

Welcome

Welcome to Boston University's 27th Annual Undergraduate Research Symposium! We are honored to have you engage with our high-achieving students and supportive faculty mentors who have collaborated over the past year working on groundbreaking research.

UROP connects BU undergraduate students with funded, faculty-mentored research projects. The program is flexible, allowing research study in any academic area university-wide, for any full-time undergraduate student at BU. Our mission is to increase student access to research experiences through funded, faculty mentored opportunities university-wide.

Enjoy and be inspired!

Phil Haberkern
Faculty Director

Melissa Johnson
Director

Molly Powers
Program Administrator

Acknowledgements

UROP is primarily supported by Boston University's Office of the Provost. We also thank our faculty advisory committee for their efforts in reviewing applications and guiding UROP to achieve its mission. Most importantly, we thank our faculty mentors for providing learning environments for our undergraduates and thus making UROP possible.

In addition, we thank the following financial sponsors for their generosity:

Funds from faculty research grants

Boston University Arts Initiative

Boston University Newbury Center

National Science Foundation

Clare Boothe Luce Program of the Henry Luce Foundation

Mark and Ruth Nelson

New England BioLabs

Friends & Family of Dr. Mark Riemen

Friends & Family of Dr. Mary Erskine

Presentation Times

Student presenters are split into two groups

Poster Session 1:

11AM to 12PM

Poster Session 2:

12PM to 1PM

Symposium Map Key

What do you want to learn?



Biological Sciences



Physical Sciences



Social Sciences



Arts & literature



Sargent: Health & Rehabilitation Sciences



Medical Sciences



Computational & Mathematical Sciences

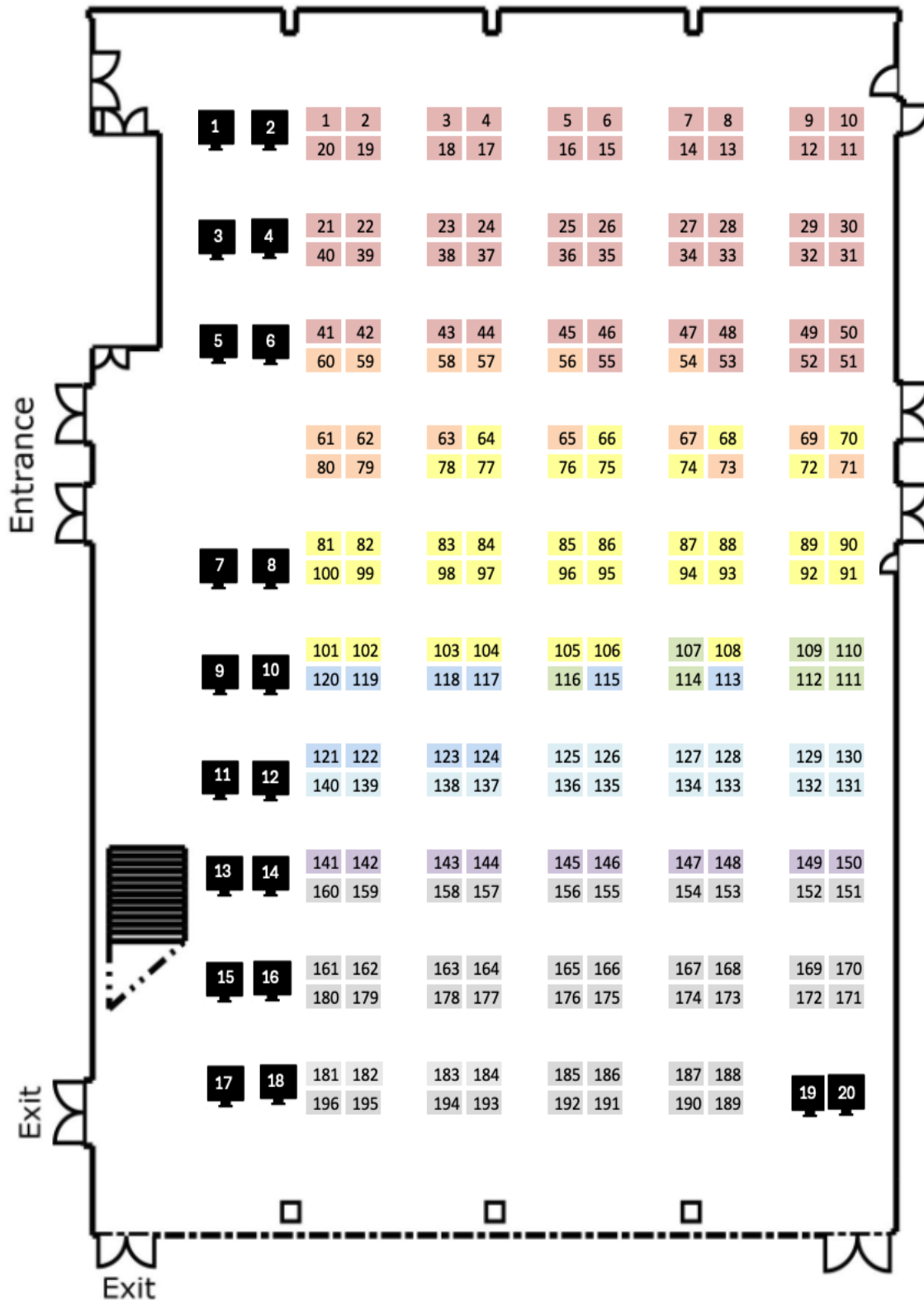


Engineering



Electronic Poster

Symposium Map



Biological Sciences

Beulah Ackah

Project Title: The Visualization of Enhanced Zinc Uptake in Neuro-2a and Mouse E199K Cells

Faculty Mentor: David Harris

Poster Number: 1

Presentation Time: 11:00 AM

Mohammad Aldabbagh

Project Title: Reflection of the Macro-Scale Cortical Gradient in Aphasia

Faculty Mentor: Swathi Kiran

Poster Number: 2

Presentation Time: 12:00 PM

Emma Applegate

Project Title: Environmental regulation of glucosinolate biosynthesis in Camelina

Faculty Mentor: John Celenza

Poster Number: 4

Presentation Time: 12:00 PM

Justin Arrick

Project Title: Impact of GLP-1R Agonists on Reward-Based Decision Making

Faculty Mentor: Lynne Chantranupong

Poster Number: e1

Presentation Time: 11:00 AM

Parnian Asgari

Project Title: Determination of the Physiological Role of Inosine Monophosphate in Inhibiting Aldolase B

Faculty Mentor: Dean Tolan

Poster Number: e2

Presentation Time: 11:00 AM

Christian Badawi

Project Title: A pseudotyped Vesicular Stomatitis Virus as a model for understanding successful endothelial cell entry by SARS-CoV-2

Faculty Mentor: John Connor

Poster Number: 6

Presentation Time: 12:00 PM

Aziza Barkuschwabe

Project Title: Exploring the genetic differentiation of a color polymorphism in *Chelymorpha alternans*

Faculty Mentor: Lynette Strickland

Poster Number: 8

Presentation Time: 12:00 PM

Rachel Baten

Project Title: Investigating the Efficacy of Piperborenine Derivatives for Cytotoxicity of A549 Lung Cancer Cells

Faculty Mentor: Aaron Beeler

Poster Number: 10

Presentation Time: 12:00 PM

Sophia Beredo

Project Title: Exploring Anemonefish Influence on Anemone Resilience and Growth under Thermal Stress

Faculty Mentor: Pete Buston

Poster Number: 12

Presentation Time: 12:00 PM

Erika Berron

Project Title: Glycosylation Patterns of Alzheimer's Disease Tauopathy

Faculty Mentor: Manveen Sethi

Poster Number: 3

Presentation Time: 11:00 AM

Benjamin Bouchard

Project Title: Assessing the Effect of Calorie Restriction on T-cell Infiltration and Oligodendrocyte Function in the Aging Monkey Brain

Faculty Mentor: Tara Moore

Poster Number: 14

Presentation Time: 12:00 PM

Di Chen

Project Title: Functional and histological assessment of an iPSC derived 3D model of Down syndrome: Differences in synaptic patterning and signaling profiles

Faculty Mentor: Ella Zeldich

Poster Number: 5

Presentation Time: 11:00 AM

Ariane Chen

Project Title: Preparation For Null Dopamine Sensor Multi-Fiber Photometry Recording During Instrumental Task

Faculty Mentor: Mark Howe

Poster Number: 16

Presentation Time: 12:00 PM

Celine Chien

Project Title: Dopamine-mediated state changes in the prelimbic cortex of mice

Faculty Mentor: Steve Ramirez

Poster Number: 7

Presentation Time: 11:00 AM

Jordyn Choe

Project Title: Characterization of Viral Peptides and Proteins Affecting Proliferation and Apoptosis

Faculty Mentor: Juan Fuxman Bass

Poster Number: 18

Presentation Time: 12:00 PM

Martin Dokholyan

Project Title: Structural and Functional Characterization of the Phosphoglycosyl Transferase WreU from *Rhizobium etli*

Faculty Mentor: Karen Allen

Poster Number: 9

Presentation Time: 11:00 AM

Yingyan Feng

Project Title: Effects of Climate Change Across Seasons on Soil Ammonium and Nitrate in a Northern Hardwood Forest

Faculty Mentor: Pamela Templer

Poster Number: 22

Presentation Time: 12:00 PM

Kiyomi Genewick

Project Title: Oral Processing Behavior Patterns in Wild Bornean Orangutans

Faculty Mentor: Cheryl Knott

Poster Number: e1

Presentation Time: 12:00 PM

Marie Grochowski

Project Title: Temperature regulation of anti-herbivory defense in *Arabidopsis thaliana* and other plant species

Faculty Mentor: John Celenza

Poster Number: 11

Presentation Time: 11:00 AM

James Harrington

Project Title: Susceptibility of *Exaiptasia pallida* to Bacteria and Oxidative Stress

Faculty Mentor: Sarah Davies

Poster Number: e3

Presentation Time: 11:00 AM

Michelle He

Project Title: Stress-Evoked Astrocyte-Neuron Dynamics in the Lateral Hypothalamus

Faculty Mentor: Steve Ramirez

Poster Number: 24

Presentation Time: 12:00 PM

Reese Hotten-Somers

Project Title: Gut microbiome as a proxy for SIV status in wild vervet monkeys (*Chlorocebus pygerythrus*)

Faculty Mentor: Christopher Schmitt

Poster Number: 13

Presentation Time: 11:00 AM

Madison Hurysz

Project Title: Impact of maternal loss and adoption on Bornean orangutan juvenile development

Faculty Mentor: Cheryl Knott

Poster Number: e4

Presentation Time: 11:00 AM

Manoc Joa-Griffith

Project Title: Mutualism between Anemones and Clownfish: Does their relationship confer resilience to heat stress?

Faculty Mentor: Peter Buston

Poster Number: 15

Presentation Time: 11:00 AM

Sarah Kornfeld

Project Title: Disrupting Gα/GoLoco Protein Complexes with a Rationally Engineered Synthetic Protein

Faculty Mentor: Mikel Garcia-Marcos

Poster Number: 26

Presentation Time: 12:00 PM

Minh Le

Project Title: Hemocyte Response during *Drosophila* Ovarian Tumor Growth

Faculty Mentor: Kimberly McCall

Poster Number: 17

Presentation Time: 11:00 AM

Jonathan Leach

Project Title: Novel transgenic reporter mouse models for microglial and astrocytic responses to neural device implantation

Faculty Mentor: Tuan Leng Tay

Poster Number: 28

Presentation Time: 12:00 PM

Benjamin Lee

Project Title: Effects of Psilocybin Compared to Cocaine on a Perceptual Evidence Accumulation Task

Faculty Mentor: Ben Scott

Poster Number: 30

Presentation Time: 12:00 PM

Matthew Levy

Project Title: Role of SHMT2 in T-cell differentiation and development in Myc-driven cancers

Faculty Mentor: Hui Feng

Poster Number: 32

Presentation Time: 12:00 PM

Irini Livanos

Project Title: Plasticity of coloration is response to variation in social environment in the clown anemonefish *Amphiprion percula*.

Faculty Mentor: Peter Buston

Poster Number: 34

Presentation Time: 12:00 PM

Emily Long

Project Title: Photobiomodulation (PBM) in Transient Ischemic Stroke

Faculty Mentor: Emily Long

Poster Number: 36

Presentation Time: 12:00 PM

Aiden Ly

Project Title: Developing a machine learning approach to quantify gait features in murine models of Parkinson's disease

Faculty Mentor: Xue Han

Poster Number: e2

Presentation Time: 12:00 PM

Jaylynn McCurdy

Project Title: The Role of the Phagocytic Receptor Draper in Neurodegeneration

Faculty Mentor: Kimberly McCall

Poster Number: 19

Presentation Time: 11:00 AM

Carly McDermott

Project Title: Host Plant Specialization in the Mimetic Butterfly *Limenitis arthemis*

Faculty Mentor: Sean Mullen

Poster Number: 38

Presentation Time: 12:00 PM

Christian Mei

Project Title: Identification of putative active cis-regulatory modules in the early *Drosophila melanogaster* embryo

Faculty Mentor: Zeba Wunderlich

Poster Number: 40

Presentation Time: 12:00 PM

Jean Messon

Project Title: Identifying and Characterizing Viral Peptides and Proteins regulating cell death pathways

Faculty Mentor: Juan Fuxman

Poster Number: 21

Presentation Time: 11:00 AM

Maia Minto

Project Title: Carbon nanotubes as a photoacoustic nanotransducer

Faculty Mentor: Chen Yang

Poster Number: 42

Presentation Time: 12:00 PM

Ezekiel Moroze

Project Title: Analysis of Cortical Degeneration in Parkinson's Disease using Explainable AI and CNNs Trained with Structural MRI Data

Faculty Mentor: Arash Yazdanbakhsh

Poster Number: e3

Presentation Time: 12:00 PM

Nevaeh Murphy

Project Title: Characterization of alf3-1 mutant recapitulation plants in Arabidopsis thaliana

Faculty Mentor: John Celenza

Poster Number: 23

Presentation Time: 11:00 AM

Aden Nagree

Project Title: Divergent Thermal Challenges Elicit Unique Responses in Orbicellid Corals

Faculty Mentor: Sarah Davies

Poster Number: 25

Presentation Time: 11:00 AM

Alejandra Navarro-Rosado

Project Title: Characterization of the DNA-Binding Activity of Jellyfish Transcription Factor NF- κ B

Faculty Mentor: Thomas Gilmore

Poster Number: 27

Presentation Time: 11:00 AM

Amanda Nazareth

Project Title: Liquid-Liquid Phase Separation of the Scaffold Protein NEMO of the NF- κ B Signaling Pathway

Faculty Mentor: Thomas Gilmore

Poster Number: 44

Presentation Time: 12:00 PM

Cal Parise

Project Title: Investigating Red Cell Biology in Zebrafish Lacking their Fetal Blood Stem Cell Niche

Faculty Mentor: Elliott Hagedorn

Poster Number: 29

Presentation Time: 11:00 AM

Mary Park

Project Title: Using GIS to Quantify Land-Sea Corridors for the Jaguar in Southern Belize Under Development Scenarios

Faculty Mentor: Les Kaufman

Poster Number: 31

Presentation Time: 11:00 AM

Shaoning Peng

Project Title: The role of palmitoylation of lysosomal integral membrane protein type-2 in α -synuclein tetramerization

Faculty Mentor: Gary Ho

Poster Number: 33

Presentation Time: 11:00 AM

Sarah Petit

Project Title: Substitution for Glu29 Impacts Human Ketohexokinase-C Catalytic Activity Authors: Sarah Petit, So Young Bae, and Dean R. Tolan

Faculty Mentor: Dean Tolan

Poster Number: 35

Presentation Time: 11:00 AM

Jacob Purinton

Project Title: Identification and Functional Characterization of Cis-Regulatory Elements

Faculty Mentor: Juan Fuxman Bass

Poster Number: 37

Presentation Time: 11:00 AM

Marko Radulovic

Project Title: Alizarin Red mediates skeletal patterning defects in sea urchin embryos via elevation of reactive oxygen species

Faculty Mentor: Cynthia Bradham

Poster Number: 39

Presentation Time: 11:00 AM

Patricio Rodriguez

Project Title: Characterization of Residue-Specific Interactions in Ketohexokinase Inhibitor Binding Using Site-Directed Mutagenesis and Quantitative Assays

Faculty Mentor: Dean Tolan

Poster Number: 46

Presentation Time: 12:00 PM

Eva Romero

Project Title: Adapting 3D Deep Learning Algorithms to Analyze Coral Geometry

Faculty Mentor: Ethan Deyle

Poster Number: 41

Presentation Time: 11:00 AM

Caitlin Sauer

Project Title: Confirmation and characterization of IMD immune-responsive Enhancers in *Drosophila melanogaster* using flow cytometry

Faculty Mentor: Zeba Wunderlich

Poster Number: 43

Presentation Time: 11:00 AM

Jasming Senel

Project Title: The role of CKAP5's TOG domains

Faculty Mentor: Laura Lowery

Poster Number: 48

Presentation Time: 12:00 PM

Abigail Skena

Project Title: Assessing Predation Pressure in a Tribal Fishery Using Predictions from Optimal Foraging Theory

Faculty Mentor: Maria Abate

Poster Number: 20

Presentation Time: 11:00 AM

Amithi Tadigadapa

Project Title: Characterizing Astrocytic and Neuronal Engram Dynamics in the Hippocampus

Faculty Mentor: Steve Ramirez

Poster Number: 45

Presentation Time: 11:00 AM

Noelle Tegan

Project Title: Defining the role of the *Dlk1-Dio3* noncoding RNA locus in cardiomyocyte differentiation

Faculty Mentor: Frank Naya

Poster Number: 47

Presentation Time: 11:00 AM

Charlotte Vogel

Project Title: The effects of Threespot Damselfish territoriality on Caribbean acroporid restoration and overall ecosystem health

Faculty Mentor: Les Kaufman

Poster Number: 49

Presentation Time: 11:00 AM

Yu Wang

Project Title: Enhancer Functionality and Positional Bias: A Comparative Study of Wild-Type and Engineered Enhancers in Gene Regulation

Faculty Mentor: Zeba Wunderlich

Poster Number: 50

Presentation Time: 12:00 PM

Sofia Weaver

Project Title: Genetic Evidence of Sex-Biased Dispersal in The Critically Endangered Yellow-Tailed Wolly Monkey (*Lagothrix flavicauda*)

Faculty Mentor: Christopher Schmitt

Poster Number: 52

Presentation Time: 12:00 PM

Max Wertheimer

Project Title: Characterizing the epithelial sheath as a barrier to professional phagocytes during apoptosis in the ovary

Faculty Mentor: Kimberly McCall

Poster Number: 51

Presentation Time: 11:00 AM

Julia Westwood

Project Title: The Effect of Anemones on Anemonefish Resilience in the Context of Rising Ocean Temperatures

Faculty Mentor: Peter Buston

Poster Number: 53

Presentation Time: 11:00 AM

Alexa Woodrow

Project Title: Optimizing exogenous expression of mosquito odorant receptors in HEK293t cells

Faculty Mentor: Meg Younger

Poster Number: 54

Presentation Time: 12:00 PM

Ivy Yang

Project Title: Investigation of glutamatergic signaling dynamics in the striatum

Faculty Mentor: Mark Howe

Poster Number: 189

Presentation Time: 11:00 AM

Jolinada Zhang

Project Title: Bacterial vaginosis derived sialidases function at low pH and reduce sperm surface charge.

Faculty Mentor: Deborah Anderson

Poster Number: e4

Presentation Time: 12:00 PM

Tina Zhang

Project Title: Defining the Lysosomal Proteome and Metabolome Across Subcellular Neuronal Compartments

Faculty Mentor: Lynne Chantranupong

Poster Number: 56

Presentation Time: 12:00 PM

Physical Sciences

Mehmet Akharman

Project Title: Analysis of Perseids Meteor Shower from Millstone Hill Observatory 440 MHz Geomagnetic Radar Data

Faculty Mentor: Meers Oppenheim

Poster Number: 58

Presentation Time: 12:00 PM

Leen Alnsour

Project Title: Thermal Modeling of the MTD Endcap Timing Layer Modules Using AutoDesk Fusion 360

Faculty Mentor: Caleb Fangmeier

Poster Number: e5

Presentation Time: 12:00 PM

Ariyana Bonab

Project Title: A STELLAR CENSUS: VISUAL ANALYSIS OF 54,131 WHITE DWARF STAR SPECTRA IN SDSS-V

Faculty Mentor: JJ Hermes

Poster Number: 60

Presentation Time: 12:00 PM

Mark Castro

Project Title: Characterization of CIAO3's FeS Clusters by Domain Analysis

Faculty Mentor: Deborah Perlstein

Poster Number: 55

Presentation Time: 11:00 AM

Ethan Chong

Project Title: Enhancing Student Laboratory Skills and Confidence with Question-Embedded Technique Videos

Faculty Mentor: Binyomin Abrams

Poster Number: e5

Presentation Time: 11:00 AM

Salvatore Cordova

Project Title: Investigating Terahertz Metamaterials for Magnetic Field Enhancement

Faculty Mentor: Wanzheng Hu

Poster Number: 62

Presentation Time: 12:00 PM

Ethan Gerhardt

Project Title: Tandem Cobalt-Electrocatalytic Z-Selective Semi-Hydrogenation under Voltage Control

Faculty Mentor: Bryan Parnitzke

Poster Number: 64

Presentation Time: 12:00 PM

Matthew Giess

Project Title: Investigation of parameters controlling saltmarsh grass species distribution in New England

Faculty Mentor: Duncan FitzGerald

Poster Number: 57

Presentation Time: 11:00 AM

Charlotte Holland

Project Title: Synthesis of Thiocarboxylate Ligands and Their Incorporation into Heterobimetallic Lantern Complexes

Faculty Mentor: Linda Doerrer

Poster Number: 59

Presentation Time: 11:00 AM

Ian Honczarenko

Project Title: Studies Towards the Synthesis of Remisporine B

Faculty Mentor: John Porco

Poster Number: 61

Presentation Time: 11:00 AM

Sneha Jos

Project Title: Enhancing Anion Trapping Efficiency: Simulation of a Novel Deceleration Stage for the Borealis Experiment

Faculty Mentor: Zeynep Demiragli

Poster Number: 66

Presentation Time: 12:00 PM

Amy Kraft

Project Title: Due to Fluorine's unique chemical properties, it has a strong impact on the physical, chemical, and biological components of bioactive molecules when

Faculty Mentor: Kaitlyn Corazzata

Poster Number: 68

Presentation Time: 12:00 PM

Maria Sofia Medina Parra

Project Title: Fungal Selective Hsp90 Resorcylate Aminopyrazole Inhibitors

Faculty Mentor: Lauren Brown

Poster Number: 70

Presentation Time: 12:00 PM

Margaret Ann Mickelberg

Project Title: Studies Toward the Synthesis of Limonene-Containing Dimers

Faculty Mentor: John Porco

Poster Number: 63

Presentation Time: 11:00 AM

Tegan Poerio

Project Title: Functionalization of Aliphatic Heterocycles via Shono-type Oxidation

Faculty Mentor: Joseph Derosa

Poster Number: 65

Presentation Time: 11:00 AM

Gabriel Russo

Project Title: Probing and Rerouting the Energy Transfer Pathways in Photosynthetic Light Harvesting

Faculty Mentor: Minjung Son

Poster Number: 67

Presentation Time: 11:00 AM

Lyla Thomson

Project Title: Structural and Computational Based Discovery of Selective Adrenergic Alpha2-C Receptor Agonists

Faculty Mentor: Lauren Brown

Poster Number: 72

Presentation Time: 12:00 PM

Alexander Thornton

Project Title: The Scattering Neutrino Detector at the Large Hadron Collider

Faculty Mentor: Zeynep Demiragli

Poster Number: e6

Presentation Time: 12:00 PM

Chanmin Woo

Project Title: Uniform Production of Ultrathin 2D GaN Through Nitrogen Substitution of GaS with Ammonia.

Faculty Mentor: Xi Ling

Poster Number: 74

Presentation Time: 12:00 PM

Social Sciences

Hallie Baker

Project Title: The Application of Facial Recognition Software to the Identification of Looted Ancient Cambodian Art

Faculty Mentor: Robert Murowchick

Poster Number: 76

Presentation Time: 12:00 PM

Sadiya Buccino

Project Title: Forced Separation: The Impact of Immigration Raids on Foster Care Admissions and Child Wellbeing

Faculty Mentor: Tatiana Padilla

Poster Number: 78

Presentation Time: 12:00 PM

Jessica Buckley

Project Title: Ancestral Subsistence on Chirikof Island: Shell Midden Analysis

Faculty Mentor: Catherine West

Poster Number: 80

Presentation Time: 12:00 PM

Seungmin Cho

Project Title: Machine Learning and nominal realization in a low-resource language

Faculty Mentor: Michael Everdell

Poster Number: 69

Presentation Time: 11:00 AM

Theodore Delisio

Project Title: Churches, Sustainability, and Spaces: Architectural Preservation in London, St James' Church and St. Martin-in-the-Fields

Faculty Mentor: Kathryn Lamontagne

Poster Number: 71

Presentation Time: 11:00 AM

Juan Diaz Garrido

Project Title: The Exit Gap: Investigating the difference between monetary sale of male founded companies against similar female founded companies.

Faculty Mentor: Patricia Cortes

Poster Number: 73

Presentation Time: 11:00 AM

Reilly Donohue

Project Title: Believing Before Seeing: Interactions Among Confidence, Accuracy, and Pupil Diameter

Faculty Mentor: Joseph McGuire

Poster Number: 75

Presentation Time: 11:00 AM

Nathan Duong

Project Title:

Faculty Mentor: Rachel Nolan

Poster Number: 86

Presentation Time:

Changxuan Fan

Project Title: Reducing Misleading Claims in Digital Marketplaces Using Truth Warrants

Faculty Mentor: Marshall Van Alstyne

Poster Number: 77

Presentation Time: 11:00 AM

Naya Habr

Project Title: Social support, housing status, and treatment of opioid use disorder

Faculty Mentor: Michelle Stransky

Poster Number: 79

Presentation Time: 11:00 AM

Stanley Huang

Project Title: Beyond Infancy and Before Adulthood: Impact of RAIDS on Pediatric Outcomes

Faculty Mentor: Tatiana Padilla

Poster Number: 81

Presentation Time: 11:00 AM

Kayla Ji

Project Title: Callous-Unemotional Traits as a Moderator for Parent-Child Language Child Matching and Attachment

Faculty Mentor: Nicholas Wagner

Poster Number: 82

Presentation Time: 12:00 PM

Seheni Kariyawan

Project Title: Investigation into Sarcasm Comprehension in First and Second Language English Speakers.

Faculty Mentor: Catherine Caldwell-Harris

Poster Number: 84

Presentation Time: 12:00 PM

Isabella Ketchen

Project Title: Iconic Allegiance: Unveiling the Intersection of Orthodoxy and Nationalistic Narratives in Russia

Faculty Mentor: Micah Goodrich

Poster Number: 83

Presentation Time: 11:00 AM

Eve Kleiber

Project Title: Does understanding death prepare children for understanding evolution by natural selection?

Faculty Mentor: Deborah Kelemen

Poster Number: 85

Presentation Time: 11:00 AM

Mitali Krishnamurthy

Project Title: Flappers, Vamps, and Sheiks: Dating and College Life in 1920s Massachusetts

Faculty Mentor: Andrew Robichaud

Poster Number: 87

Presentation Time: 11:00 AM

Mary Ladas

Project Title: Income-to-Needs Ratio is Associated with Temporal Memory in Preschool Children

Faculty Mentor: Amanda Tarullo

Poster Number: e20

Presentation Time: 12:00 PM

Sophia Lin

Project Title: Exploring the associations between parenting stress, parental reports of child anxiety, and measured behavioral inhibition.

Faculty Mentor: Nicholas Wagner

Poster Number: 88

Presentation Time: 12:00 PM

Yangduoduo Luo

Project Title: Echoes of Authenticity: The Impact of Frame Switching on Social Communication Among Bilingual Speakers

Faculty Mentor: Catherine Caldwell-Harris

Poster Number: 89

Presentation Time: 11:00 AM

Matthew Lutkins

Project Title: How Do Women Athletes Understand their Bodily Capital, Place, and Value at Boston University?

Faculty Mentor: Jonathan Mijs

Poster Number: 91

Presentation Time: 11:00 AM

Fariha Mabud

Project Title: Investigating Caregiver Influence on Children's Explanatory Preferences When Reasoning about Nature

Faculty Mentor: Deborah Kelemen

Poster Number: 93

Presentation Time: 11:00 AM

Sumhitha Malladi

Project Title: Children's beliefs about types of risk

Faculty Mentor: Sumhitha Malladi

Poster Number: 95

Presentation Time: 11:00 AM

Alexia Nastasia

Project Title: Mapping Worldwide Youth-Driven Initiatives for Addressing the Climate Crisis: Best Practices, Values Informing Climate Action, & Environmental Justice

Faculty Mentor: Eric Kelley

Poster Number: e7

Presentation Time: 12:00 PM

Elizaveta Nikiforova

Project Title: How gender influences children's likeliness to generalize, justifications for generalization, and speech pattern?

Faculty Mentor: Kathleen Corriveau

Poster Number: 90

Presentation Time: 12:00 PM

Ada Okoluku

Project Title: Establishment of a Traumatic Brain Injury Model in *Drosophila melanogaster*

Faculty Mentor: Kyle Gobrogge

Poster Number: 100

Presentation Time: 12:00 PM

Liam Reynolds

Project Title: "Researching the Training and Work Experiences of Refugee Resettlement Staff"

Faculty Mentor: Carrie Preston

Poster Number: 97

Presentation Time: 11:00 AM

A'Yanna Rouse

Project Title: Exploring Africana Diasporic Religions Through Interactive Digital Worlds

Faculty Mentor: Margarita Guillory

Poster Number: e8

Presentation Time: 12:00 PM

Amelie Sahadevan

Project Title: The Role of Investment in Chile's Economic Growth (1970-2010)

Faculty Mentor: Regina Cati

Poster Number: 99

Presentation Time: 11:00 AM

Krishi Shah

Project Title: Parental Pandemic Pressures: Examining the Link between Parental Stress During COVID-19 and Child Emotional and Behavioral Outcomes

Faculty Mentor: Nicholas Wagner

Poster Number: 101

Presentation Time: 11:00 AM

Ruofei Shang

Project Title: Asian American Youth Palestine Activism: Why Do Asian American Youths Get Involved in the Palestine Liberation Movement?

Faculty Mentor: Margaret Litvin

Poster Number: 103

Presentation Time: 11:00 AM

Ethan Stoehr

Project Title: Why Say More?: Factors that Influence Overt Argument Realization in O'dam

Faculty Mentor: Michael Everdell

Poster Number: 69

Presentation Time: 11:00 AM

Thibaut Stussi

Project Title: Exploring Shifts in Privatization Rationale for Migration Detention in Australia and the United Kingdom

Faculty Mentor: Kaija Schilde

Poster Number: 92

Presentation Time: 12:00 PM

Dafni Suresh

Project Title: Exploring associations between novel computerized measure of affiliative preferences and social behaviors in children with callous unemotional traits.

Faculty Mentor: Nicholas Wagner

Poster Number: 105

Presentation Time: 11:00 AM

Romy Tarantino

Project Title: Impact of Business Executive Corruption on Public Confidence in Charitable Organizations: A Global Econometric Analysis

Faculty Mentor: Stacey Gelsheimer

Poster Number: 107

Presentation Time: 11:00 AM

Katrina Tronco

Project Title: Family Care, Decision-Making, and Community Building in the Filipino Nursing Diaspora from an Intergenerational Perspective

Faculty Mentor: Merav Shohet

Poster Number: 94

Presentation Time: 12:00 PM

Liam Verstraet

Project Title: Emotion Dysregulation, Behavioral Inhibition and Approach, and Irritability among Depressed Adults

Faculty Mentor: Qimin Liu

Poster Number: 96

Presentation Time: 12:00 PM

Kennedy Walker

Project Title: Lower Sleep Onset Variability is Linked to Higher Language Complexity in Low SES Toddlers

Faculty Mentor: Amanda Tarullo

Poster Number: e6

Presentation Time: 11:00 AM

Yudi Wang

Project Title: Sources for Learning: Exploring Children's Acquisition of Knowledge About People and Religious Agents

Faculty Mentor: Kathleen Corriveau

Poster Number: 98

Presentation Time: 12:00 PM

Abigael Welch

Project Title: The Realist Impulse: Exploring Post-Cold War U.S. Democracy Promotion and Foreign Policy

Faculty Mentor: Jeremy Menchik

Poster Number: 100

Presentation Time: 12:00 PM

Morgan Wheeler

Project Title: Understanding Discipline in African American Families: UROP Abstract

Faculty Mentor: Cati Connell

Poster Number: 102

Presentation Time: 12:00 PM

Isabelle Wolpert

Project Title: Catherine II's Pale of Settlement: The Catalyst for Anti-Semitism in Tsarist Russia

Faculty Mentor: Alexis Peri

Poster Number: 109

Presentation Time: 11:00 AM

Jonathan Zhang

Project Title: PTSD & Post-combat Purification Rituals: An Analysis into Potential Therapeutic Benefits

Faculty Mentor: Luke Glowacki

Poster Number: 104

Presentation Time: 12:00 PM

Yixuan Zhu

Project Title: A Text Mining Approach to Measure Consistency in Reasons for Irritability

Faculty Mentor: Qimin Liu

Poster Number: 106

Presentation Time: 12:00 PM

Arts & Literature

Katherine Bourlakas

Project Title: The Details of Creation: A Transatlantic, Transhistorical Exploration of Poetry to Contextualize American Reality

Faculty Mentor: Erin Murphy

Poster Number: 108

Presentation Time: 12:00 PM

Jonah Causin

Project Title: Imagining Heaven and Hell: The Emergence of the Afterlife in Early Christian Eschatology

Faculty Mentor: Andrew Jacobs

Poster Number: e7

Presentation Time: 11:00 AM

Rivkah Chaouat Kelley

Project Title: The Mind-Body Problem in the 21st Century: E.J. Lowe's Challenge to the Physicalist Paradigm

Faculty Mentor: Nicholas Westberg

Poster Number: 110

Presentation Time: 12:00 PM

Lucas Dantas Leite

Project Title: The Poetics of a Divine Grief: Pantheism in the American Northeastern Protestant Elegy

Faculty Mentor: Joellen Masters

Poster Number: 111

Presentation Time: 11:00 AM

Samuel Dvorin

Project Title: David's Harp: Realizing Cultural Interpretations

Faculty Mentor: Victor Coelho

Poster Number: 113

Presentation Time: 11:00 AM

Christopher Ellars

Project Title: Here Where the River Forever Divides Them: Noh and Opera within 20th Century Queer Culture

Faculty Mentor: James Keith Vincent

Poster Number: e10

Presentation Time: 12:00 PM

Emma Claire Everett

Project Title: An Ecocritical Analysis of Two Jean Rhys Novels

Faculty Mentor: Anna Henchman

Poster Number: 115

Presentation Time: 11:00 AM

Emma Hardy

Project Title: Palestinian Resistance Music

Faculty Mentor: Luluah Mustafa

Poster Number: 112

Presentation Time: 12:00 PM

Noora Lahoud

Project Title: Understanding Wars in the Middle East in a Post Technological World

Faculty Mentor: Margaret Litvin

Poster Number: 117

Presentation Time: 11:00 AM

Levi Leca

Project Title: LiDAR Technology: Making Theatre More Efficient and Accurate

Faculty Mentor: Jon Savage

Poster Number: e8

Presentation Time: 11:00 AM

Wenshu Li

Project Title: We Dwellin' Today, Tomorrow, and Forever: Emerging Black Ecosystems on the Dancefloor

Faculty Mentor: Jacqueline Georgis

Poster Number: e10

Presentation Time: 11:00 AM

Maggie Ma

Project Title: The Poetics of a Divine Grief: Pantheism in the American Northeastern Protestant Elegy

Faculty Mentor: Joellen Masters

Poster Number: 111

Presentation Time: 11:00 AM

Hope Myers

Project Title: The Art of Empowerment: Black Aesthetics in the Black Power Movement from the 1960s to Today

Faculty Mentor: Brockett Horne

Poster Number: e11

Presentation Time: 12:00 PM

Bella Ramirez

Project Title: Filming the Entryway: Food Justice Told Through Different Genres

Faculty Mentor: Jodi Luber

Poster Number: e9

Presentation Time: 11:00 AM

Samirah Toussaint

Project Title: A New Understanding of Robert Bresson's life and work (to be published in three volumes: the early films, the mid-period films, the late-films)

Faculty Mentor: Ray Carney

Poster Number: e12

Presentation Time: 12:00 PM

Sargent: Health & Rehabilitation Sciences

Beatriz dos Santos Bechara

Project Title: Eating Timing of Adults with Overweight and Obesity Across the Week and Between Weekdays and Weekends, Assessed Objectively Using a Wearable Camera

Faculty Mentor: Megan McCrory

Poster Number: 119

Presentation Time: 11:00 AM

Kyleigh Gunn

Project Title: The State of Indoor Air Quality Management Policies in K-12 public schools in the U.S

Faculty Mentor: Patricia Fabian

Poster Number: 114

Presentation Time: 12:00 PM

Isabel Horney

Project Title: The Impact of Caregiver-Infant Proximity on Infant Object Exploration and Vocalization

Faculty Mentor: Jana Iverson

Poster Number: e13

Presentation Time: 12:00 PM

Claire Hwang

Project Title: Understanding phenotyping changes of vascular smooth muscle cells in the development of aortic aneurysms

Faculty Mentor: Francesca Seta

Poster Number: e11

Presentation Time: 11:00 AM

Maya Jusuf

Project Title: Structural Differences in Axons in the Internal Capsule between Control and Patients with Autism

Faculty Mentor: Basilis Zikopoulos

Poster Number: 116

Presentation Time: 12:00 PM

Anita Keltcher

Project Title: Formant perturbations to understand DIVA control scheme feedback controllers pilot experiment

Faculty Mentor: Frank Guenther

Poster Number: 121

Presentation Time: 11:00 AM

Tyler Pauly

Project Title: Validating an Electronic Health Record Algorithm to Identify Homelessness and Housing Insecurity in a Safety Net Hospital

Faculty Mentor: Heather Hsu

Poster Number: 118

Presentation Time: 12:00 PM

Emily Rotondi

Project Title: Systematic Review on Maternal Welfare and Sexual and Reproductive Health of Afghan Refugees in Pakistan

Faculty Mentor: Muhammad Zaman

Poster Number: 123

Presentation Time: 11:00 AM

Tanisha Rungta

Project Title: Assessing the intersection of cognitive and motor performance in autistic children with and without Attention Deficit Hyperactivity Disorder

Faculty Mentor: Simone Gill

Poster Number: 125

Presentation Time: 11:00 AM

Parth Shah

Project Title: Impact of Frailty on Downhill Damage in Mice Muscle Cells

Faculty Mentor: LaDora Thompson

Poster Number: 120

Presentation Time: 12:00 PM

Paulina Villanueva Salcedo

Project Title: The Effects of Speaker Variability on Word Production in Monolingual and Bilingual Children

Faculty Mentor: Kimberly Crespo

Poster Number: 127

Presentation Time: 11:00 AM

Alpha Worku

Project Title: Proportion of inhibitory calretinin expressing neurons in layer V of the anterior medial entorhinal cortex in primates

Faculty Mentor: Helen Barbas

Poster Number: 122

Presentation Time: 12:00 PM

Andrew Wrede

Project Title: Investigating Laryngeal and Acoustic Behaviors in AdLD

Faculty Mentor: Jennifer Vojtech

Poster Number: 124

Presentation Time: 12:00 PM

Eric Yang

Project Title: Efficacy of AhR and JAK2 Inhibitors in Reducing Tumorigenesis: Insights into Their Combined Impact on Immune Response in Lung Cancer

Faculty Mentor: Eric Yang

Poster Number: 129

Presentation Time: 11:00 AM

Medical Sciences

Rafay Adnan

Project Title: Development of Machine Learning Tools to Analyze Behavioral Impacts of Early Life Trauma in Mice

Faculty Mentor: Erin Hisey

Poster Number: e15

Presentation Time: 12:00 PM

Giulia Bailey

Project Title: Facilitation of Extinction Retention and Reconsolidation Blockade in Post Traumatic Stress Disorder by Intravenous Allopregnanolone

Faculty Mentor: Ann Rasmusson

Poster Number: 131

Presentation Time: 11:00 AM

Mimansa Bhargava

Project Title: FLI1 downregulation contributes to scleroderma pathogenesis by enhancing trained immunity responses in myeloid cells

Faculty Mentor: Mimansa Bhargava

Poster Number: 133

Presentation Time: 11:00 AM

Maura Farrell

Project Title: Bacterial vaginosis-associated sialidase enzymes increase sperm susceptibility to agglutination

Faculty Mentor: Deborah Anderson

Poster Number: 126

Presentation Time: 12:00 PM

Jiayi Fu

Project Title: Role of GLP1-R in Renal Physiology and Pathophysiology

Faculty Mentor: Jie Zhang

Poster Number: e12

Presentation Time: 11:00 AM

Belen Karakullukcu

Project Title: The effects of ketamine in nervous system function in *C. elegans*

Faculty Mentor: Christopher Gabel

Poster Number: 128

Presentation Time: 12:00 PM

Benjamin Kissin

Project Title: Galectin-3 Binding Protein: A Novel Mediator of Scleroderma Pathogenesis

Faculty Mentor: Andreea Bujor

Poster Number: e13

Presentation Time: 11:00 AM

Carlo Lanza

Project Title: Investigating Lamin A/C Dysregulation as a Driver of Aggressive Prostate Cancer

Faculty Mentor: Chirstopher Heapthy

Poster Number: 130

Presentation Time: 12:00 PM

Maiko Lum

Project Title: Comparison of Giant Vacuoles in the Inner Wall Endothelium of Schlemm's Canal between Normal and Glaucomatous Human Donor Eyes

Faculty Mentor: Haiyan Gong

Poster Number: e16

Presentation Time: 12:00 PM

Riya Manchanda

Project Title: Cerebral Small Vessel Disease and Major Adverse Cardiovascular Events: The Framingham Heart Study

Faculty Mentor: Jose Romero

Poster Number: 135

Presentation Time: 11:00 AM

Kristina Nicolas

Project Title: The protein kinase PIM1 epigenetically promotes lung fibroblast activation in a CBX5 dependent manner

Faculty Mentor: Giovanni Ligresti

Poster Number: 132

Presentation Time: 12:00 PM

Harshita Pattam

Project Title: Loss of Slit2 in Nephric Duct Causes CAKUT Phenotype in Mice

Faculty Mentor: Weining Lu

Poster Number: 137

Presentation Time: 11:00 AM

Shreyas Puducheri

Project Title: AI-Augmented Radiological Assessment of Alzheimer's Disease and Related Dementias

Faculty Mentor: Vijaya Kolachalama

Poster Number: e14

Presentation Time: 11:00 AM

Ksheeraja Ramanujam

Project Title: Hot-Injection Helps Optimize Synthesis of Oleic Acid Coated Superparamagnetic Iron Oxide Nanoparticles

Faculty Mentor: Joyce Wong

Poster Number: 139

Presentation Time: 11:00 AM

Vivikta Rao

Project Title: Humanized APOL1 Mice with High-Risk Alleles Exhibit Preeclampsia but Not Gestational Diabetes

Faculty Mentor: Jin Wei

Poster Number: e15

Presentation Time: 11:00 AM

Emaad Saad

Project Title: Role of Schwann Cell Precursors In Skeletal Pain in Response to Injury

Faculty Mentor: Paola Divieti-Pajevic

Poster Number: e17

Presentation Time: 12:00 PM

Sophia Sabala

Project Title: Empowering Food Justice: A Community-Driven Evaluation of the Abundance Boston App

Faculty Mentor: Renee Boynton-Jarrett

Poster Number: 134

Presentation Time: 12:00 PM

Ria Shah

Project Title: Precise manipulation of Gαs signaling using a chemogenetic tool (Gαs-CAGE)

Faculty Mentor: Mikel Garcia-Marcos

Poster Number: 141

Presentation Time: 11:00 AM

Jia Wei (Janice) Tang

Project Title: Investigation of the Off-Target Effects of SLGT2 Inhibitors

Faculty Mentor: Jie Zhang

Poster Number: e16

Presentation Time: 11:00 AM

Omer Vurkac

Project Title: Investigating the Role of Albuminuria in Cardiorenal Syndrome Using ILK Conditional knockout (cKO) Mouse Models

Faculty Mentor: Weining Lu

Poster Number: 136

Presentation Time: 12:00 PM

Kevin Wang

Project Title: Investigating molecular mechanisms of vascular toxicity in targeted cancer therapies using a tissue engineered vascular model

Faculty Mentor: Christopher Chen

Poster Number: 138

Presentation Time: 12:00 PM

Haotian Zhang

Project Title: Investigating Cancer Metastasis under Juxtaposed Fatty Acid Rich Environments through Ovarian Cancer Migration and Proliferation Assessments

Faculty Mentor: Ji-Xin Cheng

Poster Number: 140

Presentation Time: 12:00 PM

Computational & Mathematical Sciences

Talia Chen

Project Title: Efficient CPU-Based GNN Sampling with io_uring

Faculty Mentor: Vasiliki Kalavri

Poster Number: 144

Presentation Time: 12:00 PM

Nate Lambert

Project Title: Evidence of Ratio Markers in Italian

Faculty Mentor: Elizabeth Coppock

Poster Number: 143

Presentation Time: 11:00 AM

Daian Liu

Project Title: Market Solutions to Fight Misinformation

Faculty Mentor: Marshall Alstyne

Poster Number: 146

Presentation Time: 12:00 PM

Melissa Martinez

Project Title: Efficient Graph Neural Network Sampling with Modern Storage Technology: mmap

Faculty Mentor: Vasiliki Kalavri

Poster Number: 145

Presentation Time: 11:00 AM

Victor Monico Caldeira

Project Title: Bioinformatic analysis of electron transfer in proteins

Faculty Mentor: Ksenia Bravaya

Poster Number: 148

Presentation Time: 12:00 PM

Shohei Oyama

Project Title: Unsupervised Decomposition of Power Spectra of Neural Electrophysiological Recordings

Faculty Mentor: Emily Stephen

Poster Number: 147

Presentation Time: 11:00 AM

Varsha Singh

Project Title: Charge Carrier Properties as a Function of Heme Disorder in Protein Nanowires

Faculty Mentor: Giacomo Nagaro

Poster Number: 149

Presentation Time: 11:00 AM

Julyssa Villa Machado

Project Title: Benchmarking and Workload Analysis of Assistive Robot Motion Planning

Faculty Mentor: Sabrina Neuman

Poster Number: e18

Presentation Time: 12:00 PM

Manny Wang

Project Title: Developing an audio-augmented machine learning model for medical education and research

Faculty Mentor: Vijaya Kolachalama

Poster Number: 151

Presentation Time: 11:00 AM

Zikun Wang

Project Title: Effective Workflow Auto-Scaling in Streaming System.

Faculty Mentor: John Liagouris

Poster Number: 150

Presentation Time: 12:00 PM

Engineering

Ghaida Aldhahri

Project Title: Synthesis of dendrimer nanoparticles for mRNA therapeutic delivery in and evaluation of efficacy and efficiency in vitro

Faculty Mentor: Timothy O'Shea

Poster Number: 152

Presentation Time: 12:00 PM

Sarah Alizadeh

Project Title: Softer Is not Safer: Evaluating the Limits of Environmental Interaction Assumptions in Soft Robots

Faculty Mentor: Andrew Sabelhaus

Poster Number: 153

Presentation Time: 11:00 AM

Riley Applebaum

Project Title: Advancement of Soft Pneumatic Actuators for use in a Soft Bronchoscope Shape Sensing Robot

Faculty Mentor: Frank Julia Wise

Poster Number: 154

Presentation Time: 12:00 PM

Lauren Bell

Project Title: Metal–Organic Framework–Hydrogel Depots for Tunable Antigen Protein Delivery

Faculty Mentor: Michelle Teplensky

Poster Number: 155

Presentation Time: 11:00 AM

Katie Beran

Project Title: Determine the role of progesterone signaling on in vitro lymphatic capillary button junctions

Faculty Mentor: Christopher Chen

Poster Number: 142

Presentation Time: 11:00 AM

Samer Berghol

Project Title: Quantifying Age-Related Myelin Degradation Using Birefringence Microscopy and Deep Learning

Faculty Mentor: Irving Bigio

Poster Number: 156

Presentation Time: 12:00 PM

Joely Brammer-DePuy

Project Title: Modeling the Obese Microenvironment in Engineered Human Breast Tumors

Faculty Mentor: Joe Tien

Poster Number: 157

Presentation Time: 11:00 AM

Isabelle Canty

Project Title: Characterizing the Impact of Sex Hormones in Tendon Microdamage Repair

Faculty Mentor: Brianne Connizzo

Poster Number: 159

Presentation Time: 11:00 AM

Rawisara Chairat

Project Title: Carbon Footprint of Compute-in-Memory-based Accelerators for Deep Neural Network Inferences

Faculty Mentor: Ajay Joshi

Poster Number: 158

Presentation Time: 12:00 PM

Arnav Pratap Chaudhry

Project Title: Enhancing Multi-Robot System Performance Through Task Allocation and Dynamic Replanning

Faculty Mentor: Alyssa Pierson

Poster Number: e19

Presentation Time: 12:00 PM

Terry Chen

Project Title: Optimizing Enzyme-Substrate Kinetics of Novel Peptide Probe for Non-Invasive Colorectal Cancer Monitoring

Faculty Mentor: Erica Pratt

Poster Number: 160

Presentation Time: 12:00 PM

Andrew Chen

Project Title: Exploring Photo-Switchable Polymers using Atomic Force Microscopy with in situ Illumination

Faculty Mentor: Keith Brown

Poster Number: 162

Presentation Time: 12:00 PM

Lillian Chung

Project Title: Raman Spectroscopy for In Vitro Serial Monitoring of Cartilage Response to Osteoarthritis Therapies

Faculty Mentor: Michael Albro

Poster Number: 161

Presentation Time: 11:00 AM

Kevin Diggs

Project Title: Exploration of Ultrasound Neuromodulation on Gait Recovery of Parkinson's Disease Mouse Model

Faculty Mentor: Erynne San Antonio

Poster Number: 164

Presentation Time: 12:00 PM

Naomi Gonzalez

Project Title: Testing the Module Thermal Behavior in a Realistic Environment at CERN

Faculty Mentor: Frank Golf

Poster Number: 166

Presentation Time: 12:00 PM

Halide Zeynep Haciguzeller

Project Title: The creation of interferon-reporter gene constructs for improved in vitro screening of RNA immunogenicity

Faculty Mentor: Wilson Wong

Poster Number: 163

Presentation Time: 11:00 AM

Lachlan Hooper

Project Title: Effects of temperature on ultrafast thulium-doped large mode area amplification

Faculty Mentor: Michelle Sander

Poster Number: 165

Presentation Time: 11:00 AM

James Huang

Project Title: Passive suction cup for object manipulation underwater

Faculty Mentor: Tommaso Ranzani

Poster Number: 167

Presentation Time: 11:00 AM

Kelvin Huang

Project Title: The Impact of Surface Defects on NH₃ adsorption on MoS₂

Faculty Mentor: Sahar Sharifzadeh

Poster Number: 168

Presentation Time: 12:00 PM

Zain Jafri

Project Title: Building a Deep-Learning Model to Automatically Detect Capillary Stalling Events in the Brain from Two-Photon Bessel Data

Faculty Mentor: David Boas

Poster Number: 170

Presentation Time: 12:00 PM

Xiang Jin

Project Title: Real-Time Ion Count-Aided Microscopy Using Field Programmable Grid Arrays Applied to Helium Ion Microscopy

Faculty Mentor: Vivek Goyal

Poster Number: e19

Presentation Time: 11:00 AM

Peter Joo

Project Title: Influence of Tissue Preservation Methods on the Mechanical Properties of Engineered Cartilage

Faculty Mentor: Michael Albro

Poster Number: 172

Presentation Time: 12:00 PM

Han Ali Kahvecioglu

Project Title: Probing aerosol transport in healthy and diseased lung in real time via crystal ribcage

Faculty Mentor: Hadi Nia

Poster Number: e17

Presentation Time: 11:00 AM

Mankrit Singh Kalra

Project Title: Simulations supporting the fabrication of a mechanical Ising model

Faculty Mentor: Abigail Plummer

Poster Number: 169

Presentation Time: 11:00 AM

Jacob Labovitz

Project Title: in vitro wound simulation: a high-throughput rig for wound healing scratch assays

Faculty Mentor: Timothy O'Shea

Poster Number: 171

Presentation Time: 11:00 AM

Justin Li

Project Title: Explainability for Machine Learning ECG Classification

Faculty Mentor: Ayse Coskun

Poster Number: 173

Presentation Time: 11:00 AM

Ray Lian

Project Title: Optimizing Print Parameters for Filament Fidelity in Direct Ink Writing

Faculty Mentor: Will Boley

Poster Number: 175

Presentation Time: 11:00 AM

Nicolas Malamug

Project Title: Towards Wavelength Independent Imaging with Meta-Optics

Faculty Mentor: Roberto Paiella

Poster Number: 177

Presentation Time: 11:00 AM

Colin McMillen

Project Title: Understanding Flexoelectricity in 3D-Printed Polymers and Modeling Accelerated Aging in Polymer Foams

Faculty Mentor: Keith Brown

Poster Number: 174

Presentation Time: 12:00 PM

Yash Patel

Project Title: Development of a Deployable, Sterilizable Multi-Sensing Platform for Real-Time Electrochemical Measurements in Bioreactors

Faculty Mentor: Rabia Yazicigil

Poster Number: 179

Presentation Time: 11:00 AM

Nick Pham

Project Title: Investigating the Role of DHEA on Tendon Matrix Composition and Synthesis : Potential Therapeutic Implications for Postmenopausal Women

Faculty Mentor: Brianne Connizzo

Poster Number: 181

Presentation Time: 11:00 AM

Luca Pungan

Project Title: Microbial Devices for Fertility Hormone Sensing

Faculty Mentor: Miguel Jimenez

Poster Number: 183

Presentation Time: 11:00 AM

Noah Robitshek

Project Title: Enhancing Human-Robot Interaction: Integrating AR/VR and Routing Paths in Robotic Motion Planning and Operation

Faculty Mentor: Thomas Little

Poster Number: 176

Presentation Time: 12:00 PM

Vittoria Sama

Project Title: Expanding Research in Cell Sheet Technology: Scaling Up Thermo-responsive Substrates

Faculty Mentor: Christine McKee

Poster Number: 185

Presentation Time: 11:00 AM

Christian So

Project Title: Is Offline Evaluation Sufficient for Autonomous Driving?

Faculty Mentor: Eshed Ohn-Bar

Poster Number: 178

Presentation Time: 12:00 PM

Will Stride

Project Title: Development of a Python Library for Optical Scattering Simulations

Faculty Mentor: Alexander Sergienko

Poster Number: 180

Presentation Time: 12:00 PM

Rayan Syed

Project Title: Identifying Systematic Mistakes of a Trained Deep Model and Explaining it with Large Language Models (LLM)

Faculty Mentor: Kayhan Batmanghelich

Poster Number: 186

Presentation Time: 11:00 AM

Victoria Travník

Project Title: Probing Heterogeneity of Mosaic Tile Pattern of Inhaled Aerosol Particles in the Whole Lung

Faculty Mentor: Hadi Nia

Poster Number: e18

Presentation Time: 11:00 AM

Edward Wei

Project Title: Photothermal Spectroscopy of Fibroblasts in Collagen Matrix

Faculty Mentor: Michelle Sander

Poster Number: 182

Presentation Time: 12:00 PM

Zhiheng Xu

Project Title: A Cough Stretcher for COPD Research

Faculty Mentor: Bela Suki

Poster Number: 187

Presentation Time: 11:00 AM

Edward Xu

Project Title: The Development of Sequence-Independent Transcriptional Activators

Faculty Mentor: James Robson

Poster Number: 184

Presentation Time: 12:00 PM

Anne Marie Zambon

Project Title: Evaluating Methods for Predicting Gene Expression in Motor Cortex Cells

Faculty Mentor: Michael Economo

Poster Number: 188

Presentation Time: 11:00 AM