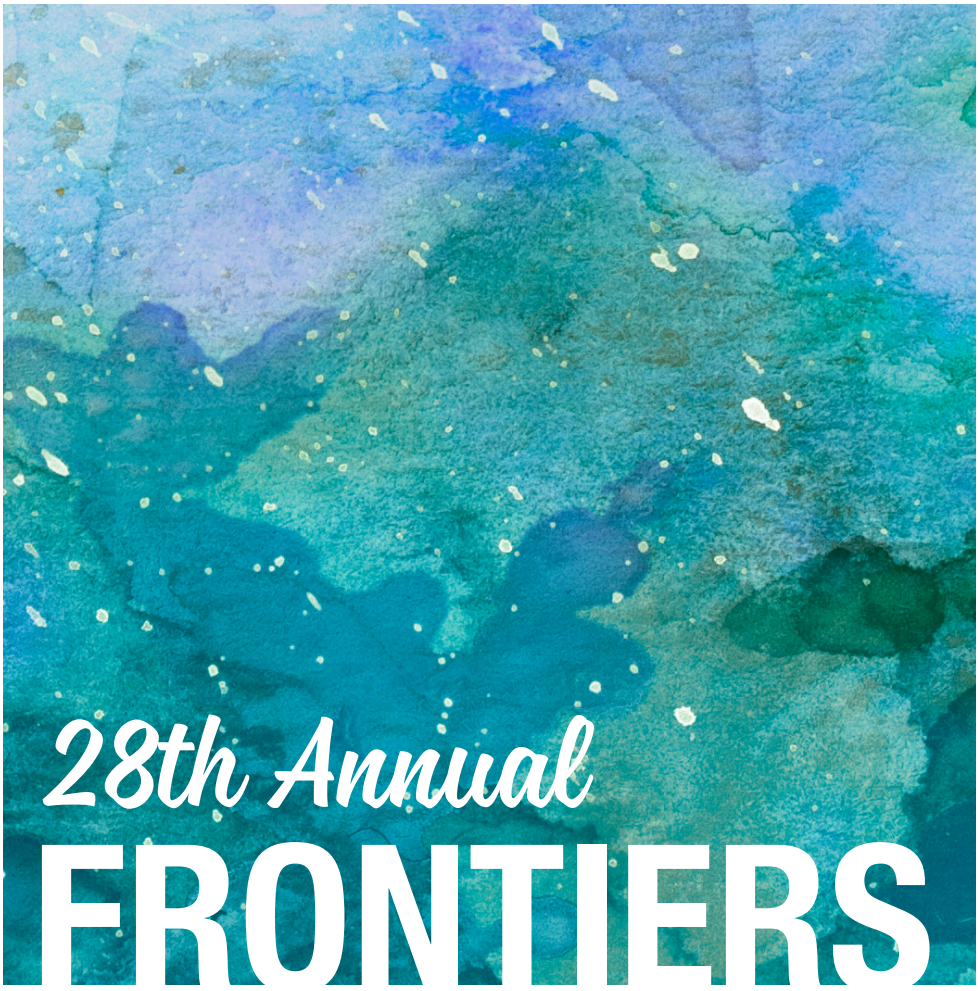

UNDERGRADUATE RESEARCH POSTER EXHIBITION

April 16, 2025

2:00 - 3:30 p.m • 4:00 - 5:30 p.m.
6:00 - 7:30 p.m.
Wilbur Cross North Reading Room

Schedule of Events

Poster Exhibition

Wednesday, April 16, 2025

Session 1: 2:00 p.m. – 3:30 p.m.
Session 2: 4:00 p.m. – 5:30 p.m.
Session 3: 6:00 p.m. – 7:30 p.m.

Session Welcome

Micah Heumann,
Director, Office of Undergraduate Research

Mentorship Excellence Awards

The Faculty and Graduate Student Mentorship Awards will be presented at the inaugural ***University Teaching, Advising & Mentoring Awards*** ceremony on **May 1, 2025.**

Closing Remarks

About Frontiers in Undergraduate Research

The Frontiers Poster Exhibition is a multidisciplinary research forum showcasing undergraduate research, scholarship, and creative projects at the University of Connecticut. Frontiers 2025 is the twenty-eighth annual Frontiers event sponsored by the Office of Undergraduate Research (OUR). This year's exhibition includes 247 students presenting posters for 225 research and creative projects at the Storrs in-person exhibition. The inaugural in-person exhibition at the Waterbury campus on April 15, 2025, will showcase 18 students presenting 14 research and creative projects. 20 students will present 16 research and creative projects at the Stamford in-person exhibition on April 22, 2025. Additional projects can be viewed in the online exhibition at ugradresearch.uconn.edu/frontiers2025.

Students' projects span the disciplines and include both independent research and work pursued in collaboration with other undergraduates. The projects presented reflect the invaluable contributions of research mentors, including graduate students, postdoctoral scholars, staff, and faculty members. We hope you enjoy meeting our wonderful students and learning about their innovative projects.

About the Office of Undergraduate Research

The Office of Undergraduate Research (OUR) is a resource for students interested in enriching their undergraduate experience through participation in research, scholarship, and creative activity. OUR provides information and advising to assist students in identifying relevant opportunities, as well as several funding programs to support the students and their faculty mentors.

Many of the Frontiers presenters have received financial support for their projects from the OUR, which awarded over $650,000 in 2023-24 in support of students' research and creative endeavors. These awards are funded by the Office of Undergraduate Research with generous support from the Office of the Provost, the Office of the Vice President for Research, the deans of the schools and colleges, and private donations from alumni, parents, and other friends of UConn and undergraduate research.

Sequential Listing of Poster Presentations

This listing of projects includes the undergraduate student authors and their faculty mentors. Please note that this is not a comprehensive listing of mentors: many projects also reflect the contributions and mentorship of dedicated graduate students, post-doctoral scholars, and research staff members.

SESSION 1 PRESENTATIONS

1. The Politics of the Black Womb: How Education and Power Reinforce the U.S. Black Maternal Health Crisis
Foluke Akinkunmi, Political Science
Advisor: Jane Gordon, Professor, Political Science

2. Religion, Meaning and Coping
Taylor Bryan, Psychological Sciences & Human Development and Family Sciences
Advisor: Crystal Park, Distinguished Professor, Psychological Sciences

3. The Socio-Linguistic Condition of Congolese Immigrants in Connecticut
Kanny Salike, Linguistics/Philosophy & Anthropology
Advisor: Vicki Carsten, Professor, Linguistics

4. College Sojourners' Reentry Experiences after Studying Abroad
Samantha Maiolo, Spanish Language Education & Spanish/Italian
Advisor: Catherine Little, Professor, Educational Psychology

5. From The Eyes of Latinx Children: Parental Detainment and Deportation in Picture, Middle Grade, and Young Adult Books
Hannah Spinner, Elementary Education
Advisor: Douglas Kaufman, Associate Professor, Curriculum and Instruction

6. Understanding Social-Emotional Learning: Its Definition, Importance, and Integration into Elementary Education Curricula
Madison Johnson, Communication
Advisor: Sara Stifano, Assistant Professor in Residence, Communication

7. Addressing Inequities for Immigrant Families: Social Policies & Immigrant Family Well-being
Johana Mateo, Human Development and Family Sciences
Advisor: Kevin Ferreira van Leer, Assistant Professor, Human Development and Family Sciences
Advisor: Caitlin Lombardi, Associate Professor, Human Development and Family Sciences

8. Protecting Alaska's Children: The Urgent Need for Safe Storage and Child Access Prevention Laws
Hailey Correia, Human Development and Family Sciences
Advisor: Terry Berthelot, Assistant Professor in Residence, Human Development and Family Sciences

9. A Systematic Review of Weight Loss Interventions Among Black Postpartum Women
Jhelma Velveder Perez, Nutritional Sciences
Advisor: Loneke Blackman Carr, Assistant Professor, Nutritional Sciences

10. Interaction Between Fruit and Vegetable Intake and Physical Activity on Body Composition
Om Ghetia, Nutritional Sciences
Advisor: Ock Chun, Professor, Nutritional Sciences

11. Impact of Acculturation on Asian Parents' Reports of Their Child's ADHD Symptoms and Behaviors
Eunice Kim, Psychological Sciences
Natalie Kells, Psychological Sciences
Naz Choudry, Psychological Sciences
Advisor: Jeffrey Burke, Associate Professor, Psychological Sciences

12. A Scoping Review on Microaffirmations in Higher Education Studies
Claire Grant, Psychological Sciences
Advisor: Lorena Solis, Assistant Professor, Psychological Sciences and El Instituto

13. WNBA Coach Gender vs. Player Efficiency
Ashley Dearborn, Economics
Advisor: Oskar Harmon, Associate Professor, Economics

14. Race-Ethnicity, Mental Health, and Oral Health among Young Adults
Vangmayee Upadhyay, Allied Health Sciences
Advisor: Ryan Talbert, Assistant Professor, Sociology

15. Title IX Lawsuit Outcomes and the Participation Gap
Terry Bukowski, Sport Management
Advisor: Oskar Harmon, Associate Professor, Economics

16. Post-Mortem of a Pandemic: A Temporal Frame of Work Life and Death in COVID-19
Keshav Desibhatla, Pathobiology & Sociology
Morgan Tutt, Sociology
Krithika Santhanam, Molecular and Cell Biology & IMJR: Health Policy and Racial Disparities
Advisor: Fumilayo Showers, Assistant Professor, Sociology

17. Reaping What They Sew: Exploring the Chinatown Garment Industry's Labor Organizing in Response to Global Economic Shifts and its Afterlives on Economic Justice
Karen Lau, Economics & History
Advisor: Fiona Vernal, Associate Professor, History
Advisor: Delia Furtado, Professor, Economics
Advisor: Shareen Hertel, Professor, Political Science

18. Understanding the Underrepresented: A Descriptive Deep-Dive into the Impact of Young Legislators
Eric Meade Jr., Political Science & Sociology
Advisor: Jeffrey Ladewig, Associate Professor, Political Science
Advisor: Matthew Singer, Professor, Political Science

19. Surgical Versus Nonoperative Treatment of Ulnar Collateral Ligament Tear in Overhead Athletes' Return to Sport
Pranav Seshadri, Exercise Science
Advisor: Linda Pescatello, Distinguished Professor, Kinesiology
Advisor: Steven Harrison, Assistant Professor, Kinesiology/Psychological Sciences
Advisor: Jeffrey Kinsella-Shaw, Associate Professor, Kinesiology

20. Examining Human Rights In Turkey Over Time
Olivia Joyce, Political Science & Statistics
Advisor: Zehra Arat, Professor, Political Science

21. Assessing Child Engagement in Pediatric Rehabilitation Research: Lessons Learned from Implementation of a Ride-on Toy Navigation Training Program
Ashley Guillot, Psychological Sciences & American Sign Language
Advisor: Sudha Srinivasan, Assistant Professor, Kinesiology

22. Impacts of an Undergraduate Research Assistant Program (URAP) on Student and Research Outcomes
Manogna Reddy, Physiology and Neurobiology & Molecular and Cell Biology
Advisor: Elizabeth Kline, Assistant Professor in Residence, Molecular and Cell Biology
Advisor: Sharon Smith, Professor, Pediatrics

23. Measuring Quality in Medicaid-Certified Nursing Homes in Connecticut using CoreQ, a Nursing Home Resident and Family Member Satisfaction Survey
Anushka Jain, Physiology and Neurobiology & English
Advisor: Ellis Dillon, Assistant Professor, Public Health Sciences

24. Exploring Shared Decision-Making for Long-Acting Injectable Treatments for Opioid Use Disorder in Community-Based Settings
Cailyn Fuss, Allied Health Sciences
Advisor: Megan O'Grady, Associate Professor, Public Health Sciences
Advisor: Morica Hutchinson, Clinical Research Associate II, Public Health Sciences

25. Racial and Ethnic Barriers on Effective Communication and Treatment for Eating Disorders in Adolescents
Isabela Londono, Psychological Sciences
Advisor: Amy Egbert, Assistant Professor, Psychological Sciences
Advisor: Sharon Smith, Professor, Pediatrics
Advisor: Elizabeth Kline, Assistant Professor in Residence, Molecular and Cell Biology

26. The Evaluation of Aggression and Psychopathy
Anisa Rafik, Psychological Sciences & Individualized Major: Criminal Behavior
Advisor: Jeffrey Burke, Associate Professor, Psychological Sciences

27. Does an Impaired Sense of Smell Make it Harder to Think about Things like *Garlic*?
Ishrat Khan, Individualized Major: Systems Neuroscience
Advisor: Eiling Yee, Associate Professor, Psychological Sciences

28. Are Objects Oriented Towards Your Dominant Hand Easier to Recognize While Grasping Batons?
Joshua Budnik, Physiology and Neurobiology & Molecular and Cell Biology
Advisor: Eiling Yee, Associate Professor, Psychological Sciences

29. Semantic Context Boosts Word Learning from Low-Informative Events
Wilona Boafo, Psychological Sciences & Sociology
Advisor: Umay Suanda, Assistant Professor, Psychological Sciences

30. Qualitative Analysis and Translation Process of Spanish and English Stakeholders' Responses to an EHDI Module
Aaron Herrera, Speech, Language, and Hearing Sciences
Advisor: Torri Ann Woodruff-Gautherin, Research Scientist, Speech, Language, and Hearing Sciences
Advisor: Kathleen Cienkowski, Associate Professor, Speech, Language, and Hearing Sciences

31. Can Training in the Presence of Background Noise Maximize Auditory Learning?
Carly Furlong, Allied Health Sciences
Advisor: Akshay Maggu, Assistant Professor, Speech, Language, and Hearing Sciences

32. Accessibility of Hearing Loss in New Haven County Venues
Sarah Perrotta, Speech, Language, and Hearing Sciences
Advisor: Kathleen Cienkowski, Associate Professor, Speech, Language, and Hearing Sciences

33. Effort-Based Linguistic Retrieval Markers and Accuracy of Autistic Adult Eyewitnesses
Emma Dwyer, Speech, Language, and Hearing Sciences
Advisor: Tammie Spaulding, Associate Professor, Speech, Language, and Hearing Sciences
Advisor: Bernard Grela, Professor Emeritus, Speech, Language, and Hearing Sciences

34. Waves of Words: Is EEG Mu Rhythm during Action Processing Correlated with Measures of Infant Vocabulary?
Ali Mohiuddin, Linguistics/Psychology
Advisor: Kimberly Cuevas, Associate Professor, Psychological Sciences

35. Identifying Linguistic Markers for GAD Through Problem Anxiety Talk Among Dyads
Samantha Cipolla, Psychological Sciences
Advisor: Kimberli Treadwell, Associate Professor, Psychological Sciences

36. Neuroanatomical Alterations in Structural Connectivity of Children Who Stutter: A Comparative MRI-Based Analysis
Mohammad Khan, Physiology and Neurobiology
Advisor: Joseph Loturco, Professor, Physiology and Neurobiology
Advisor: Nabin Koirala, Director, Brain Imaging Research Core (BIRC)

37. Midkine and Syndecan-4 Double Knockout by CRISPR May Alter Vascular Development in a Mouse Model of Supratentorial Ependymoma
Jonathan Saidon, Biological Sciences
Advisor: Joseph LoTurco, Professor, Physiology and Neurobiology

38. Investigating the Effects of $KRAS^{G12D}$ on Mouse Cortical Neurogenesis and Proliferation
Mahika Rawat, Physiology and Neurobiology
Advisor: Rahul Kanadia, Associate Professor, Physiology and Neurobiology

39. Creatine-Monohydrate and Ketone-Body Supplementation in Mitigating Post-TBI Sleep Disruptions in a Drosophila Model of CTE
Ashwath Athreya, Physiology and Neurobiology
Angelo Dandonoli, Physiology and Neurobiology
Advisor: Geoffrey Tanner, Associate Professor in Residence, Physiology and Neurobiology

40. The Drosophila Odorant Binding Protein 47a (Obp47a) is Enriched in Male Forelegs and Contributes to Male Mating Behavior
McKenna Rook, Physiology and Neurobiology & Molecular and Cell Biology
Advisor: Karen Menuz, Associate Professor, Physiology and Neurobiology

41. Percutaneous Drainage as the First-Line Treatment for Abscess Secondary to Complicated Appendicitis in Pediatric Patients
Jasmine Maggio, Molecular and Cell Biology & Linguistics/Philosophy
Advisor: Ian Michelow, Associate Professor, Pediatrics, UConn School of Medicine
Advisor: Hassan El Chebib, University Affiliate, Pediatrics

42. Decoding Sensory Attention from Mouse Facial Gestures Using Machine Learning
Varun Chamarty, Biomedical Engineering
Advisor: Timothy Spellman, Assistant Professor, Neuroscience

43. Long Term Spatial Memory in Mouse Models Using VR Contexts
Quinn Fong, Physiology and Neurobiology
Advisor: Andres Grosmark, Assistant Professor, Neuroscience

44. Examining Loss of Imprint in F1 Hybrid Female Mice Due to X Chromosome Epimutation and the Implications for Autism
Arianna Roach, Molecular and Cell Biology
Advisor: Michael O'Neill, Associate Professor, Molecular and Cell Biology

45. Developing a Novel Model System for *Euprymna scolopes* Eggs to Unravel Microbiome Crosstalk
Magdalena Swierczek, Molecular and Cell Biology
Advisor: Spencer Nyholm, Professor, Molecular and Cell Biology

46. Polymerase η Confers 5-FU Resistance in Colorectal Cancer by Facilitating Translesion Synthesis
Julia Viveiros, Molecular and Cell Biology
Advisor: Hunmin Jung, Assistant Professor, Pharmaceutical Sciences

47. Targeting Pulmonary Fibrosis Using PNA Conjugates
Nitya Somineni, Molecular and Cell Biology & Anthropology
Advisor: Raman Bahal, Associate Professor, Pharmaceutical Sciences

48. The Effect of Cellular Glucose Levels on Inotersen-Mediated Target Reduction in in vitro Cell Models
Andrea Durwin, Molecular and Cell Biology
Advisor: Xiaobo Zhong, Professor, Pharmaceutical Sciences
Advisor: Adam Zweifach, Professor, Molecular and Cell Biology

49. How CySCs are Involved in the Dedifferentiation of GSCs in Drosophila Testes
Justin Carroll, Biological Sciences
Advisor: Mayu Inaba, Associate Professor, Cell Biology

50. BaTiO3 Nanoparticles for Megavoltage Radiation Dose Enhancement
Maya Ganguli, Molecular and Cell Biology
Advisor: Henry Smilowitz, Associate Professor, Cell Biology

51. Age-Dependent Mineralization and Osteogenesis in Murine Bones: A Histological and Immunochemical Study
Amogh Chittajallu, Molecular and Cell Biology
Advisor: Archana Sanjay, Associate Professor, Orthopedic Surgery

52. Investigating the Macrophage-to-Myofibroblast Transition in Implant-Induced Foreign Body Response
Fraser McGurk, Molecular and Cell Biology
Advisor: Mallika Ghosh, Assistant Professor, Cell Biology

53. Mapping the Endosteal vs Periosteal Contribution to Cortical Bone Formation
Anthony Zuo, Physiology and Neurobiology
Jennifer Alaska, Biomedical Engineering
Advisor: Benjamin Sinder, Assistant Professor, Orthopedic Surgery

54. Maintenance of Genomic Stability by Actin Nucleation Factors
Ryan Frier, Molecular and Cell Biology & Statistics
Advisor: Kenneth Campellone, Associate Professor, Molecular and Cell Biology

55. The Synergic Role of a Novel Sodium Channel Blocker and Electrical Stimulation for Wound Healing Applications
Laxmi Chinmaya Vobbineni, Biomedical Engineering & Molecular and Cell Biology
Advisor: Sangamesh Kumbar, Professor, College of Dentistry Department of Growth and Development, University of Nebraska Medical Center
Advisor: Sama Abdulmalik, Assistant Professor, College of Dentistry Department of Growth and Development, University of Nebraska Medical Center

56. A Machine Learning Approach to Support Data Completeness in Energy Justice Research
Jack Bienvenue, Statistical Data Science
Advisor: Dan Wanyama, Assistant Professor in Residence, Geography, Sustainability, Community, and Urban Studies

57. Thermal Camera Equipped Drones for Energy Assessments
Nicholas Bailey, Management and Engineering for Manufacturing & Applied Mathematical Sciences
Advisor: Liang Zhang, Professor, Electrical and Computer Engineering

58. SecureV2X: An Efficient and Privacy-Preserving System for Vehicle-to-Everything (V2X) Applications
Joshua Lee, Statistical Data Science
Advisor: Yuan Hong, Associate Professsor, School of Computing

59. Structural Health Monitoring System for High Skewed Bridges
Romy Reichenberger, Civil Engineering
Advisor: Shinae Jang, Professor in Residence, Civil Engineering

60. Serological Evaluation for Leptospirosis on Samples Received by the Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL)
Hayden Samuels, Pathobiology
Advisor: Elsio Wunder, Assistant Professor, Pathobiology
Advisor: Camila Hamond, Research Associate, Pathobiology

61. Leptospira Transport Medium: A Practical Tool for Leptospires Isolation from Bovine Urine
Anayah Fanfan, Animal Science
Advisor: Elsio Wunder, Assistant Professor, Pathobiology
Advisor: Camila Hamond, Research Associate, Pathobiology

62. Applying Nanotechnology to Improve Antimicrobial Efficacy During Triple-Wash Process
Kasia Deptula, Biological Sciences
Advisor: Yangchao Luo, Associate Professor, Nutritional Sciences

63. A Tale of Two Tubeworms: *Riftia pachyptila* and *Tevnia jerichonana* Comparative Genomics
Samira Obbu, Molecular and Cell Biology
Andrew Deierlein, Molecular and Cell Biology & Pathobiology
Alan Rodger, Ecology and Evolutionary Biology & Anthropology
Advisor: Jill Wegrzyn, Associate Professor, Ecology and Evolutionary Biology
Advisor: Rachel O'Neill, Distinguished Professor, Molecular and Cell Biology

64. Exploring the Spectra of Polylactic Acid Affected by Water Degradation
Raymond Li, Chemical Engineering
Jiajun Yang, Materials Science and Engineering
Advisor: Fiona Leek, Assistant Professor-in-Residence, Materials Science and Engineering
Advisor: Capri Price, Research Associate, Institute of Materials Science

65. Ring-Opening Polymerization of Caprolactone with Tin(II) Complexes: A Comparative Analysis of Ligand Effects on Catalytic Activity
Eva-LaRue Barber, Allied Health Sciences
Advisor: Alexandru Asandei, Associate Professor, Chemistry

66. The Chemistry of Biological Color: The Red Feather Pigment Turacin
Sarah Bekkali, Chemistry
Advisor: Christian Brückner, Professor, Chemistry

67. Photopharmacological modulation of native CRAC channels using Tethered-Light-Operated CRAC channel Inhibitors (LOCI)
Nevaeh Hutchins, Physiology and Neurobiology
Advisor: Michael Kienzler, Assistant Professor, Chemistry

68. Quantification of PFAS "Forever Chemicals" in Medical Devices and Materials using UPLC-MS/MS
Melanie Khalfin, Molecular and Cell Biology
Advisor: Anthony Provatas, Assistant Research Professor, Chemistry & Center for Environmental Sciences and Engineering

69. PFAS In Seafood, Fruits, And Vegetables
Mark MacDaniel, Physiology and Neurobiology
Saagar Patel, Physiology and Neurobiology
Advisor: Anthony Provatas, Assistant Research Professor, Chemistry & Center for Environmental Sciences and Engineering

70. Synthesis and Characterization of Sustainable Gels with Enhanced Mechanical Robustness
Akram Alhadainy, Biomedical Engineering & German Studies
Advisor: Rajeswari Kasi, Professor, Chemistry and Institute for Materials Science

71. Investigation of Geltrex as an Alternative Basement Membrane Matrix to Matrigel for U87-MG Spheroid Formation
Yuan-Jen Kuo, Biomedical Engineering
Advisor: Xueju Wang, Associate Professor, Materials Science and Engineering
Advisor: Yi Zhang, Associate Professor, Biomedical Engineering

72. rhPRG4: A Potential Therapeutic and Delivery Enhancer for Age Related Macular Degeneration
Mohnish Peddi, Biomedical Engineering
Advisor: Tannin Schmidt, Associate Professor, Biomedical Engineering

73. Toward Effective Sleepiness Simulation: Validation using Perceptual and Physiological Measures
Yashvi Gupta, Biomedical Engineering
Advisor: Ki Chon, Distinguished Professor, Biomedical Engineering

74. Development of a 3D Cartilage Organ-on-a-Chip Model to Test Disease-Modifying Osteoarthritis Drugs
Abhishek Singh, Biomedical Engineering
Advisor: Yupeng Chen, Associate Professor, Biomedical Engineering

75. Nucleic Acid Nanocarriers for Targeted Cancer Therapy at the Cellular and Subcellular Levels
Lisa Liang, Chemistry
Advisor: Jessica Rouge, Associate Professor, Chemistry

SESSION 2 PRESENTATIONS

1. Tracing the Trailblazers: UConn's Muslim Community, Accommodations, and Activism Journey
Nadine Noaman, Psychological Sciences & Spanish
Advisor: Angela Rola, Director, Asian American Cultural Center

2. New York's Ever-Changing Green Spaces: An Insight into Historical Writing and Research
Kaitlyn Nusz, English
Advisor: Mars Plater, Assistant Professor, History

3. Reconstructing Art and Evidence: Forensic Architecture in Institutional Settings
Makenzie Smith, Art History
Advisor: Robin Greeley, Professor, Art and Art History
Advisor: Jose Falconi, Assistant Professor, Art and Art History
Advisor: Michael Orwicz, Associate Professor, Art and Art History

4. "Creation in Reverse:" the Nationalist Coalition, Revolution, and the State in Cerro de Pasco, Peru
Benjamin Pitt, History & Latino and Latin American Studies
Advisor: Rodolfo Fernandez, Assistant Professor in Residence, El Instituto: Institute of Latina/o, Caribbean, and Latin American Studies

5. Uncovering Orlando's Anti-Immigrant Narrative and How it Impacts Latinos Living in Oak Ridge
Annabel De La Cruz, History & Human Rights
Advisor: Melisa Argañaraz Gomez, Assistant Professor in Residence, Urban and Community Studies

6. Contact with the Criminal Justice System and Self-Esteem
Alexandria Dominique, Psychological Sciences
Advisor: Ryan Talbert, Assistant Professor, Sociology

7. Incarceration Exposure and the Regulation of Inflammatory and Antiviral Genes among Black Americans
Dehjah Drye, Allied Health Sciences
Advisor: Ryan Talbert, Assistant Professor, Sociology

8. Hands-On Learning: Insights from an Apprenticeship in the Platicando Juntos Community-Based Research
Sofia Guerrero, Psychological Sciences
Advisor: Sarah Rendon Garcia, Assistant Professor, Human Development and Family Sciences

9. Post-Secondary Educational Interventions for Youth Aging Out of Foster Care: A Systematic Review
Catherine Ware, Human Development and Family Sciences
Advisor: Preston Britner, Professor, Human Development and Family Sciences

10. Teacher Mindfulness In COVID
Kaila Scally, Human Development and Family Sciences
Advisor: Alaina Brenick, Associate Professor, Human Development and Family Sciences

11. Examining Vulnerable Populations' Food Experiences in Willimantic, Connecticut
Lilla Korniss, Economics & Mathematics
Advisor: Xiang "Peter" Chen, Associate Professor, Geography, Sustainability, Community, and Urban Studies

12. The Benefits of Improving Dietary Fat Stage of Change on Preventing Diabetes, Directly and through Weight Loss: A Randomized Intervention Implemented in Black Churches
Alveena Ehsan, Biomedical Engineering
Advisor: Emil Coman, Assistant Professor, Public Health Sciences
Advisor: Judith Fifield, Emeritus Faculty, Medicine

13. Understanding Baseline Dietary Status in the Community of Hartford
Mingda Sun, Nutritional Sciences
Advisor: Helen Wu, Associate Professor, Psychiatry
Advisor: Michael Puglisi, Associate Extension Professor, Nutritional Sciences

14. Exploring Healthcare Barriers: Immigrant and Provider Perspectives
Nazanin Zaer, Molecular and Cell Biology
Advisor: Susan Levine, Associate Professor and Physician, Internal Medicine
Advisor: Fumilayo Showers, Assistant Professor, Sociology & Africana Studies
Advisor: Amir Kouzehkanani, Adjunct Professor, Statistics

15. “Too Young for Sex, Too Young for PrEP”: Healthcare Providers' Attitudes and Experiences on Prescribing Pre-exposure Prophylaxis to Adolescent Girls and Young Women in Eswatini
Joy Dlamini, Molecular and Cell Biology
Advisor: Roman Shrestha, Assistant Professor, Allied Health Sciences

16. Exploring Purpose in the First Year: Training Student Leaders and Investigating First-Year Perspectives
Lourdes Mollica, Psychological Sciences
Advisor: Jordan Ochs, Director, First Year Experience

17. Voices of the Unheard: Exploring Multilingual Healthcare Experiences From Translation to Transformation - Our Journey Towards Health Equity
Maryam Shabazz, Nursing
Zainab Kane, Nursing
Advisor: Carrie Eaton, Associate Clinical Professor, Nursing

18. Supreme Court Ethics: A Comparative Study for Reform
Jacob Daignault, Political Science & Finance
Advisor: Kimberly Bergendahl, Associate Professor in Residence, Political Science
Advisor: Matthew Singer, Professor, Political Science

19. Trump’s Lies: An Examination of the Fictitious Perception of Latin American Immigrants as Violent Criminals
Sophia Esposito, Political Science & Spanish
Advisor: Charles Venator, Associate Professor, Political Science and El Instituto: Institute of Latina/o, Caribbean, and Latin American Studies

20. Please Heed the Call: Music as a Tool for Collective Political Action in the U.S. Civil Rights Movement
Alexandra Wynne, Political Science
Advisor: Fred Lee, Associate Professor, Political Science
Advisor: Elizabeth Sallinger, Visiting Assistant Professor, Music

21. Please Welcome to the Stage: Investigating Third-Party Candidates’ Debate Speech Prioritization
Jack Tyler, Political Science & Sociology
Advisor: Kimberly Bergendahl, Associate Professor in Residence, Political Science

22. Secondary Traumatic Stress in Labor and Delivery Nurses During Neonatal Resuscitation
Meijin Hsiao, Nursing
Advisor: Carrie Eaton, Associate Clinical Professor, Nursing

23. The Consequences of Dobbs v. Jackson Women's Health Through the Eyes of Nurses
Yana Tartakovskiy, Healthcare Management
Advisor: Carrie Eaton, Associate Clinical Professor, Nursing

24. Reframing Campus Life: Anti-DEI Policies on Students' Anticipated Experiences
Dannah Urban, Psychological Sciences
Cassidy McDonald, Psychological Sciences & Sociology
Advisor: Alexandra Garr-Schultz, Assistant Professor, Psychological Sciences

25. "Not at Odds": Exploring Factors That Contribute to Collective Identity Coherence
Linda Connolly, Psychological Sciences & Human Development and Family Sciences
Ally Padilla, Psychological Sciences
Sai Thanvi Kota, Psychological Sciences
Advisor: Alexandra Garr-Schultz, Assistant Professor, Psychological Sciences

26. The Effects of Psychological Factors on Blood Pressure Readings: Study Procedure Development and Data Cleaning
Ally Padilla, Psychological Sciences
Advisor: Crystal Park, Distinguished Professor, Psychological Sciences

27. Relationships Between Health Behaviors and C-Reactive Protein on Blood Pressure
Alison Godfrey, Allied Health Sciences
Advisor: Lauren Corso, Assistant Professor in Residence, Allied Health Sciences
Advisor: Bruce Blanchard, Assistant Clinical Professor, Allied Health Sciences

28. Conditioning People to Prefer Virtual Reality Rooms with Alcohol Cues
Erin Curran, Psychological Sciences
Advisor: Robert Astur, Associate Professor, Psychological Sciences

29. Exploring the Role of Positive Ethnic Identity as a Buffer Between Discrimination and Blood Pressure: A Preliminary Data Analysis
Emma Davies, Psychological Sciences & Physiology and Neurobiology
Amen Khan, Psychological Sciences
Advisor: Dean Cruess, Professor, Psychological Sciences

30. Analysis of Child-Service Provider Engagement During Rehabilitation Sessions involving Ride-on Toys in Children with Hemiplegic Cerebral Palsy
Katherine Anderson, Allied Health Sciences
Advisor: Sudha Srinivasan, Assistant Professor, Kinesiology

31. Improvements in Motor Coordination and Movement Control of Children with Hemiplegic Cerebral Palsy Following a Dual Joystick Operated Ride-on-Toy Navigation Training Program
Niti Jhaveri, Molecular and Cell Biology & Psychological Sciences
Advisor: Sudha Srinivasan, Assistant Professor, Kinesiology

32. Effects of a Ride on Toy Navigation Therapy for Children with Unilateral Cerebral Palsy
Rebecca Drouillard, Molecular and Cell Biology
Advisor: Sudha Srinivasan, Assistant Professor, Kinesiology

33. Aronia Supplementation Effects on *Caenorhabditis elegans* Polyglutamine Aggregation during Heat Stress
Robert Anchini, Physiology and Neurobiology
Advisor: Elaine Lee, Professor, Kinesiology
Advisor: Staci Thornton, Professional Staff, Kinesiology

34. Beat by Beat, Wave by Wave: Examining the Interplay between Attention and Mu Rhythm Variability during Action Processing in 6-9-week-olds
Pearlina Tran, Psychological Sciences & Human Development and Family Sciences
Advisor: Kimberly Cuevas, Associate Professor, Psychological Sciences
Advisor: Lauren Bryant, University Affiliate, Psychological Sciences

35. Assessing Reliability of Resting-state EEG Metrics in School-age Children using a Naturalistic Paradigm
Madhumita Nambiar, Physiology and Neurobiology
Advisor: Silvia Clement-Lam, Assistant Research Professor, Psychological Sciences

36. Characterization of the Cannabinoid CB1 Receptor in Catecholaminergic Neurons following Stress
Manaswini Pujar, Physiology and Neurobiology
Advisor: Natale Sciolino, Assistant Professor, Physiology and Neurobiology

37. Point-of-Need (PON) Resilient Nutrient Production with Algae
Keegan Jalbert, General Studies
Diana Pinta, Biological Sciences
Advisor: Mingyu Qiao, Assistant Professor, Nutritional Sciences

38. Anatomical Characterization of Lateral Hypothalamic GABAergic Projections to Neuromodulatory Regions
Jeremy Lesser, Physiology and Neurobiology
Advisor: Alexander Jackson, Associate Professor, Physiology and Neurobiology

39. Circulating Cell-free DNA Analyses Aiding to Define its Biomarker Potential for Late-life Depression
Emily Brayton, Molecular and Cell Biology
Advisor: Breno Diniz, Associate Professor, Psychiatry

40. Minor Spliceosome Inhibition Alters Splicing of Genes in the Pre-replication Complex Resulting in G1 Arrest of Prostate Cancer Cells
Abigail Boria, Physiology and Neurobiology
Advisor: Rahul Kanadia, AssociateProfessor, Physiology and Neurobiology

41. KCNQ2 Channel Interacts with PIKFYVE
Micah Fleischman, Physiology and Neurobiology
Advisor: Anastasios Tzingounis, Professor, Physiology and Neurobiology

42. The Relationship between Dyslexia and Resilience
Hannah Linder, Molecular and Cell Biology
Advisor: Nicole Landi, Professor, Psychological Sciences

43. D.A.N.C.E.: Dynamics of Action and Neural Coordination via Entrainment
Shivani Karthikeyan, Biomedical Engineering
Advisor: Edward Large, Professor, Psychological Sciences

44. Analysis of Repeated Impacts to the Top of the Head and Incidence of Lower Extremity Injuries in Division 1 College Football Players
Melissa Hilton, Physiology and Neurobiology
Advisor: John Redden, Associate Professor in Residence, Physiology and Neurobiology
Advisor: Matthew Hausmann, Athletic Trainer, Sports Medicine

45. Neural Correlates of PTSD Severity in Children and its Relation to Verbal Fluency
Chloe Betrand, Physiology and Neurobiology
Advisor: Nabin Koirala, Director, Brain Imaging Research Core (BIRC)

46. Corneal Axonal Regeneration After Chemical Injury
Aanvi Agrawal, Molecular and Cell Biology & Psychological Sciences
Advisor: Royce Mohan, Professor, Neuroscience

47. The Effects of 4-AP and CBX on Spontaneous Activity of Pyramidal Neurons in the Mouse Model of Alzheimer's Disease
Madhav Jami, Physiology and Neurobiology
Advisor: Srdjan Antic, Professor, Neuroscience

48. Analyzing the Heterogeneity of Granule Cell Precursors in Post-Natal Mouse Cerebella
Shravya Anisetti, Physiology and Neurobiology
Advisor: James Li, Professor, Genetics and Genome Sciences
Advisor: Xinnian Chen, Professor in Residence, Physiology and Neurobiology

49. Generation of a Leptospira Non-Resistant Cassette Mutant using Real-Time PCR
Nicole Eugenio, Allied Health Sciences
Advisor: Elsio Wunder, Assistant Professor, Pathobiology

50. Isolation and Characterization of Saprophytic and Pathogenic Strains of Leptospira from Water Sources in Storrs Manfield, CT, United States
Ellie Borton, Animal Science
Advisor: Elsio Wunder, Assistant Professor, Pathobiology

51. Assessing Shiga Toxin-mediated Human Cell Death
Udayan Chidambaram, Molecular and Cell Biology
Advisor: Sivapriya Kailasan Vanaja, Associate Professor, Immunology

52. Impact of Homolog Pairing on Chromosome Territory Compaction during Early Embryogenesis
Peter Fatzinger, Molecular and Cell Biology
Advisor: Jelena Erceg, Assistant Professor, Molecular and Cell Biology

53. Analysis of AAC5 Gene Silencing in *Trypanosoma brucei*
Rakshan Chadha, Molecular and Cell Biology
Advisor: Arthur Günzl, Professor, Genetics and Genome Sciences

54. Investigating How Age Impacts the Selfish Behavior of B chromosomes in *Drosophila melanogaster*
Annette St. Jacques, Molecular and Cell Biology
Advisor: Stacey Hanlon, Assistant Professor, Molecular and Cell Biology

55. Advancing Molecular Diagnostics for Amdoparvovirus: PCR Assay Development and Retrospective Insights
Alexis Elkinson, Physiology and Neurobiology
Advisor: Guillermo Risatti, Professor, Pathobiology and Veterinary Science
Advisor: Emily Reinhardt, Assistant Clinical Professor, Pathobiology and Veterinary Science

56. Who Makes this Lichen? An Integrative Approach to Unravel the Diversity of Sticta and Podostictina in Southern South America
Crystal Zhu, Biological Sciences
Advisor: Bernard Goffinet, Professor, Ecology and Evolutionary Biology

57. Developing Next-Gen AI Entertainment for Portable Escape Rooms
Matthew Marczak, Electrical Engineering
Advisor: Edward Weingart, Associate Professor, Dramatic Arts

58. Batrachoseps Boundaries: A Response to Climate Change?
Lesley Rendon-Hernandez, Ecology and Evolutionary Biology
Advisor: Elizabeth Jockusch, Professor, Ecology and Evolutionary Biology

59. A Potential Disease-Modifying Therapy for Osteoarthritis: An Ex Vivo Analysis Using Human Cartilage Explants
Arsalan Zaki, Physiology and Neurobiology
Advisor: Caroline Dealy, Professor, Orthodontics, Biomedical Engineering, Orthopedic Surgery & Cell Biology

60. Phytoliths in Wood and Bark: A Comparative Reference and Analysis
Tiffany Nguyen, Biological Sciences
Advisor: Pamela Diggle, Professor, Ecology and Evolutionary Biology

61. The Synthesis and Characterization of Kartogenin Modified Glycol Chitosan
Ashna Prakash, Biomedical Engineering
Advisor: Lakshmi Nair, Associate Professor, Orthopedic Surgery

62. Multigenerational Impacts of Poor Maternal Nutrition on Mitochondrial Cardiolipin Content and Muscle Fiber Cross-sectional Area in Sheep
Alana Wolfson, Animal Science
Advisor: Sarah Reed, Associate Professor, Animal Science

63. Patterns of Legacy Phosphorus in Beaver Pond Sediments
Gavin Bouslough, Environmental Sciences
Advisor: Ashley Helton, Associate Professor, Natural Resources and the Environment

64. Impact of Microgravity on the Janus Base Nanoparticles' Assembly for Improved RNA Delivery
Qianyu Chen, Biomedical Engineering
Advisor: Yupeng Chen, Associate Professor, Biomedical Engineering

65. Differential Delivery to Neurons and Microglia Using Janus Base Nanoparticles
Shreya Nagri, Biomedical Engineering
Advisor: Yupeng Chen, Associate Professor, Biomedical Engineering

66. PFAs in Oral Care and Surgery Products
Samantha Andersen, Molecular and Cell Biology
Advisor: Anthony Provatas, Assistant Research Professor, Chemistry & Center for Environmental Sciences and Engineering

67. Phosphate Sensing: The Role of Inorganic Metal Complexes in Selective Detection
Aida Adiguzel, Chemistry
Kevin Souza, Chemistry
Advisor: Christian Brückner, Professor, Chemistry

68. Selective C-H bond Activation Through Restricted Access of Substrates to Catalysts
Natalia Del Toro Justiniano, Biological Sciences
Advisor: Eugene Pinkhassik, Associate Professor, Chemistry

69. The Development of Photoswitchable Serotonin Modulators
Arjun Ahuja, Chemistry & Psychological Sciences
Advisor: Michael Kienzler, Assistant Professor, Chemistry

70. Stability Analysis of Time-dependent Ocean Shear Flows using Convex Optimization
Kalin Kochnev, Robotics Engineering
Advisor: Chang Liu, Assistant Professor, School of Mechanical, Aerospace, and Manufacturing Engineering

71. Pion Structure in the Covariant Parton Model
Thomas Tarutin, Physics & Mathematics-Statistics
Advisor: Asli Tandogan-Kunkel, Assistant Professor in Residence, Physics

72. Dynamical Signatures of Time-Reversal Breaking at Superconductor Interfaces
Jefferson Tang, Physics
Advisor: Pavel Volkov, Assistant Professor, Physics

73. Light Echoes of the Coronal Line Region in a Luminous Quasar
Teddy Smith, Physics
Advisor: Jonathan Trump, Associate Professor, Physics

74. The Effect of Antifolates on Potential Cancer Target SHMT2
Jackson Lin, Pharmacy Studies
Advisor: Hunmin Jung, Assistant Professor, Pharmaceutical Sciences

75. Development of a Stable Aspirin Suspension
Lyla White, Doctor of Pharmacy
Advisor: Robin Bogner, Professor, Pharmaceutical Sciences

SESSION 3 PRESENTATIONS

1. ¡Comamos Ya! - Multimedia Recipe-book on Peruvian Cuisine
Lee Ernest, Art - Illustration/Animation
Advisor: Mark Zurolo, Associate Professor, Art and Art History

2. First Year Here: A Novel Discussing Gen Z Relationships within Freshman Year of College
Grace Wright-Goodison, English & Secondary English Education
Advisor: Sean Forbes, Associate Professor in Residence, English

3. Monstrosity on Trial: Claiming Legal Personhood for Frankenstein's Monster
Gianna Socci, Political Science & English
Advisor: Dwight Codr, Associate Professor, English

4. The Role of Corporate Social Responsibility Relating to Purchase Intention and Consumer Attitudes
Emily Ocasio, Communication
Advisor: Thomas Meade, Associate Professor in Residence, Communciation

5. Race-Ethnicity and Oral Healthcare Visits from Adolescence to Adulthood
Safiyah Ahmed, Allied Health Sciences
Advisor: Ryan Talbert, Assistant Professor, Sociology

6. Our Beholder's Influence: Perceived Attractiveness and Systemic Inflammation in Black Americans
Akeva Koulla, Biomedical Engineering
Advisor: Ryan Talbert, Assistant Professor, Sociology

7. Cardiovascular Disease Mortality Disparities in Rural New England: A Matter of Provider Access
Eashwar Krishna, Molecular and Cell Biology & Sociology
Advisor: Ryan Talbert, Assistant Professor, Sociology

8. The College Experience: Socioemotional Effects of Covid-19
Asia Stewart, Human Development and Family Sciences
Advisor: Vida Samuel, Assistant Professor in Residence, Human Development and Family Sciences

9. Attitudes Towards Seeking Professional Help and Attachment Style as Predictors of Mental Health Literacy
Emma Dineen, Psychological Sciences & Human Development and Family Sciences
Layla Redente, Psychological Sciences & Human Development and Family Sciences
Advisor: Rachel Tambling, Professor, Human Development and Family Sciences

10. Exploring Hybridization in Lungless Salamanders
Ruiwen Lin, Molecular and Cell Biology & Ecology and Evolutionary Biology
Advisor: Elizabeth Jockusch, Professor, Ecology and Evolutionary Biology

11. Resilience in the Face of Adversity: The Role of Life Experiences, COVID-19, and Mental Health in University Students
Savannah Rose, Human Development and Family Sciences
Advisor: Maria LaRusso, Assistant Professor, Human Development and Family Sciences

12. Native Spaces: The Struggle for Colleges to Incorporate Native Frameworks into Curriculums
Eleanor Gelb, Political Science
Advisor: Sandy Grande, Professor, Political Science

13. U.S. Supreme Court Legitimacy in the Post-Roe Era
Makenzie Cossette, Political Science & Individualized Major: Law and Society
Advisor: Kimberly Bergendahl, Associate Professor in Residence, Political Science

14. From Viral to Victory: Examining John Fetterman's Twitter Strategy in His 2022 Bid for Pennsylvania's Open Senate Seat
Elly Stephen, Political Science
Advisor: Paul Herrnson, Professor, Political Science

15. The Chill Effect: How Do Secure Communities Shape Likely Undocumented Women's Healthcare Uptake?
Erin Appelson, English & Human Rights
Advisor: Delia Furtado, Professor, Economics

16. Deadly Choices: Political, Legal, and Moral Understandings of U.S. Supreme Court Death Penalty Decisions
Anabelle Bergstrom, Political Science & Philosophy
Advisor: Virginia Hettinger, Associate Professor, Political Science
Advisor: Paul Bloomfield, Professor, Philosophy
Advisor: Richard Wilson, Distinguished Professor, Anthropology & Law

17. Backlash and Perceptions: Analyzing the Multiracial Contexts of Immigration Attitudes in the United States
Yng Zhen Tse Wan, Political Science & Sociology
Advisor: Thomas Hayes, Associate Professor, Political Science
Advisor: Matthew Singer, Professor, Political Science

18. Exploring GLP-1: Analyzing TikTok Material to Gain Insight on the Consumer Narrative
Iva Filipovic, Psychological Sciences
Jenna Griesing, Psychological Sciences
Isabella Naso, Chemistry
Advisor: Amy Egbert, Assistant Professor, Psychological Sciences
Advisor: Arianna Mullings, Research Assistant, Psychological Sciences

19. The Starting Point: Examining Policy Perceptions and Support for Transgender Rights
Jamie DiDato, Psychological Sciences
Advisor: Alexandra Garr-Schultz, Assistant Professor, Psychological Sciences

20. Nurse-Physicians: From Nursing School to Practicing Physician
Tobias Fraedrich, Nursing
Advisor: Carrie Eaton, Associate Clinical Professor, Nursing

21. Investigating Intergenerational Mental Health Stigma Among UConn Students and Parents
Aviral Mehta, Molecular and Cell Biology
Pratham Tallam, Physiology and Neurobiology
Faizdeenkhan Pathan, Physiology and Neurobiology
Advisor: Stephanie Milan, Associate Professor, Psychological Sciences

22. Breastfeeding Frequency and Pain: A Longitudinal Study
Audrey Osei, Biological Sciences
Advisor: Ruth Lucas, Associate Professor, Nursing

23. Identifying Risk Factors for Disordered Eating in Adolescent Athletes
Claire Murphy, Molecular and Cell Biology & Individualized Major: Global Health, Gender, and Reproduction
Advisor: Sharon Smith, Professor, Pediatrics

24. Strengthening the Connections to Opportunities for Prevention Engagement (SCOPE)
Ada Nduka, Molecular and Cell Biology
Advisor: Sharon Smith, Professor, Pediatrics
Advisor: Kevin Borrup, Assistant Professor, Injury Prevention Center, Connecticut Children's
Advisor: Rebecca Beebe, Research Scientist, Injury Prevention Center, Connecticut Children's

25. How Driving Distractions Impact Motor Vehicle Accidents
Rahiq Rashid, Molecular and Cell Biology
Advisor: Sharon Smith, Professor, Pediatrics

26. Driving is Fun! Affective Expressions of Children During Ride-on-Toy Navigation Training Program
Meghan Barrett, Physiology and Neurobiology
Advisor: Sudha Srinivasan, Assistant Professor, Kinesiology
Advisor: Xinnian Chen, Professor in Residence, Physiology and Neurobiology

27. Exploring Affective Stages in Children with Unilateral Cerebral Palsy During Ride-On Toy Training
Zaria Jarvis, Molecular and Cell Biology
Advisor: Sudha Srinivasan, Assistant Professor, Kinesiology

28. A Novel Program Using Ride-on Toys to Improve Upper Extremity Function in Children With Hemiplegia
Neha Samuel, Physiology and Neurobiology
Advisor: Sudha Srinivasan, Assistant Professor, Kinesiology

29. Play-Based Therapy Kits for Enhancing Upper Extremity Function in Children with Cerebral Palsy
Akshitha Chaganti, Molecular and Cell Biology
Advisor: Sudha Srinivasan, Assistant Professor, Kinesiology

30. Toying with Attention: Analyzing Attention Patterns in Children with Hemiplegic Cerebral Palsy Engaged in a Ride-on-Toy Navigation Training Program
Madeline Jakubowski, Molecular and Cell Biology
Advisor: Sudha Srinivasan, Assistant Professor, Kinesiology

31. Fine Motor Skill and Gesture Use in Minimal-low Verbal Autistic Adolescents
Zachary Cotter, Speech, Language, and Hearing Sciences
Advisor: Lindsay Butler, Assistant Professor, Speech, Language, and Hearing Sciences
Advisor: Inge-Marie Eigsti, Professor, Psychological Sciences
Advisor: Derek Houston, Professor, Speech, Language, and Hearing Sciences

32. Impact of Training on Swaddling Ear to Ear Implementation Fidelity: How to Teach Someone to Pass the Vibe Check in a Family-centered Way
Cassidy White, Speech, Language, and Hearing Sciences
Advisor: Torri-Ann Woodruff-Gautherin, Research Scientist, Speech, Language, and Hearing Sciences

33. Novel Methods to Enhance Fear Extinction in People with Social Anxiety
Mia Tzikas, Psychological Sciences
Advisor: Robert Astur, Associate Professor, Psychological Sciences
Advisor: Kimberli Treadwell, Associate Professor, Psychological Sciences

34. Relationships Between Friendship Quality and Worry-Based Conversational Strategies Within Anxious Adolescent Friendships
Emma Ronaghan, Physiology and Neurobiology & Psychological Sciences
Advisor: Kimberli Treadwell, Associate Professor, Psychological Sciences

35. Alterations to Extinction May Lead to More Success In Exposure Therapy
Claudia Mizerek, Biological Sciences
Advisor: Robert Astur, Associate Professor, Psychological Sciences

36. Investigating the Role of Ecdysteroids for Ovulation and Sperm Storage in *Drosophila melanogaster*
Rylie Starer, Physiology and Neurobiology
Advisor: Jianjun Sun, Professor, Physiology and Neurobiology

37. Investigating the Role of a Synaptic Adhesion Molecule in the Development of Orexinergic Synapses
Wesley Ong, Biological Sciences
Advisor: Alexander Jackson, Associate Professor, Physiology and Neurobiology

38. The Role of Transcription Factor PU.1 In Kidney Inflammation
John Kaszycki, Biological Sciences
Advisor: Yanlin Wang, Professor, Medicine-Nephrology

39. Investigating Purinergic P2X4 Receptor (P2X4R) Trafficking in Ischemic Stroke
Shreya Chintalapudi, Physiology and Neurobiology & Molecular and Cell Biology
Advisor: Rajkumar Verma, Assistant Professor, Neuroscience
Advisor: Daylin Gamiotea-Turro, Research Assistant, Neuroscience

40. The Effects of Cholinergic Drugs on Cognitive Flexibility in Mice
Katarina Kalajzic, Psychological Sciences
Advisor: Timothy Spellman, Assistant Professor, Neuroscience

41. Playsis: Researching AR/VR to Help Early Onset Dementia Patients
Kailey Frieden, Digital Media and Design
Angela Ni, Digital Media and Design
Advisor: Ting Zhou, Assistant Professor, Digital Media and Design

42. Development of a Pruritus-Depressed Assay Using the Marble Burying Test in Mice
Emily Flynn, Physiology and Neurobiology
Advisor: Steve Kinsey, Professor, Nursing

43. Examining the Role of BRD4 in Chlorine-Induced Lung Injury and Inflammation
Suheera Haq, Molecular and Cell Biology & Individualized Major: Social Determinants of Reproductive Health
Advisor: Cody Smith, Assistant Professor, Pharmaceutical Sciences

44. Fear Generalization in Rodents and its Implications in Post Traumatic Stress Disorder-like Symptomatology
Aditi Malpure, Molecular and Cell Biology & Psychology
Advisor: Sebnem Tuncdemir, Assistant Professor, Neuroscience

45. Optimization of *In Vitro* Dexamethasone Release in Dex-Loaded Catheter
Shyam Nambiar, Physiology and Neurobiology
Advisor: Diane Burgess, Distinguished Professor, Pharmaceutical Sciences

46. (2R,6R)-Hydroxynorketamine as a Novel Treatment for Opioid Withdrawal
Maria Cruceta, Pharmacy Studies
Advisor: Gregory Sartor, Assistant Professor, Pharmaceutical Sciences

47. The Impact of Senolytics on Influenza-Induced Muscle Dysfunction with Aging
Kelsey Gorgei, Molecular and Cell Biology
Advisor: Kenneth Campellone, Associate Professor, Molecular and Cell Biology
Advisor: Jenna Bartley, Assistant Professor, Center on Aging and Department of Immunology, UConn Health

48. Formononetin to Promote Osteogenesis and Myogenesis for Bone-Muscle Defect Repair
Ayana Shrestha, Biomedical Engineering
Advisor: Syam Nukavarapu, Professor, Biomedical Engineering

49. Patients Undergoing Hip Arthroscopy with Either Periportal or Puncture Capsulotomy Demonstrate Favorable Outcomes: A Systematic Review
Raquel Rosa, Allied Health Sciences
Advisor: Andrew Jimenez, Assistant Professor, Orthopaedics & Rehabilitation, Yale School of Medicine

50. Reconstructing an Intracellular Network for a Breast Cancer Cell Line under Hypoxic Conditions
Simran Jain, Biomedical Engineering
Advisor: Paola Vera-Licona, Assistant Professor, Center for Quantitative Medicine

51. Hox Expression in Murine Fatigue Loading Stress Fracture Model
Jennifer Alaska, Biomedical Engineering
Anthony Zuo, Physiology and Neurobiology
Advisor: Benjamin Sinder, Assistant Professor, Orthopedic Surgery
Advisor: Danielle Rux, Assistant Professor, Orthopedic Surgery

52. The Interplay of Transcription and Chromosome Territory Architecture During Zygotic Genome Activation
Anna Johnson, Molecular and Cell Biology
Advisor: Jelena Erceg, Assistant Professor, Molecular and Cell Biology

53. Isolation of *Leptospira* from Animals: Gaining Insight into the Epidemiology and Prevalence of the Zoonotic Disease Leptospirosis in CT
Olivia Merlini, Pathobiology
Advisor: Elsio Wunder, Assistant Professor, Pathobiology
Advisor: Camila Hamond, Research Associate, Pathobiology

54. Investigating the Role of ORF1 in the Transposition of the Centromere-Enriched Retroelement *G2/Jockey-3*
Bianca Planeta, Molecular and Cell Biology & Anthropology
Advisor: Barbara Mellone, Professor, Molecular and Cell Biology

55. Investigating Regulation of Neutrophil-mediated Inflammation in *Mycoplasma pneumoniae* Infection
Nathan Velazquez, Pathobiology
Advisor: Steven Szczepanek, Associate Professor, Pathobiology

56. SARS-Cov-2 Detection through Wastewater Surveillance at the University of Connecticut
Nathan Shaw, Biological Sciences
Rebecca Abirached, Medical Laboratory Sciences
Advisor: Lisa Nigro, Assistant Research Professor, Institute for Systems Genomics
Advisor: Kendra Maas, Facility Scientist, Microbial Analysis, Resources, and Services (MARS)
Advisor: Rachel O'Neill, Distinguished Professor, Molecular and Cell Biology & Institute for Systems Genomics

57. Molecular Engineering of Emissive Molecular Qubits Based on Spin-Correlated Radical Pairs
Neo Lin, Chemistry
Advisor: Tomoyasu Mani, Associate Professor, Chemistry

58. Does the Effect of Nest Temperature on Skin Development Influence Host-Parasite Interactions?
Carissa Leung, Ecology and Evolutionary Biology & Animal Science
Advisor: Sarah Knutie, Associate Professor, Ecology and Evolutionary Biology

59. Low-Field Magnetoresistance in Nanocomposites of La0.7Sr0.3MnO3 and Metal Oxides
Nicholas Thiel-Hudson, Physics & Music
Advisor: Menka Jain, Professor, Physics
Advisor: Peter Schweitzer, Professor, Physics

60. Cracking the Walnut: Molecular Mechanisms Contributing to Pathogen Resistance in *Juglans ailantifolia*
Anthony He, Molecular and Cell Biology
Keertana Chagari, Molecular and Cell Biology
Advisor: Jill Wegrzyn, Associate Professor, Ecology and Ecolutionary Biology
Advisor: Rachel O'Neill, Distinguished Professor, Molecular and Cell Biology

61. Multipolar Mitosis in Tetraploid Embryos
Klaudia Bielski, Pathobiology
Advisor: Xiuchun Tian, Professor, Animal Science

62. Determination of the Efficacy of Nerol and Limonene for Controlling Major Fish Pathogens: *Edwardsiella ictaluri* and *Yersinia ruckeri*
Sydney Puchol, Animal Science & Pathobiology
Advisor: Kumar Venkitanarayanan, Professor, Animal Science

63. Industrial Training Assessment Center (ITAC) Assessment Study
Roi Alfonso Rodriguez, Robotics Engineering
Tyler King, Electrical Engineering
Jaden Chen, Electrical Engineering
Advisor: Liang Zhang, Professor, Electrical and Computer Engineering

64. Network Theory Approach to Analyzing the Cosmic Web in Cosmological Simulations
Pragyan Yadav, Computer Science
Advisor: Daniel Anglés-Alcázar, Assistant Professor, Physics

65. Adding Time Activity Data into a Clinical Trial of the Benefits of In-home Air Purifiers for Cardiovascular Health
Pratham Tallam, Physiology and Neurobiology
Advisor: Douglas Brugge, Professor, Public Health Sciences

66. A Modified ELISA for the Detection of IgG via Gold Nanoparticle Catalysis
Ava Otano, Chemistry
Advisor: Jing Zhao, Professor, Chemistry

67. Shedding Light on Calcium Signaling: Photoswitchable Modulation of SOCE through CRAC Channels
José Matute Gálvez, Molecular and Cell Biology & Allied Health Sciences
Advisor: Michael Kienzler, Assistant Professor, Chemistry

68. Identifying the Presence of PFAS "Forever Chemicals" in Household Aerosol and Cleaning Products
Angelica Velasquez, Chemistry
Advisor: Anthony Provatas, Assistant Research Professor, Chemistry & Center for Environmental Sciences and Engineering

69. Photo-switchable Photocatalysts for ATRA Reactions
Michael Vrionides, Chemistry
Advisor: Michael Kienzler, Assistant Professor, Chemistry
Advisor: Tomoyasu Mani, Associate Professor, Chemistry

70. Nanocapsule Systems for Controlling Enzyme Microenvironments: Current Understanding and Future Prospects
Aidan Stimac, Chemistry & Marketing
Advisor: Eugene Pinkhassik, Associate Professor, Chemistry

71. Go With Your Gut: An Investigation of the Gut and Fecal Microbiomes of The Eastern Oyster (*Crassostrea virginica*)
Alexandra Carabetta, Molecular and Cell Biology & Diagnostic Genetic Sciences
Advisor: Lisa Nigro, Assistant Research Professor, Institute for Systems Genomics

72. SAXOPHONE: Developing a Field Detection Device for Harmful Algal Blooms (HABs)
Emma Hazard, Allied Health Sciences
Suma Dendi, Biomedical Engineering
Anna Shoemaker, Molecular and Cell Biology
Sabina Csak, Chemical Engineering
Advisor: Kate Castellano, Assistant Research Professor, Institute of Systems Genomics

73. Effect of Temperature and Viscosity on Euchaeta Norvegica
Timothy Buckley, Marine Sciences
Advisor: David Fields, Senior Research Scientist, Bigelow Laboratory for Ocean Sciences

74. Investigating Land Use Induced Sedimentation Behind Two Historic Mill Dams in Eastern Connecticut
Lydia Field, Earth Science
Advisor: William Ouimet, Associate Professor, Earth Sciences

75. Investigating Holocene Sea Level Rise, Fluvial & Estuary Processes, and Indigenous Occupation at the Grannis Island Archaeological Site in New Haven, CT
Cassie Aimetti, Earth Science & Anthropology
Advisor: William Ouimet, Associate Professor, Earth Sciences
Advisor: Sarah Sportman, State Archaeologist, Musuem of Natural History

Special Thanks

The Office of Undergraduate Research wishes to thank the deans of the represented schools and colleges, the Office of the Provost, the Office of the Vice President for Research, and the generous donors to Enrichment Programs and to the Honors Program for their support of undergraduate research. In addition, we thank the following individuals for their support:

Radenka Maric*, President, University of Connecticut*

Anne D'Alleva, *Provost and Executive Vice President for Academic Affairs*

Jennifer Lease Butts, *Associate Vice Provost, Enrichment Programs and Director, Honors Program*

Student Volunteers for the Spring Frontiers Poster Exhibition

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Melissa Berkey, *Assistant Director*

Jodi Eskin, *Program Administrator and Advisor*

Emily Schwab, *BOLD Director and Advisor*

OUR Peer Research Ambassadors

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Hailey DeWalt '26 (CLAS)
Alexis Elkinson '25 (CLAS)
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Fraser McGurk '25 (CLAS)
Malak Nechnach '26 (CLAS)
Krithika Santhanam '25 (CLAS)
Annette St. Jacques '26 (CLAS)
Mariam Vargas '25 (CLAS)

Alphabetical Listing of Presenters with Poster Numbers

S1 denotes a Session 1 presentation – Wednesday, April 16 at 2:00 p.m.
S2 denotes a Session 2 presentation – Wednesday, April 16 at 4:00 p.m.
S3 denotes a Session 3 presentation – Wednesday, April 16 at 6:00 p.m.

Abirached, Rebecca – 56 (S3)
Adiguzel, Aida – 67 (S2)
Agrawal, Aanvi – 46 (S2)
Ahmed, Safiyah – 5 (S3)
Ahuja, Arjun – 69 (S2)
Aimetti, Cassie – 75 (S3)
Akinkunmi, Foluke – 1 (S1)
Alaska, Jennifer – 51 (S3)
Alhadainy, Akram – 70 (S1)
Anchini, Robert – 33 (S2)
Andersen, Samantha – 66 (S2)
Anderson, Katherine – 3 (S2)
Anisetti, Shravya – 48 (S2)
Appelson, Erin – 15 (S3)
Athreya, Ashwath – 39 (S1)
Bailey, Nicholas – 57 (S1)
Barber, Eva-LaRue – 65 (S1)
Barrett, Meghan – 26 (S3)
Bekkali, Sarah – 66 (S1)
Bergstrom, Anabelle – 16 (S3)
Betrand, Chloe – 45 (S2)
Bielski, Klaudia – 61 (S3)
Bienvenue, Jack – 56 (S1)
Boafo, Wilona – 29 (S1)
Boria, Abigail – 40 (S2)
Borton, Ellie – 5 (S2)
Bouslough, Gavin – 63 (S2)
Brayton, Emily – 39 (S2)
Bryan, Taylor – 2 (S1)
Buckley, Timothy – 73 (S3)
Budnik, Joshua – 28 (S1)
Bukowski, Terry – 15 (S1)
Carabetta, Alexandra – 71 (S3)
Carroll, Justin – 49 (S1)
Chadha, Rakshan – 53 (S2)
Chaganti, Akshitha – 29 (S3)
Chagari, Keertana – 60 (S3)
Chamarty, Varun – 42 (S1)
Chen, Jaden – 63 (S3)
Chen, Qianyu – 64 (S2)
Chidambaram, Udayan – 51 (S2)
Chintalapudi, Shreya – 39 (S3)
Chittajallu, Amogh – 51 (S1)
Choudry, Naz – 11 (S1)
Cipolla, Samantha – 35 (S1)
Connolly, Linda – 25 (S2)
Correia, Hailey – 8 (S1)
Cossette, Makenzie – 13 (S3)
Cotter, Zachary – 31 (S3)
Cruceta, Maria – 46 (S3)
Csak, Sabina – 72 (S3)
Curran, Erin – 28 (S2)
Daignault, Jacob – 18 (S2)
Dandonoli, Angelo – 39 (S1)
Davies, Emma – 29 (S2)
De La Cruz, Annabel – 5 (S2)
Dearborn, Ashley – 13 (S1)
Deierlein, Andrew – 63 (S1)
Del Toro Justiniano, Natalia – 68 (S2)
Dendi, Suma – 72 (S3)
Deptula, Kasia – 62 (S1)
Desibhatla, Keshav – 16 (S1)
DiDato, Jamie – 19 (S3)
Dineen, Emma – 9 (S3)
Dlamini, Joy – 15 (S2)

Dominique, Alexandria – 6 (S2)
Drouillard, Rebecca – 32 (S2)
Drye, Dehjah – 7 (S2)
Durwin, Andrea – 48 (S1)
Dwyer, Emma – 33 (S1)
Ehsan, Alveena – 12 (S2)
Elkinson, Alexis – 55 (S2)
Ernest, Lee – 1 (S3)
Esposito, Sophia – 19 (S2)
Eugenio, Nicole – 49 (S2)
Fanfan, Anayah – 61 (S1)
Fatzinger, Peter – 52 (S2)
Field, Lydia – 74 (S3)
Filipovic, Iva – 18 (S3)
Fleischman, Micah – 41 (S2)
Flynn, Emily – 42 (S3)
Fong, Quinn – 43 (S1)
Fraedrich, Tobias – 20 (S3)
Frieden, Kailey – 41 (S3)
Frier, Ryan – 54 (S1)
Furlong, Carly – 31 (S1)
Fuss, Cailyn – 24 (S1)
Ganguli, Maya – 50 (S1)
Gelb, Eleanor – 12 (S3)
Ghetia, Om – 10 (S1)
Godfrey, Alison – 27 (S2)
Gorgei, Kelsey – 47 (S3)
Grant, Claire – 12 (S1)
Griesing, Jenna – 18 (S3)
Guerrero, Sofia – 8 (S2)
Guillot, Ashley – 21 (S1)
Gupta, Yashvi – 73 (S1)
Haq, Suheera – 43 (S3)
Hazard, Emma – 72 (S3)
He, Anthony – 60 (S3)
Herrera, Aaron – 30 (S1)
Hilton, Melissa – 44 (S2)
Hsiao, Meijin – 22 (S2)
Hutchins, Nevaeh – 67 (S1)
Jain, Anushka – 23 (S1)
Jain, Simran – 50 (S3)
Jakubowski, Madeline – 30 (S3)
Jalbert, Keegan – 37 (S2)
Jami, Madhav – 47 (S2)
Jarvis, Zaria – 27 (S3)
Jhaveri, Niti – 31 (S2)
Johnson, Anna – 52 (S3)
Johnson, Madison – 6 (S1)
Joyce, Olivia – 20 (S1)
Kalajzic, Katarina – 40 (S3)
Kane, Zainab – 17 (S2)
Karthikeyan, Shivani – 43 (S2)
Kaszycki, John – 38 (S3)
Kells, Natalie – 11 (S1)
Khalfin, Melanie – 68 (S1)
Khan, Amen – 29 (S2)
Khan, Ishrat – 27 (S1)
Khan, Mohammad – 36 (S1)
Kim, Eunice – 11 (S1)
King, Tyler – 63 (S3)
Kochnev, Kalin – 70 (S2)
Korniss, Lilla – 11 (S2)
Koulla, Akeva – 6 (S3)
Krishna, Eashwar – 7 (S3)
Kuo, Yuan-Jen – 71 (S1)
Lau, Karen – 17 (S1)
Lee, Joshua – 58 (S1)
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S2 denotes a Session 2 presentation – Wednesday, April 16 at 4:00 p.m.
S3 denotes a Session 3 presentation – Wednesday, April 16 at 6:00 p.m.

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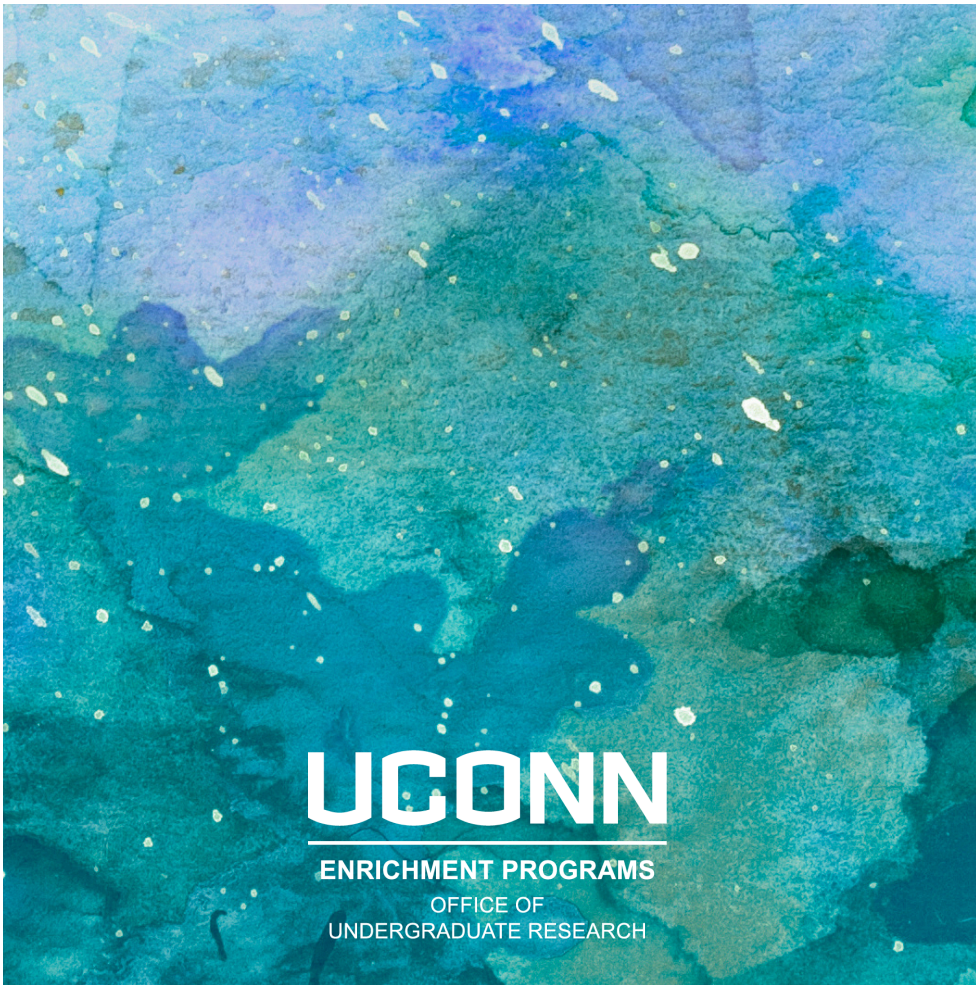

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