVERSITY
FULLERTON

8th Annual Summer Research Symposium - Listed in Order of Presentation

Presentation Order	Title	Presenter	Faculty Mentor
Session 1			
1A1	Object Detection and Lane Navigation for Autonomous Vehicles	Ana Venegas Hernandez	Dr. Yu Bai
1A2	Unavailable	Mike Nguyen	Dr. Yu Bai
1A3	A Study on Balancing a Self-Driving Bicycle	Van Vu	Dr. Yu Bai
1B1	Effect of Human Products on Cefiderocol Activity on Acinetobacter Spp.	Aimee Carranza	Dr. Maria Soledad Ramirez
1B2	The Burkholderia Cepacia Complex: Understanding Phenotypic Changes Between Microbial Communities	Germaine Mendez	Dr. Maria Soledad Ramirez
1B3	Acinetobacter Baumannii Response to Human Pleural Fluid in Cefiderocol Treatment	Susie Arriaga	Dr. Maria Soledad Ramirez
1C1	ggDoE: An R Package for Experimental Design with an Application to Prostate Cancer Drugs	Casey Truong	Dr. Jessica Jaynes
1C2	Characterizing Changes in Sedimentation Within a Southern California Estuary Over the Past Century	Kimberly Baez	Dr. Joe Carlin
1C3	Murder Mysteries and Machine Learning	Carmen Romero	Dr. Roberto Soto
Session 2			
2A1	Machine Learning for Object Detection in Self-Driving Vehicles	Manh Khang Nguyen	Dr. Yu Bai
2A2	Thevenin Equivalent Modeling Technique of PV Module Modeling	Armando Rodriguez	Dr. Rakesh Mahto
2A3	Engineering Wildfire Mitigation	Juilo Villegas	Dr. Ankita Mohapatra
2B1	Sulbactam-Avibactam Inhibitors Combination Strategy: Understanding the Mechanisms Beyond their Activity to Combat Acinetobacter spp. Infection	Venjaminne Fua	Dr. Maria Soledad Ramirez
2B2	The Role of Microbiota in Drosophila Evolution	Alyssa Goldpenny	Dr. Parvin Shahrestani
2B3	Establishing a Dry Weight Assay for Testing Drosophila	Czara Baker	Dr. Parvin Shahrestani
2C1	Cellular Localization of the Alternative Splicing Regulating Protein, PTBP1, is Regulated in Part by its RRM2 Domain	Constanza Perez	Dr. Alison Miyamoto
2C2	The Effects of p21 Protein Expression in HeLa Cell Proliferation When Treated with Niclosamide Analogs	George Contreras	Dr. Nilay Patel
2C3	The Mechanism of De Lijser Compounds in Decreasing HeLa Cells' Proliferation Through HINT1	Thien Nguyen	Dr. Nilay Patel
Session 3			
3A1	Study on 3D Bioprinting for Tissue Engineering Applications	Dylan Ta	Dr. Sagil James
3A2	Computation of CO2 Emission for High Performance Pumice	Luis Garcia	Dr. Pratanu Ghosh
3A3	Novel Hybrid Renewable Energy Generation System	Casca Pham	Dr. Sagil James
3B1	Establishing Desiccation and Starvation Resistance Assay for Testing Drosophila	Donelle Aguayo	Dr. Parvin Shahrestani
3B2	Fungal Immune Defense in Long- and Short-Lived Populations of Drosophila	Daniel Campos	Dr. Parvin Shahrestani
3B3	The Impact of Parallel Evolution on the Drosophila Microbiota	Phong Nguyen	Dr. Parvin Shahrestani
3C1	Computational Analysis of the Electronic Quenching of NO With H2O	Justin Urquilla	Dr. Andrew Petit
3C2	Controlling the Formation of Double Perovskites with the NCOT Structure	Kaylee Chiou	Dr. Ally Fry-Petit
3C3	Cloning and Production of a Viral DNA Packaging Enzyme	Hy Dao	Dr. Marcos Ortega
Session 4			
4A1	Investigation of the Effects of Ni Substitution on Li2CuP2O7 Pigments	Maureen Sison	Dr. Joya Cooley
4A2	Synthesis and Characterization of Li2Cu1-xMnxP2O7 for Cool Pigment Applications	Kyle Currier	Dr. Joya Cooley
4A3	Synthesis of LiCo1-xCuxPO4 Using Conventional Furnace Synthesis and Rapid Microwave-Assisted Synthesis	Dayana Flores	Dr. Joya Cooley
4B1	Fossil of the Pilo-Pleistocene	Jazmin Blue Araujo	Dr. Nicole Bonuso
4B2	Using Charcoal to Reconstruct a Fire History of the Carrizo Plains, CA	Dahlia Serrato	Dr. Matthew Kirby
4B3	Changes in Late Pliocene	Jocelyn Atilano	Dr. Nicole Bonuso
4C1	Characterization of the Linker 2 Region of Polypyrimidine Binding Protein 2	Gabe Munoz	Dr. Niroshika Keppetipola
4C2	Design, Synthesis, and Biological Evaluation of Donepezil-Based Acetylcholinesterase Inhibitors as Therapeutics for Alzheimer'S Disease	Alex Gaspar	Dr. Stevan Pecic

8th Annual Summer Research Symposium - Listed Alphabetically per Partner College

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Citrus College			
2B1	Sulbactam-Avibactam Inhibitors Combination Strategy: Understanding the Mechanisms Beyond their Activity to Combat Acinetobacter spp. Infection	Venjaminne Fua	Maria Soledad Ramirez
2B2	The Role of Microbiota in Drosophila Evolution	Alyssa Goldpenny	Parvin Shahrestani
3A2	Computation of CO2 Emission for High Performance Pumice	Luis Garcia	Pratanu Ghosh
4B1	Fossil of the Pilo-Pleistocene	Jazmin Blue Araujo	Nicole Bonuso
Cypress College			
1B1	Effect of Human Products on Cefiderocol Activity on Acinetobacter Spp.	Aimee Carranza	Maria Soledad Ramirez
1C3	Murder Mysteries and Machine Learning	Carmen Romero	Roberto Soto
3C1	Computational Analysis of the Electronic Quenching of NO With H2O	Justin Urquilla	Andrew Petit
3A3	Novel Hybrid Renewable Energy Generation System	Casca Pham	Sagil James
Fullerton College			
1B2	The Burkholderia Cepacia Complex: Understanding Phenotypic Changes Between Microbial Communities	Germaine Mendez	Maria Soledad Ramirez
2C1	Cellular Localization of the Alternative Splicing Regulating Protein, PTBP1, is Regulated in Part by its RRM2 Domain	Constanza Perez	Alison Miyamoto
2B3	Establishing a Dry Weight Assay for Testing Drosophila	Czara Baker	Parvin Shahrestani
4B2	Using Charcoal to Reconstruct a Fire History of the Carrizo Plains, CA	Dahlia Serrato	Matthew Kirby
Golden West College			
1A1	Object Detection and Lane Navigation for Autonomous Vehicles	Ana Venegas Hernandez	Yu Bai
1A2	Unavailable	Mike Nguyen	Yu Bai
3A1	Study on 3D Bioprinting for Tissue Engineering Applications	Dylan Ta	Sagil James
3B3	The Impact of Parallel Evolution on the Drosophila Microbiota	Phong Nguyen	Parvin Shahrestani
Mt. San Antonio College			
2C2	The Effects of p21 Protein Expression in HeLa Cell Proliferation When Treated with Niclosamide Analogs	George Contreras	Nilay Patel
3C2	Controlling the Formation of Double Perovskites with the NCOT Structure	Kaylee Chiou	Ally Fry-Petit
4C1	Characterization of the Linker 2 Region of Polypyrimidine Binding Protein 2	Gabe Munoz	Niroshika Keppetipola
4A3	Synthesis of LiCo1-xCuxPO4 Using Conventional Furnace Synthesis and Rapid Microwave-Assisted Synthesis	Dayana Flores	Joya Cooley
Orange Coast College			
1C1	ggDoE: An R Package for Experimental Design with an Application to Prostate Cancer Drugs	Casey Truong	Jessica Jaynes
1A3	A Study on Balancing a Self-Driving Bicycle	Van Vu	Yu Bai
2C3	The Mechanism of De Lijser Compounds in Decreasing HeLa Cells' Proliferation Through HINT1	Thien Nguyen	Nilay Patel
3C3	Cloning and Production of a Viral DNA Packaging Enzyme	Hy Dao	Marcos Ortega
Santa Ana College			
2A1	Machine Learning for Object Detection in Self-Driving Vehicles	Manh Khang Nguyen	Yu Bai
2A2	Thevenin Equivalent Modeling Technique of PV Module Modeling	Armando Rodriguez	Rakesh Mahto
3B1	Establishing Desiccation and Starvation Resistance Assay for Testing Drosophila	Donelle Aguayo	Parvin Shahrestani
4C2	Design, Synthesis, and Biological Evaluation of Donepezil-Based Acetylcholinesterase Inhibitors as Therapeutics for Alzheimer'S Disease	Alex Gaspar	Stevan Pecic
Santiago Canyon College			
1C2	Characterizing Changes in Sedimentation Within a Southern California Estuary Over the Past Century	Kimberly Baez	Joe Carlin
1B3	Acinetobacter Baumannii Response to Human Pleural Fluid in Cefiderocol Treatment	Susie Arriaga	Maria Soledad Ramirez
2A3	Engineering Wildfire Mitigation	Juilo Villegas	Ankita Mohapatra
3B2	Fungal Immune Defense in Long- and Short-Lived Populations of Drosophila	Daniel Campos	Parvin Shahrestani
California State University, Fullerton			
4A1	Investigation of the Effects of Ni Substitution on Li2CuP2O7 Pigments	Maureen Sison	Joya Cooley
4A2	Synthesis and Characterization of Li2Cu1-xMnxP2O7 for Cool Pigment Applications	Kyle Currier	Joya Cooley
4B3	Changes in Late Pliocene	Jocelyn Atilano	Nicole Bonuso

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