

Undergraduate Research Festival Program Information

April 21, 2023
Times & Locations Included

Milton Atrium
Life Sciences Complex

Presentations

Session A - 10:30 a.m. - 11:45 a.m.

1. LSC 435 - Faculty Moderator: Jamie Dejardains

- 10:30 a.m. -- Chloe Hechter (WRC) Now What? A Comprehensive Guide to the In-Between
- 10:45 a.m. -- Nathan Magers (PHY) Optimizing Optical Properties of an Opaque Water-Based Liquid Scintillator for a Novel Neutrino Detector
- 11:00 a.m. -- William Russell and Isabella Ladao (CSD) Performance Intensity Functions for Mandarin-English Bilinguals on the NU-6 Word Recognition Test
- ▶ <u>11:15 a.m.</u> -- Jacob Leisawitz (BIO) Arsenic and Astrocytes: Implications of Brain Defense
- ➤ <u>11:30 a.m.</u> -- Julia G. Tumber (BIO) *Using Blue Light to Control Fluorescence and Stress Tolerance in Bacterial Cells*

2. CST Room 1-132 - Faculty Moderator: Jonna Gilfus

- 10:30 a.m. -- Alesandra "Sasha" Temerte (WRC/ECN) At the Crossroads of Culture: A Study of Cultural Identity and the Interaction Between People and Place
- 10:45 a.m -- Maggie Sardino (WRC/CCE/EHN) The power of public humanities and community engagement
- ➤ <u>11:00 a.m.</u> -- Ofentse Mokoka (WRC/ECN) *Deconstructing the 'African Aesthetic' and ownership of culture*
- 11:15 a.m. -- Quenten Chicón (CHE) Stimuli Responsive Antimicrobial Hydrogels for Wound Healing

Session B - 12:30-1:30 p.m.

1. CST Room 1-132 - Faculty Moderator: John French

- > 12:30 p.m. -- Karim Wehbe (BIO) The Effects of Exposure to BPA and its Analogs on seizure susceptibility in Zebrafish
- 12:45 p.m. -- Tara Sandlin (AMH) A Heroine of Questionable Heroism'": A Queer, Feminist Re-Listening of Verdi's Giovanna d'Arco (working)
- 1:00 p.m. -- Julianne Stein (AMH) Expanding the Western European Canon
- 1:15 p.m. -- Catherine Wallace (CHE) Testing Crystal Structure Predictions with Low-Frequency Vibrational Spectroscopy

Session C - 2:00-3:15 p.m.

1. LSC 435 - Faculty Moderator: Heather Coleman

- 2:00 p.m. -- Liam A. Grima (ESF) Norms and International Governance: Implications for Climate Change Policy and Collaboration
- 2:15 p.m. -- T. Mitchell Mazza (NEU) A BrainGENIE Analysis of 'Effort' and Psychopathology in Children Using Blood-based Imputation of Brain-region-specific Gene-expression Levels
- 2:30 p.m. -- Katarina A. Sako (BIO) The Implications of Deprescribing in Skilled Nursing Facilities and in the United States
- 2:45 p.m. -- Noor Zamamiri (BIO) Expression of Beta-Glucosidase in Poplar
- 3:00 p.m. -- Valrie Paynton (WRC/POL/SOC) Kung Fu Twinkie: Navigating Identity as an Adopted Asian American

2. CST Room 1-132 - Faculty Moderator: TBD

- 2:00 p.m. -- Lucio Maffei (PHI) Disproving God: Using Possible Worlds to Determine the Likelihood of God's Existence
- 2:15 p.m. -- Matthew Cufari (PHY) Repeatedly Shredding A Star With a Supermassive Black Hole

- 2:30 p.m. -- Dominique Nana Adjoa Dokua Sheldon (PSY) ADHD symptoms, personality and functioning in female college students
- 2:45 p.m. -- Anthony Apantenco Melendez (PSY) The Association of Discrimination w/ Alcohol Use/Misuse, Negative Emotion, and Aggression Among Hispanic High Schoolers
- 3:00 p.m. -- John Adams (WRC) At the Crossroads of Culture: A Study of Cultural Identity and the Interaction Between People and Place

Posters

Note: All posters will be displayed for the entirety of the day. The posters are numbered and color coded based on the time that the presenter will be present at the event. AM Session is listed in ORANGE and PM session in BLUE.

Milton Atrium

10:00 a.m.-12:00 noon / 2:00 p.m. - 4:00 p.m.

- 1. Ellie Aspin (BIO) Examining the Relationship Between Mental Health and Emotional Eating in University Students
- 2. Courtney Conte (LLL) Stolperstein Research Holocaust survivor Bob Hyman/Otto Heimann, Bochum, Germany and New York, USA
- 3. Katie Miles & Ainsley Rodio (LLL) *Experiences of Deaf Women in Reproductive Healthcare Settings*
- 4. James M Harford (PHY) The Lattice Field Theorist's Guide to the Lambda < 0 Universe: An Investigation of Hyperbolic Ising Models
- 5. Corinne Motl (PHY) *Positron Emission Tomography with Liquid Argon Detection*
- 6. Hong Beom Lee (PHY) *The Effect of Ionic Strength in MAP65 Binding to Microtubules*

- 7. Katie Smith and Nicholas Rubayiza (PHY) *Muon Flux Detection For Superconducting Qubit Experiments*
- 8. Dan Qiao (PHY) How enzyme activities affect protein's LLPS
- 9. August Larson and Lucas Sarabia (PHY) *Development of an Ultrapure Liquid Argon Cryogenic System*
- 10. Julia Fancher (PHY) A controlled set of numerical experiments of stars destroyed by supermassive black holes
- 11. Cordiana Cozier (CHE) *Dihydropyrones as Dipolarophiles in 1,3-dipolar Cycloaddition Reactions*
- 12. Serena Peters (CHE/EDU) *Investigating the Impact of Written Problem Solving on Course Performance*
- 13. Capriana Cormier and Richard Davies (PSY) *Breaking down break-up distress: How do people end romantic relationships?*
- 14. Maxum O'Halloran (PSY) Long-term single people's experiences of being single
- 15. D'Arcy Roberts and Maheen Mukhtar (PSY) *On graduate mentor and mentee relationships*
- 16. Clayton Masters, Adam Perry, and Karina Primeau (PHY/BIO) Investigations of Katanin, a Microtubule Severing Enzyme
- 17. Kari Wilson, Madison Potocki, Sarah Dickerson (PSY) *The attachment GNAT: A new implicit measure of attachment security*
- 18. Maximus B Short (PHY) *Dynamic clustering in a calorimeter under high-occupancy conditions*
- 19. Nedine Abdelhamid (PHY/BIO) *A Tale of 12 Tails: Katanin Severing Activity Affected by Carboxy-Terminal Tail Sequences*
- 20. Tanner Demaree (PSY) *Intergroup perceptions of discrimination at Syracuse University*
- 21. Rihua Min (PSY) Did the 2020 election change ingroup and outgroup political attitudes? Examining people's attitudes towards Biden and Trump and towards Their respective supporters

- 22. Simone Bellot (CSD) The Development of Expressive Morphosyntax in Bahamian Creole English Speaking Preschoolers
- 23. Katherine Monroe, Sonia Julius, Jadon Garofalo, Dorian Lee Baker-Santoro, Kurt Schaeffer, Derick Ramos, and Emily Olech (PHY)

 Understanding neural computations of a simple brain
- 24. Cynthia Garcia, Danelly Urrutia, & Yhanelly Ruiz (CSD) *Just write!*Evaluating the impact of spoken language on writing ability for Spanishspeaking bilingual children
- 25. Nina Kishova (CSD) Spoken language and phonological processing in kindergarteners born preterm
- 26. Amina Ahmed Amin and Kayla Turner (BIO) *Environmental Enrichment Combined with Social Mixing Increases Stress Reactivity in Adolescent Maternally Separated CD-1 Mice*
- 27. Zhanyue (Harper) Cheng (PHY/BIO) Microtubule Self Assembly with PRC1
- 28. Ryan Brinton (BIO) *Impacts of Water Stress on Populus alba and Populus nigra*
- 29. Monica A. Ciaffi (BIO) *Norepinephrine-Induced Increases in Lactate Production by Hippocampal Astrocytes are Stable During Aging*
- 30. Grace P. Flynn (BIO) Regulation of Primordial Follicle Formation by Insulin Signaling
- 31. Miguel Francisco Guzman Aguirre (BIO) *C-Terminal Cholesterylation to produce Bio-active Engineered Lipoproteins*
- 32. Ashley S. Houlihan (BIO) Abnormal Primordial Germ Cell Formation and Adult Fecundity in C. elegans
- 33. Anoop Iyer (BIO) Regulation of PUP Protein Expression in C. elegans Development
- 34. Abigail J. Johnson (BIO) *Investigating in utero Vitamin D*Supplementation to Reduce Early Neurodevelopmental Phenotypes in Mouse Models of Rett Syndrome
- 35. Viktoria Jakubikova (BIO) Thioredoxin Reductase Characterization in E. Coli and Sea Urchin Eggs (L. variegatus) Preferences Among NADPH Levels

- 36. Renee C. LeClair (BIO) Exploring the Somatic Phenotype of the PUP-3; PUP-4 Double Mutant in C. elegans
- 37. Katherine M. Loveland (BIO) *Investigating the Effects of Blocking Maternal Estrogen and Progesterone Synthesis in the Mouse*
- 38. Madison MacKinnon (BIO) Role of Calcium Ion (Ca2+) Signaling in Establishing the Left-Right Body Axis
- 39. Amanda A. Marzouk (BIO) *Identifying Regulators of Cell Proliferation During Embryonic Left-Right Axis Development*
- 40. Julianna K. Mercado (BIO) Defining Domains in Dse3 that Mediate its Localization at Sites of Cytokinesis and Interaction with Pxl1
- 41. Olivia Papi and Olivia Han (BIO) Robust Attraction to Home Nest Odors in Socially Mixed Maternally Separated CD-1 Mice
- 42. Rowan D. Nothnagle (ESF) Visible Light Induced Decompensation of Disinfection Byproducts in Drinking Water
- 43. Natalia Y. Pedraza (FSC) Recovering Trace Evidence from Archival Samples
- 44. Kadin Person (BIO) Exploration of Mycelium-Based Materials Using P. ostreatus
- 45. Veronica L. Poole (FSC) *The Quantification and Characterization of Cell-*Free DNA in Touch Samples
- 46. Meris S. Rosenberg (BIO) *Cellular Distribution of NAD Kinase in Eggs of S. purpuratus: An Update*
- 47. Catherine N. Solis and Jordan E. Ruddell (BIO) *Maternal Separation Influences Recognition Memory on the Sociability Task in Socially Mixed and Environmentally Enriched Adolescent CD-1 Mice*
- 48. Patrick Minty Tran (BIO) *Investigating PUP-4 Function in the Germline Development of C. elegans*
- 49. Caroline R. Underwood (BIO) *Mind your Legacy P's and Q's: The Effect of Quagga Mussels on Sediment Nutrient release*
- 50. Karim Wehbe (BIO) *Using Zebrafish to Determine the Effect of Bisphenol A and Analogs on Seizure Susceptibility*

- 51. Galina Yakubovich (BIO) *Investigating Major Sperm Protein SSQ-1 Expression in PUP-1/-2 Deletion Mutants*
- 52. Jonah I. Da Silva (BIO) *Analysis of Zebrafish Cenexin During Embryonic Cell Divisions*
- 53. Jack Pocorobba (CHE) "Forever Chemicals" No More: Photocatalytic Degradation of PFOA
- 54. Nadia G. Gaytan (BIO) *TGF-Beta Signaling Regulation of Genes with a Novel Promoter Motif in C. elegans*
- 55. Sonja Nusser (CHE) *Colorimetric Monitoring of [Br-] Using CsPbBr3-xIx Nanoparticles*
- 56. Christopher Taveras (BIO) Characterizing Centrosome Positioning in Relation to Cilia Formation during Kupffer's Vesicle Development
- 57. Faith O. Akoachere (BIO) Characterizing the Role of SID-1 in RNA Interference in C. elegans
- 58. Luis A. Rodriguez (BIO) *Transgenerational Effects of Oleic Acid on C. elegans*
- 59. Julia G. Tumber (BIO) *Using Blue Light to Control Fluorescence and Stress Tolerance in Bacterial Cells*
- 60. Thomas V. Cammerino (BIO) *Understanding Ciliary Mechanisms within Lateral Line Formation*
- 61. Chance Baggett (PHY) Folding Paths in Elastic Self-Folding Origami
- 62. Donyell Logan(CHE) *Novel Alkaline Earth Metal Tetraarylborate Pyrazolates*
- 63. Deena M. Netz (BIO) Functional Reconstitution of Six1 Transcriptional Complexes Using Exogenous Leucine Zipper Domains
- 64. Ana Cottrell and Oseaghe Omomhenle (NEU/CSD) *Aphasia- Optimized Fatigue Measures*
- 65. Shannon Collins (CSD) Speech and rest breathing in Preschool and School-age Children who do and do not Stutter

- 66. Madison Tyler (ETS) Sidney Poitier's "Soul" Method: Locating Black Performance in Stanislavskian Approaches to Acting (working)
- 67. Nathan Ashby (BIO) Using Zebrafish to Determine the Effect of Bisphenol A (BPA) and Alternatives on Seizure Susceptibility
- 68. Meaghan Doyle (CSD) Executive Function Skills in Preschool-Age Children Who Do and Do Not Stutter
- 69. Chloe Crowley (CSD) *Individual Differences in Temperament and Attention in Preschool-Age Children Who Stutter*
- 70. Hana Weiss (CSD) Rage against the sound: Characteristics of sound triggers and reactions in misophonia
- 71. Morgan Opp (CHE) Corrination of Vitamin B12 to Oxytocin to Limit CNS Entry and Maintain OT-R Effects
- 72. Isabella Reeve (CSD) *Physiological Arousal during Speaking in Preschoolage Children who Stutter*
- 73. Samantha Tran (CHE) "Flouroplatin" Pt(IV) pro-probes for fluorescence detection of cisplatin by in-situ reduction and co-localization of a blue emitting fluorophore.
- 74. Isabella Chavez Miranda (CHE) *Peptide synthesis and characterization of peptide based therapeutics for type 2 diabetes*
- 75. Alexandra J. Snioch (BIO) *Testing Utility of SPISE (Single Point Insulin Sensitivity Estimator) for Diabetes Risk from the NHANES Data*