

FRONTIERS

IN UNDERGRADUATE RESEARCH

Nineteenth Annual
Poster Exhibition

A CELEBRATION OF SCHOLARSHIP, INNOVATION,
CREATIVITY, AND COLLABORATION

April 8, 2016

3:00 p.m. – 4:30 p.m.

April 9, 2016

10:30 a.m. – 12:30 p.m.

UConn

ENRICHMENT PROGRAMS

OFFICE OF
UNDERGRADUATE RESEARCH

Sponsored by
The University of Connecticut

Office of Undergraduate Research
Enrichment Programs
Honors Program

About Frontiers in Undergraduate Research

The Frontiers Poster Exhibition is a multidisciplinary research forum and the largest showcase of undergraduate research, scholarship, and creative projects at the University of Connecticut. Frontiers 2016 is the nineteenth annual Frontiers event sponsored by the Office of Undergraduate Research (OUR). This year's poster exhibition includes 272 students presenting posters for 234 research projects, with some students presenting on Friday or Saturday only.

The projects span the disciplines and include both independent research and work pursued in collaboration with other undergraduates as well as graduate student and faculty mentors. The presenters are among the top students at UConn and include Honors students, University Scholars, winners of OUR funding competitions, and nominees and winners of prestigious national scholarships. We hope you enjoy meeting our wonderful students and learning about their exciting work.

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 office 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 \$400,000 in 2014-2015 to students for their research and creative work over the summer and during the academic year. These awards are funded by the Office of Undergraduate Research with generous support from the Deans of the schools and colleges, the Office of the Vice President for Research, the Provost's office, and private donations from many, many alumni, parents, and other friends of UConn and undergraduate research.

Schedule of Events

Poster Exhibition	Friday, April 8, 2016 3:00 p.m. – 4:30 p.m.
	Saturday, April 9, 2016 10:30 a.m. – 12:30 p.m.
Student and Faculty Reception	Friday, April 8, 2016 4:30 p.m. – 5:30 p.m.

Introduction and Welcome

Caroline McGuire, Director, Office of Undergraduate Research

Presentation of the Mentorship Excellence Awards

Faculty Awards

Dwight Codr, Associate Professor, English

Presented by **Giorgina Paiella '16** (CLAS)

Etan Markus, Professor, Psychological Sciences

Presented by **Stephanie Vu '16** (CLAS)

Graduate Student Award

Samantha Yohn, Ph.D. Student, Behavioral Neuroscience

Presented by **Giuseppe Tripodi '16** (CLAS)

Closing Remarks

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

Sequential Listing of Poster Presentations

This listing of projects includes the undergraduate student authors and their faculty mentors. Many projects also include the contributions and mentorship of dedicated graduate students and post-doctoral scholars. In some cases students work with faculty outside their school or college; in most cases, research is grouped according to the student's major.

Please note that an "F" after the poster number signifies a presentation on Friday only and an "S" after the poster number signifies a presentation on Saturday only. An alphabetical listing of presenters begins on page 37.

ROTUNDA

1. FlipHop iOS App: An Innovative Campus Marketplace

Matthew Gagliano, Digital Media and Design

Case Polen, Digital Media and Design

Justin Hall, Mechanical Engineering

Advisor: Kathy Rocha, Visiting Instructor, Engineering Dean's Office; UConn Entrepreneurship and Innovation Consortium

2. Disposable Toilet Seat Cover: Cobb Value Text for Polyhydroxyalkanoates

Young Son, Physics and Mathematics

Advisor: Richard Parnas, Professor, Chemical and Biomolecular Engineering

3. "Small Pond": A Puppet Arts Production

Hailey Bendar, Puppet Arts

Advisor: Bart Roccoberton, Professor, Dramatic Arts

4. The Summer of Ballroom

Jasmine Jones, Art – Photography

Advisor: Ray DiCapua, Associate Professor, Art and Art History

5. Whispers of Light: A Video and Sound Installation

Madeline Nicholson, Art History

Advisor: Ray DiCapua, Associate Professor, Art and Art History

Advisor: Monica Bock, Associate Professor, Art and Art History

6F. TODO MODO: Food and Recipe Illustrations

Christina Corey, Studio Art

Advisor: Cora Lynn Deibler, Professor and Department Head, Art and Art History

Advisor: Phoebe Godfrey, Assistant Professor in Residence, Sociology

6S. Examining the Social Characteristics of the Creative Process through Collaborative Musical Performance and Composition

Michael O'Callaghan, Music – Jazz Studies

Julien Monick, Music Performance and Music Composition

Advisor: Louis Hanzlik, Associate Professor, Music

7F. Visual Meditation

Ryan King, Art – Painting

Advisor: John O'Donnell, Assistant Professor, Art and Art History

7S. Directing a Performance of Steve Reich's Music for 18 Musicians

Rex Sturdevant, Music Education

Advisor: Eric Rice, Associate Professor and Department Head, Music

8. These Violent Delights

Emily Cole, English and Secondary English Education

Advisor: Jason Courtmanche, Lecturer, English, and Director, Connecticut Writing Project

9. Bridging the Structural-Cultural Gap: An Anthropological Investigation of Earthquake Engineering, Risk and Resilience

Lia Goncalves, Anthropology

Advisor: Richard Christenson, Associate Professor, Civil and Environmental Engineering

Advisor: Eleanor Shoreman-Ouimet, Assistant Professor in Residence, Anthropology

10. Why is Women's Health just Maternal Health? A View from NGO's and the State in Bangladesh

Asahi Hoque, Molecular and Cell Biology and Human Rights

Advisor: Manisha Desai, Associate Professor, Sociology and Women's, Gender, and Sexuality Studies

Advisor: Shareen Hertel, Associate Professor, Political Science

Advisor: Victoria Robinson, Associate Professor, Molecular and Cell Biology

11. Occupational Stressors and Health Outcomes for Nurses Working in Correctional and Non-Correctional Settings

Alyssa Zabin, Psychology and Sociology

Advisor: Blair Johnson, Distinguished Professor, Psychological Sciences

Advisor: Denise Panosky, Associate Clinical Professor, Nursing

Advisor: Lynne Goodstein, Professor, Sociology

12. An Investigation into Pediatric Staff Nurses' Attitudes Toward their Institution's Clinical Ladder System

Abigail Moore, Allied Health Sciences

Advisor: Jacqueline McGrath, Professor and Associate Dean, Nursing

13. Identification of Student Nurses' Knowledge and Attitudes Regarding Pediatric Pain Management

Jessica Laprise, Nursing

Advisor: Jacqueline McGrath, Professor and Associate Dean, Nursing

Advisor: Cheryl Beck, Distinguished Professor, Nursing

14. Hostile Takeover: Pathogenic *E. coli* and Innate Immunity

Henry Chen, Molecular and Cell Biology and Physiology and Neurobiology

Advisor: Kenneth Campellone, Assistant Professor, Molecular and Cell Biology

15. Computational Investigations into the Structural Characteristics of PDE6 and its Inhibition by PDE6- γ

Shaan Kamal, Molecular and Cell Biology

Advisor: Eric May, Assistant Professor, Molecular and Cell Biology

16. The Minor Spliceosome snRNA's U4atac and U6atac are Down Regulated in Starvation Induced Stress Response

Nikita Sturrock, Physiology and Neurobiology

Advisor: Rahul Kanadia, Assistant Professor, Physiology and Neurobiology

17. Effect of *Staphylococcus aureus* on Milk Neutrophil Apoptotic Gene Expression

Alexandra Rudolph, Animal Science and Molecular and Cell Biology

Advisor: Sheila Andrew, Professor, Animal Science

Advisor: Michael O'Neill, Associate Professor, Molecular and Cell Biology

Advisor: Steven Szczepanek, Assistant Professor, Pathobiology and Veterinary Science

18. High Efficiency Production of 1,3-Propanediol by Recombinant *E. coli*

Summit Singhaviranon, Chemical Engineering and Molecular and Cell Biology
Advisor: Richard Parnas, Professor, Chemical and Biomolecular Engineering
Advisor: Jonathan Klassen, Assistant Professor, Molecular and Cell Biology

19. Hydrogeological Conceptual Model of La Villa River Watershed, Republic of Panama

Maria Castrellon, Environmental Engineering
Advisor: Amvrossios Bagtzoglou, Professor and Department Head, Civil and Environmental Engineering

20. The Impact of Waste Signage on Recycling Rates

Miles Radin, Communication and Philosophy
Advisor: David Atkin, Professor, Communication

21. Beyond Capture: Development of a Visual Body Condition Index to Determine Effects of Nutritional Condition of Mule Deer (*Odocoileus hemionus*)

Rachel Smiley, Natural Resources
Advisor: Chadwick Rittenhouse, Assistant Research Professor, Natural Resources and the Environment

22. Aquaponics - A Sustainable Agricultural Ecosystem

Carl Underwood, Ecology and Evolutionary Biology and Exercise Science
Gabriel DeRosa, Horticulture
Advisor: Julia Cartabiano, Adjunct Faculty, First Year Programs/Learning Communities

23. Overcoming Production Hurdles of *Aronia mitschurinii* 'Viking' through Elevation Grafting

Nathan Wojtyna, Horticulture and Resource Economics
Advisor: Mark Brand, Professor, Plant Science and Landscape Architecture

24. Evaluating the Efficacy of 3D Scanner as a Means to Improve Plant Taxonomy

William Brown, Electrical Engineering and Computer Engineering
Advisor: Pamela Diggle, Professor, Ecology and Evolutionary Biology

HALLWAY

25. Self-Sustaining Space Heating Solution Using Zeolite Adsorption

Joel Kim, Mechanical Engineering

Joshua Park, Civil Engineering

Hyun-Young Kim, Mechanical Engineering

Hyunsung Kim, Biomedical Engineering

Advisor: Sung-Yeul Park, Associate Professor, Electrical and Computer Engineering

Advisor: Ioulia Valla, Assistant Professor, Chemical and Biomolecular Engineering

26. A Demonstration of High Critical Temperature Superconductivity in Artificial Non-Cuprates at the Macromolecular Level

John Mantese, Chemical Engineering

Advisor: Pamir Alpay, Professor and Department Head, Materials Science and Engineering

27. Doxorubicin Loaded Polymer Nanoparticles for the Improvement of Cancer Therapy Outcomes

Sarah Warack, Pharmacy

Advisor: Xiuling Lu, Assistant Professor, Pharmaceutical Sciences

28F. Simulating Brain Damage in a Neural Network: Do Double Dissociations Prove Modularity?

Emily MacNaught, Cognitive Science

Advisor: James Magnuson, Professor, Psychological Sciences

28S. Visual History of Parks and Public Space in Waterbury, Connecticut

Donato Pesce, Urban and Community Studies

Advisor: Phil Birge-Liberman, Assistant Professor in Residence, Urban and Community Studies

29F. Woman a Machine: Gender, Automation, and Created Beings

Giorgina Paiella, English

Advisor: Dwight Codr, Associate Professor, English

29S. After the Branding: Student Created Perceptions of University Writing Centers

Alexandria Bottelsen, Secondary English Education and English

Luke LaRosa, Urban and Community Studies and Geography

Advisor: Tom Deans, Professor, English, and Director, Writing Center

30F. Self-Healing Double Network Hydrogels

Omar Allam, Chemistry

Advisor: Thomas Seery, Associate Professor, Chemistry

30S. The Androgynous Center: Tutoring Across the Masculine/Feminine Spectrum

Brandon Marquis, English

Sarah Carew, Physiology and Neurobiology

Jessica Zaccagnini, English

Advisor: Samuel Robinson, Adjunct Faculty and Writing Center Coordinator

NORTH READING ROOM

31F. Pole Switching Induction Machine Winding Configurations for Improved Capability and Efficiency

Christian Ratliff, Electrical Engineering

Advisor: Ali Bazzi, Assistant Professor, Electrical and Computer Engineering

31S. Ultracold Triatomic Ion Formation Energetics of Rb and K

Michael Cantara, Physics

Advisor: William Stwalley, Distinguished Professor, Physics

32F. Modern Advanced Analytics and their Effect on Sport Business

Tyler Axon, Sport Management

Advisor: Kathleen McLaughlin, Adjunct Faculty, Statistics

Advisor: Joseph Cooper, Assistant Professor, Educational Leadership

32S. The Effect of Polymer-Drug Interaction on Product Quality of PLGA Microspheres

Suleyman Bozal, Structural Biology/Biophysics

Advisor: Jie Shen, Assistant Research Professor, Pharmaceutical Sciences

33. Ultracold Long Range Molecule Formation with Rb and K

Cameron Vickers, Physics and Mathematics

Advisor: William Stwalley, Distinguished Professor, Physics

34. Growth of ZnO Nanocolumns on Silica Nanospheres Using Glanced Angle Pulsed Laser Deposition

Nico Wright, Materials Science and Engineering and German Studies

Advisor: Sarath Witanachchi, Professor, Physics, University of South Florida

35. Dynamic Evolution of Defect Structures during Spall Failure of Nanocrystalline Al

Kathleen Coleman, Materials Science and Engineering

Advisor: Avinash Dongare, Assistant Professor, Materials Science and Engineering

36. PFM Characterization of Multiferroic Functional Devices for Aerospace Applications

Zachary Thatcher, Materials Science and Engineering

Advisor: Bryan Huey, Associate Professor, Materials Science and Engineering

37F. Wireless Electroencephalographic Device Incorporation into Gameplay

Ashley Dumaine, Computer Science and Engineering

Anthony Barletta, Computer Science

Patrick Belanger, Computer Science

Todd Slater, Computer Science

Iu-Wei Sze, Computer Science and Engineering

Advisor: Jeffrey Meunier, Lecturer and Associate Director of Undergraduate Studies, Computer Science and Engineering

37S. Towards Automatic Seizure Onset Detection: A Systems Approach

Edward Novikov, Electrical Engineering and Mathematics

Advisor: Shalabh Gupta, Assistant Professor, Electrical and Computer Engineering

Advisor: Sabato Santaniello, Assistant Professor, Biomedical Engineering

Advisor: Maria Gordina, Professor, Mathematics

38. Gallium Nitride Field Effect Transistors (GaN FETs)

Kevin Bisson, Electrical Engineering

Advisor: Sung-Yeul Park, Associate Professor, Electrical and Computer Engineering

39. A Data-Driven Approach to Analyze the Spatial and Temporal Variations in the Power Distribution Grid

Qiwei Zheng, Computer Science and Geography

Advisor: Sanguthevar Rajasekaran, Professor, Computer Science and Engineering

40. Fibronectin Adsorption on 3D Braided PLLA Scaffolds

Kevin Smith, Biomedical Engineering

Advisor: Syam Nukavarapu, Assistant Professor, Orthopaedic Surgery, UConn Health

41. Universal Grammar In the Acquisition of A Second Language

Megan Brown, Cognitive Science and Linguistics/Psychology

Advisor: Eva Bar-Shalom, Associate Research Professor, Linguistics

42. Body Posture and the Representation of “Abstract” Concepts

Kagnica Seng, Biological Sciences and Psychology

Patrick Orvis, Biological Sciences

Rebecca Welles, Psychology and Speech, Language, and Hearing Sciences

Advisor: Eiling Yee, Assistant Professor, Psychological Sciences

43F. Do Women and Men Implicitly Create Cognitive Maps within a Virtual Environment?

Morgan McKenna, Exploratory – Biomedical Engineering

Lena Capozzi, Psychology

Eric Dunn, Psychology

Advisor: Robert Astur, Associate Professor, Psychological Sciences

43S. Orthographical Learning: The Impact of Crossmodal Interaction

Rebecca Welles, Psychology and Speech, Language, and Hearing Sciences

Advisor: Eiling Yee, Assistant Professor, Psychological Sciences

44. The Effects of Nicotine on Conditioning, Extinction, and Reinstatement

Courtney McQuade, Psychology

Advisor: Robert Astur, Associate Professor, Psychological Sciences

45. The Effect of Estrogen on Hippocampal-Dependent Spatial Memory

Stephen Friedland, Psychology

Advisor: Robert Astur, Associate Professor, Psychological Sciences

46F. Assessment of the Ability of a New Cancer Imaging Molecule to Detect Tumor Hypoxia

Thomas Cotton, Biomedical Engineering

Advisor: Liisa Kuhn, Associate Professor of Reconstructive Sciences, Center for Regenerative Medicine and Skeletal Development, UConn Health

46S. Rapid Detection And Quantitative Analysis Of Algal Toxins In Surface Water Using Ultra Performance Liquid Chromatography Coupled With Tandem Mass Spectrometry

Rachel Trotman, Chemistry

Advisor: Anthony Provatas, Project Scientist, Center for Environmental Sciences & Engineering

47F. Mobile Automated Analysis of Sperm Quality

Michael Messina, Biomedical Engineering

Advisor: Savas Tasoglu, Assistant Professor, Mechanical Engineering

47S. Analysis of Lunar Habitats

Fiona O'Donnell, Civil Engineering

Advisor: Ramesh Malla, Associate Professor, Civil and Environmental Engineering

48F. Small-Scale Vehicle Stabilization

Christian Schirmer, Mechanical Engineering and Computer Science and Engineering

Advisor: Jeffrey Meunier, Lecturer and Associate Director of Undergraduate Studies, Computer Science and Engineering

48S. Ultrafine Cobalt Sulfides@Porous Carbon Nitride Hollow Nanospheres for Electrocatalytic Hydrogen Reduction

Anthony Federico, Chemistry

Advisor: Jie He, Assistant Professor, Chemistry

Advisor: Ben Liu, Postdoctoral Fellow, Chemistry

49. Synthesis, Characterization, and Exploration of Biological Activity of Copper Binding Antimicrobial Peptide Families

Scott Pierce, Chemistry

Advisor: Alfredo Angeles-Boza, Assistant Professor, Chemistry

50. Conformational Equilibria of the Cyano Group Revisited: The Importance of Intramolecular Electrostatic Interactions

Zachary Stempel, Chemistry

Advisor: William Bailey, Professor, Chemistry

51. Metal-Free Catalysis: Synthesis and Oxidation of Primary Amines to Nitriles

Francis Sternberg, Chemistry

Advisor: William Bailey, Professor, Chemistry

52. Oxidation of Primary Amines to Nitriles Using a 4-Acetamido-TEMPO/Oxone Catalytic System

Sherif Eldirany, Chemistry

Liam Kissane, Finance

Advisor: William Bailey, Professor, Chemistry

53. Rapid Quechers Extraction in Tandem with a Novel Phospholipid Purification Method for the Analysis of Selected Insecticides in Lobster and Shellfish using GC-MS/MS

Andrew Bell, Chemistry

Samantha Feinberg, Physiology and Neurobiology

Advisor: Anthony Provasas, Project Scientist, Center for Environmental Sciences & Engineering

Advisor: James Stuart, Professor Emeritus, Chemistry

54. New Frontiers in Oxoammonium Salt Oxidations

John Ovian, Chemistry

Advisor: Nicholas Leadbeater, Associate Professor, Chemistry

55. In Vitro Evaluation of Calcium Peroxide Release from Composite Poly(lactic-co-glycolic acid) Microsphere Scaffolds

Ornella Tempo, Chemical Engineering

Advisor: Yusuf Khan, Assistant Professor, Orthopaedic Surgery, UConn Health

56. Effects of Soil Structure and Bacterial EPS on Drying Rate in Soil Emulating Microfluidic Devices

Jake Lewis, Chemical Engineering

Advisor: Leslie Shor, Associate Professor, Chemical and Biomolecular Engineering

57. Respiratory Response of *Staphylococcus aureus* Biofilm to Daptomycin Exposure

Victoria Drake, Chemical Engineering

Advisor: Leslie Shor, Associate Professor, Chemical and Biomolecular Engineering

58. Dynamic Simulation of a Combined Cycle Power Plant Integrated with Chemical-Looping Combustion

Kyle Such, Chemical Engineering

Advisor: George Bollas, Assistant Professor, Chemical and Biomolecular Engineering

59. Characterizing Materials for Additive Manufacturing

Kerry Davis, Chemical Engineering

John Corsi, Materials Science and Engineering

Advisor: C. Barry Carter, Professor, Chemical and Biomolecular Engineering and Materials Science and Engineering

60. Exploring the Effect of Novel Small Molecules on Oligodendrocyte Precursor Proliferation

Sagune Sakya, Pharmacy

Advisor: Akiko Nishiyama, Professor, Physiology and Neurobiology

Advisor: Dennis Wright, Professor, Pharmaceutical Sciences

Advisor: Daniel Schwartz, Assistant Professor, Physiology and Neurobiology

61. Itraconazole Analogues as Anti-Cancer Hedgehog & Angiogenesis Inhibitors

Kelly Chan, Pharmacy

Advisor: Kyle Hadden, Assistant Professor, Pharmaceutical Sciences

62. Identification of the Cellular Targets that Govern Inhibition of Hedgehog Signaling by the Vitamin D Scaffold

Evrett Thompson, Molecular and Cell Biology and Chemistry

Advisor: Kyle Hadden, Assistant Professor, Pharmaceutical Sciences

Advisor: Charles Giardina, Professor, Molecular and Cell Biology

Advisor: Ashis Basu, Professor, Chemistry

63F. The Fabrication of Drug Encapsulated Microparticles for the Purpose of Drug Delivery for Pain Management

Anurag Ojha, Biomedical Engineering

Advisor: Sangamesh Kumbar, Associate Professor, Orthopaedic Surgery, UConn Health

Advisor: Namdev Shelke, Researcher, Orthopaedic Surgery, UConn Health

63S. Dye-Loaded Hydrogel of Bovine Serum Albumin and Medium-Chain Fatty Acid Used as a Bio White Light Emitter

Matthew Henry, Molecular and Cell Biology

Advisor: Challa Kumar, Professor, Chemistry

64F. Synthesis of Zeolitic Thin Film by Chemical Vapor Deposition

Yijia Sun, Chemical Engineering

Advisor: George Bollas, Assistant Professor, Chemical and Biomolecular Engineering

64S. Extraction and Quantification of Polycyclic Aromatic Hydrocarbons in Avian Feathers Utilizing Accelerated Solvent Extraction and UPLC/UV Detection

Stephen Jiang, Chemistry

Advisor: Anthony Provatas, Project Scientist, Center for Environmental Sciences & Engineering

65F. Analysis of a Simulated Moving Bed Configuration for Chemical-Looping Combustion

Clarke Palmer, Chemical and Biomolecular Engineering

Advisor: George Bollas, Assistant Professor, Chemical and Biomolecular Engineering

65S. Direct Analysis of Glyphosate and its Degradation Products in Surface Water Without Derivatization Using UPLC-MS in Selected Ion Recording Mode

Steven Kolakowski, Chemistry and Classics and Ancient Mediterranean Studies

Advisor: Anthony Provatas, Project Scientist, Center for Environmental Sciences & Engineering

66S. Auditory Word Comprehension while Performing a Visual Task

Caitlin Dowling, Physiology and Neurobiology

Advisor: Eiling Yee, Assistant Professor, Psychological Sciences

67. Predictors of Persistent Infant Car Seat Challenge Failure

Laura Mandell, Nursing

Advisor: Jacqueline McGrath, Professor and Associate Dean, Nursing

68. Paternal Bottle-Feeding and Breast Milk Exclusivity

Roxanne Lapierre, Nursing

Advisor: Ruth Lucas, Assistant Professor, Nursing

69. The Accumulated Pain/Stressor Scale (APSS) Measures Early Life Experiences of Preterm Infants

Shaina Forte, Nursing

Advisor: Xiaomei Cong, Associate Professor, Nursing

70S. Studying Genetic and Somatosensory Variables Related to Lower Back Pain

Jenny Yung, Nursing

Leena Kader, Biological Sciences

Angelica Lee, Nursing

Advisor: Angela Starkweather, Professor, Nursing

71. Provision of Emotional Support to Increase Pumping Duration in High Risk Mothers

Katherine Dinisi, Nursing

Advisor: Jacqueline McGrath, Professor and Associate Dean, Nursing

Advisor: Ruth Lucas, Assistant Professor, Nursing

72F. Results of Intensive Sound Production Treatment Study for Apraxia of Speech: An Analysis of Self-Correction

Abigail Garneau, Speech, Language, and Hearing Sciences

Advisor: Carl Coelho, Professor, Speech, Language, and Hearing Sciences

Advisor: Jennifer Mozeiko, Visiting Assistant Professor, Speech, Language, and Hearing Sciences

72S. Neural Processing of Sound in Adult Bilinguals

Michael Figueiredo, Speech, Language, and Hearing Sciences

Advisor: Erika Skoe, Assistant Professor, Speech, Language, and Hearing Sciences

73. Investigating the Role of Temporal Speech Dynamics in Infant and Adult Speaker Identification

Casey Turovac, Speech, Language, and Hearing Sciences

Advisor: Heather Bortfeld, Assistant Professor, Psychological Sciences

74F. You Hear What You Speak

Kara Casale, Speech, Language, and Hearing Sciences and Spanish

Gianna Duncan, Speech, Language, and Hearing Sciences and Human Development and Family Studies

Erika Hodlin, Speech, Language, and Hearing Sciences

Advisor: Adrian Garcia-Sierra, Assistant Professor, Speech, Language, and Hearing Sciences

74S. Neural Processing of Non-Speech Sounds and the Bilingual Experience

Margaret “Meg” Hardin, Physiology and Neurobiology

Advisor: Erika Skoe, Assistant Professor, Speech, Language, and Hearing Sciences

75F. Results of Intensive Sound Production Treatment Study for Apraxia of Speech: An Analysis of Error Consistency

Victoria Abolafia, Speech, Language, and Hearing Sciences

Advisor: Carl Coelho, Professor, Speech, Language, and Hearing Sciences

Advisor: Jennifer Mozeiko, Visiting Assistant Professor, Speech, Language, and Hearing Sciences

75S. Connecticut Birth to Three: A Content Analysis of Programs for Individuals with Hearing Loss

Hannah Burrick, Human Development and Family Studies and Speech, Language, and Hearing Sciences

Advisor: Laura Mauldin, Assistant Professor, Human Development and Family Studies

76F. Ethnic-Racial Identity and Socio-Emotional Adjustment Among Young Biracial Children

Kalea Coles, Human Development and Family Studies and Psychology

Advisor: Annamaria Cszimadia, Associate Professor, Human Development and Family Studies

76S. Adolescents in Recovery: Depression, Emotion Regulation, and Distress Tolerance

Ginamarie Mazzucco, Human Development and Family Studies

Advisor: Beth Russell, Assistant Professor, Human Development and Family Studies

77. Explaining the Math/Number Gap: A Meta-Analysis Comparing Deaf and Hard of Hearing Students and Normally Hearing Peers

Keesha Miller, Human Development and Family Studies

Advisor: Marie Coppola, Assistant Professor, Psychological Sciences and Linguistics

78F. Observations of Conflict Resolution in Adolescent Friendships

Lauren Chapman, Psychology and Spanish

Advisor: Rhiannon Smith, Assistant Professor, Psychological Sciences

78S. Comparison of Impulsivity, Emotion Regulation, and Distress Tolerance in Substance Using Adolescents

Alaina Fusco, Human Development and Family Studies

Advisor: Beth Russell, Assistant Professor, Human Development and Family Studies

79F. Personal Attributes and Experiences with Disabilities: Relations to Career Choice

Jessica Oknin, Human Development and Family Studies

Advisor: Kari Adamsons, Associate Professor, Human Development and Family Studies

Advisor: Anne Farrell, Associate Professor, Human Development and Family Studies

79S. Love Awareness

Vashe Beechinor, Human Development and Family Studies

Advisor: Shannon Weaver, Associate Professor, Human Development and Family Studies

80F. The Effects of Parental Involvement on Literacy Achievement in Elementary School Children

Melissa Gargano, Human Development and Family Studies

Advisor: Annamaria Csizmadia, Associate Professor, Human Development and Family Studies

80S. Academic Self-Efficacy, Locus of Control, and Social Support: Improving Academic Outcomes Among Adolescents in Foster Care

Kayla Theriault, Human Development and Family Studies

Advisor: Preston Britner, Professor, Human Development and Family Studies

81. Persuasion Through Transportation: Video Game Delivery of Graphic Health Warnings

Mallory Kloss, Psychology

Advisor: Hart Blanton, Professor, Psychological Sciences

82F. Get Off The Couch! Increasing Physical Activity Through the Use of Social Support and Financial Incentives

Jessica Naples, Psychology and Human Development and Family Studies

Melanie Klink, Human Development and Family Studies

Advisor: Amy Gorin, Associate Professor, Psychological Sciences

82S. Interpreting Intent in Potential Bullying Situations: The Relation Between Race/Ethnicity, Hostile Intent Attributions, and Bullying Experience

Myroslava Veres, Psychology

Samantha Lawrence, Psychology

Advisor: Alaina Brenick, Assistant Professor, Human Development and Family Studies

83. Effect of Calorie Exercise Equivalent Labeling on Selection of High-Calorie Foods in a College Dining Hall

Aaron Plotke, Nutritional Sciences and Individualized Major: Health Policy

Valerie Everett, Psychology (May 2015)

Lauren Frymus, Individualized Major: Food, Culture, and Health

Kiersten Kronschnabel, Biological Sciences (May 2015)

Khiem Nguyen, Physiology and Neurobiology (May 2015)

Advisor: Amy Gorin, Associate Professor, Psychological Sciences

84. #WeTakeTheStairs: A Study of the Effects of Stair Taking Behavior in a University Dormitory

Kate Boudreau, Psychology and Biological Sciences

Julia Werth, Nutritional Sciences and Journalism

Advisor: Amy Gorin, Associate Professor, Psychological Sciences

85. Questioning Assumptions: The Alliance for Progress, Chile and Housing Policy

Harrison Fregeau, History

Advisor: Mark Healey, Associate Professor, History

86F. Project SPARK: Analysis of Response Lessons Eliciting High Potential Behavior

Kelsey Iwanicki, Elementary Education

Advisor: Catherine Little, Associate Professor, Educational Psychology

86S. Classroom Discourse: Conversation Patterns of High Potential Students from Underrepresented Populations in a Mathematics Summer Enrichment Program

Jessica Liu, Elementary Education

Advisor: Catherine Little, Associate Professor, Educational Psychology

87. Galatea Triumphant: Explorations in Figurative Ceramic Sculpture

Catherine Solari, Art – Sculpture and Ceramic Art

Advisor: Monica Bock, Associate Professor, Art and Art History

88F. Topics in Time Series Modeling of Inter-Event Durations

Rajeshwari Majumdar, Economics and Mathematics – Statistics

Advisor: Nalini Ravishanker, Professor, Statistics

88S. Analysis of Second Day Performance in Archery Competitions

Jenna DeVoe, Actuarial Science

Advisor: Nalini Ravishanker, Professor, Statistics

Advisor: Gregory Vaughan, Instructor, Statistics

89F. Identity in Coming of Age Literature: Challenging the Singular Sense of Self

Sarah Luft, Individualized Major: Cultural Influence on Youth Development and Economics

Advisor: Kathy Knapp, Associate Professor, English

89S. Haiti in the Dominican Republic's News Media

Isamar Tavarez, Economics

Advisor: Thomas Craemer, Professor, Political Science

Advisor: Samuel Martinez, Associate Professor, Anthropology

90. Fall of the Wild: The Cultural Construction of the Grey Wolf

Elina Cate Griggs, Environmental Studies

Advisor: Wayne Franklin, Professor, English and American Studies

91F. The Politics of Refugees: A Comparative Study on Receiving Syrian Immigrants From Conflict

Jessica Topper, Individualized Major: International Relations

Advisor: David Richards, Associate Professor, Political Science

91S. The Media and Public Opinions on Renewable Energy

Jessica Topper, Individualized Major: International Relations

Advisor: Oksan Bayulgen, Associate Professor, Political Science

92. Committed to Inequality? How Confronting the Public with New Information Changes Preferences for Redistribution

Emma Sifre, Individualized Major: Interdisciplinary Study of Economic Inequality

Advisor: Thomas Hayes, Assistant Professor, Political Science

Advisor: Lyle Scruggs, Professor, Political Science

93. Political Participation in the Internet Age

Christopher Guay, Political Science

Advisor: Thomas Hayes, Assistant Professor, Political Science

94. The Politics of Environmental Action: Cities, Water Pollution and Environmental Inequality in Latin America

Renato Muguerza, Latin American Studies

Advisor: Veronica Herrera, Assistant Professor, Political Science

95F. A New Political Player: The Role of Super PACs in Congressional Elections

Riley Hasson, Political Science

Advisor: Paul Herrnson, Professor, Political Science

95S. The Impact of Political Experience on Candidate Emergence in the 2016 Congressional Elections

Jared Quigley, Political Science

Advisor: Paul Herrnson, Professor, Political Science

96F. The Darker Side of Congressional Elections: The Transparency of Single-Candidate Super PACs

Christian Caron, Political Science

Advisor: Paul Herrnson, Professor, Political Science

96S. The Impact Gender Has on Political Experience of the 2016 Congressional Candidates

Selena Cruz, Political Science

Advisor: Paul Herrnson, Professor, Political Science

97. Multi-Level Environment Governance: Studying Equity Implications of National Plans for Carbon Emission Reductions

Edward McInerney, Political Science

Advisor: Prakash Kashwan, Assistant Professor, Political Science

98F. First Things First: An Investigation of Factors Influencing the Supreme Court's Incorporation of the First Amendment

Brian McCarty, Political Science and Economics

Advisor: Kimberly Bergendahl, Assistant Professor in Residence, Political Science

98S. Great Expectations After Obergefell: Assessing the Difficulties That Same-Sex Couples Face in Accessing Methods of Family Formation After Marriage Equality

Rebecca Mancini, Political Science and Women's, Gender, and Sexuality Studies

Advisor: Barbara Gurr, Assistant Professor in Residence, Women's, Gender, and Sexuality Studies

99F. Discourse in the District: Framing the Issue of D.C. Voting Rights and Statehood

Christopher Kelly, Political Science and Economics

Advisor: Ronald Schurin, Associate Professor in Residence, Political Science

Advisor: Jennifer Sterling-Folker, Alan R. Bennett Honors Professor and POLS Honors Director, Political Science

99S. Sorting Out Our Differences: The Psychology Behind Partisan Polarization

John Ciurylo, Political Science

Advisor: Ronald Schurin, Associate Professor in Residence, Political Science

100F. Incentivizing Violence: Party Competition and Hindu-Muslim Ethnic Violence in India

Rachel Laffitte, Political Science and Business Management

Advisor: Betty Hanson, Professor Emeritus, Political Science

100S. Corporate Social Responsibility and the Syrian Refugee Crisis

Andrew Lerch, Political Science and Human Rights

Advisor: Caroline Kaeb, Assistant Professor, Marketing

101F. Roma Reproductive Rights and the Case for Implementation: A Comparative Analysis of Rights Realization

Lauren Davis, Political Science and Human Rights

Advisor: Jennifer Sterling-Folker, Alan R. Bennett Honors Professor and POLS Honors Director, Political Science

101S. How the Public Views Black Presidential Candidates

Sydney Carr, Political Science

Advisor: Evelyn Simien, Associate Professor, Political Science

102S. The Elusive European Dream: The Barriers to EU Unity and Effective Burden Sharing Analyzed Through the Lens of the Syrian Refugee Crisis

Iva Petkova, Political Science and Human Rights

Advisor: Kathryn Libal, Associate Professor, Social Work and Human Rights, and Director, Human Rights Institute

Advisor: Jennifer Sterling-Folker, Alan R. Bennett Honors Professor and POLS Honors Director, Political Science

HALLWAY

103F. Parental and Physician Perceptions of Medical Marijuana in an Urban Children's Medical Center

Michael Powell, Biological Sciences

Pavan Anant, Molecular and Cell Biology

Advisor: Arlene Albert, Professor, Molecular and Cell Biology

103S. A State Denied: Kurdistan and the Challenges of Coordination for Ethnic Nationalism

David Luchs, Political Science and History

Advisor: Jeremy Pressman, Associate Professor, Political Science

Advisor: Jennifer Sterling-Folker, Alan R. Bennett Honors Professor and POLS Honors Director, Political Science

104F. Prader-Willi Syndrome: A Genetic Disorder

Robyn Raadmae, Molecular and Cell Biology

Advisor: Judith Brown, Associate Professor in Residence, Allied Health Sciences

104S. Developing a Culturally Tailored Reminiscence Facilitator Checklist Using Community-Based Participatory Research Methods

Rubby Koomson, Nursing

Advisor: Juliette Shellman, Associate Professor, Nursing

105. Assessing Public Perceptions of Recent Epidemics In Children

William Chan, Molecular and Cell Biology

Jia "Henry" Guo, Biological Sciences

Advisor: Arlene Albert, Professor, Molecular and Cell Biology

Advisor: Sharon Smith, M.D., Emergency Department, CT Children's

106. Associations between Asthma and Central Obesity in Children: A Case-Control Study in a Pediatric Emergency Department (PED)

Nicole Gherlone, Biological Sciences

Advisor: Arlene Albert, Professor, Molecular and Cell Biology

Advisor: Valerie Duffy, Professor, Allied Health Sciences

107. The Effects of Perceptual Fine-Tuning on Facial Recognition in Infancy

Leighanne Ormston, Biological Sciences and Psychological Sciences

Advisor: Heather Bortfeld, Assistant Professor, Psychological Sciences

108. Testing Auditory Brainstem Responses in Low and High-Functioning Children with ASD in a Home Setting

Zania Johnson, Biological Sciences

Advisor: Letitia Naigles, Professor, Psychological Sciences

Advisor: Erika Skoe, Assistant Professor, Speech, Language, and Hearing Sciences

109. The Efficacy of Metal Compounds on Wounds Infected with Methicillin-Resistant *Staphylococcus aureus* Using an In Vitro Wound Model

Patrick Lau, Molecular and Cell Biology

Advisor: Kumar Venkitanarayanan, Professor, Animal Science

110. Characterization of Induced RNAi Silencing of Vaccinia Virus Essential Genes

Kewa Jiang, Molecular and Cell Biology

Advisor: Paulo Verardi, Associate Professor, Pathobiology and Veterinary Science

Advisor: Joerg Graf, Professor, Molecular and Cell Biology

Advisor: Antonio Garmendia, Professor, Pathobiology and Veterinary Science

SOUTH READING ROOM

111. How is Actin Actin' in Parkinson's Disease?

Isabel Nip, Molecular and Cell Biology

Advisor: Kenneth Campellone, Assistant Professor, Molecular and Cell Biology

112. JMY and Programmed Cell Death: An Actin Nucleator with a License to Kill

Nathan Leclair, Molecular and Cell Biology and Physiology and Neurobiology

Advisor: Kenneth Campellone, Assistant Professor, Molecular and Cell Biology

113F. The Influence of Bacterial Metallothionein on Human Immune Cell Proliferation

Brian Greco, Biological Sciences

Advisor: Michael Lynes, Professor and Department Head, Molecular and Cell Biology

113S. It's Alright to be a WHIMP: Analysis of a New Actin Assembly Factor

Margaret Zimmer, Biological Sciences and Molecular and Cell Biology

Advisor: Kenneth Campellone, Assistant Professor, Molecular and Cell Biology

114. Effects of Ketone Supplementation on *C. elegans* Osmotic Stress Response

Emma Manuel, Biological Sciences

Advisor: Elaine Lee, Assistant Professor, Kinesiology

115. Upregulation of Antibiotic Activity of a *Streptomyces* sp. Via Co-Cultures with Challenge Pathogens

Anne Sung, Molecular and Cell Biology and Spanish

Advisor: Marcy Balunas, Assistant Professor, Pharmaceutical Sciences

116. In-Silico AFM Nanoindentation of Norwalk Virus Capsids

Prakhar Bansal, Molecular and Cell Biology

Advisor: Eric May, Assistant Professor, Molecular and Cell Biology

117. Characterization of Exopolysaccharide Genes and Pathways in *Haloferax volcanii* Biofilms

Sonya Haupt, Molecular and Cell Biology

Advisor: Robertson Papke, Associate Professor, Molecular and Cell Biology

118. Expression and Purification of the Innate Immune Receptors, LGP2 and MDA5, in *E. coli*

Srinath-Reddi Pingle, Biological Sciences

Advisor: James Cole, Professor, Molecular and Cell Biology

119F. Mapping of Cluster 3 onto Modern Human Migration Routes and Defining Pre-Historic Western and Southwestern American Communities

Allison Hillmon, Physiology and Neurobiology

Advisor: Lawrence Hightower, Professor Emeritus, Molecular and Cell Biology

Advisor: Helen Neumann, Managing Editor, Cell Stress & Chaperones

119S. Structural Analysis of Adenovirus VAI RNA

Emily Stassen, Molecular and Cell Biology and Individualized Major: American Sign Language and Deaf Culture

Advisor: James Cole, Professor, Molecular and Cell Biology

120F. Characterization of Fluoroquinolone Resistance Plasmid p1471 Isolated from Leech Symbiont, *Aeromonas hydrophila*

Emily LaMarre, Molecular and Cell Biology

Advisor: Joerg Graf, Associate Professor, Molecular and Cell Biology

120S. Self-Generated Gradient Chemotaxis

Brian Heckler, Molecular and Cell Biology

Hayly Marshall, Molecular and Cell Biology

Advisor: David Knecht, Professor, Molecular and Cell Biology

121F. Effort-Related Motivational Effects of the Pro-Inflammatory Cytokine, Interleukin-6: Studies with Concurrent FR5/Chow-Feeding Choice Task Paradigm

Allison Haley, Physiology and Neurobiology and Anthropology

Advisor: John Salamone, Distinguished Professor, Psychological Sciences

122F. The Effects of VMAT-2 Inhibitor Tetrabenazine on Locomotor Activity in the Open Field

Phoebe Hughes, Physiology and Neurobiology

Advisor: John Salamone, Distinguished Professor, Psychological Sciences

122S. Sources and Experiences of Math Anxiety in Post-Secondary Students

Michelle Heyder, Secondary Math Education and Mathematics

Advisor: Catherine Little, Associate Professor, Educational Psychology

123F. Neurochemical Effects of Norepinephrine Inhibitors on Mesolimbic Dopamine: Implications for Motivational Dysfunctions

Nadia Zafar, Physiology and Neurobiology

Advisor: John Salamone, Distinguished Professor, Psychological Sciences

123S. Guardian ad Litem Programs in the U.S: A Comparative Review of Scope and History Across the States

Christine Hushion, Human Development and Family Studies and History

Advisor: Preston Britner, Professor, Human Development and Family Studies

124. Characterizing the Effort Related Effects of Interleukin-6 in Rodent Models: Implications for Motivational Dysfunction

Yumna Arif, Biological Sciences

Advisor: John Salamone, Distinguished Professor, Psychological Sciences

125. Deletion of Dopamine in Nucleus Accumbens via Tetrabenazine Impacts Rats in a High Workload Ratio Schedule but Not in a Low Workload Ratio Schedule

Matthew Somerville, Biological Sciences

Advisor: John Salamone, Distinguished Professor, Psychological Sciences

126. Drug Treatment for Depression: Deprenyl's Effect on Motivation, Effort and Behavior

Shanicka Reynolds, Psychology

Advisor: John Salamone, Distinguished Professor, Psychological Sciences

127. Neurochemical Effects of Deprenyl on Extracellular Dopamine in the Nucleus Accumbens: Implications for Motivational Dysfunction

Laura Cleary, Biological Sciences

Giuseppe Tripodi, Physiology and Neurobiology

Advisor: John Salamone, Distinguished Professor, Psychological Sciences

128. Novel Antimicrobial Compound Discovery in the Trachymyrmex Septentrionalis Symbiosis

Rofina Johnkennedy, Molecular and Cell Biology and English

Advisor: Jonathan Klassen, Assistant Professor, Molecular and Cell Biology

129. A Combined Experimental And Bioinformatic Approach For Predicting Function Of Non-Coding, Disease-Associated Genetic Loci (or SNPs)

Brandon Luxkaranayagam, Physiology and Neurobiology and Molecular and Cell Biology

Advisor: Leighton Core, Assistant Professor, Molecular and Cell Biology

130. Tracing the Genomic Evolution of Cancer: An Investigation of Disease Susceptibility and Progression in a Non-Traditional Mammalian Model

Brendan Smalec, Molecular and Cell Biology and Art History

Advisor: Rachel O'Neill, Professor, Molecular and Cell Biology

131. An Examination of the Cognitive Phenotype of the TS2-neo Mice Model of Autism

Aiden Ford, Physiology and Neurobiology

Advisor: R. Holly Fitch, Professor, Psychological Sciences

132F. Neuroanatomical Investigation of a Cntnap2 Mouse Model

Allison Cammisa, Physiology and Neurobiology and Psychology

Advisor: R. Holly Fitch, Professor, Psychological Sciences

132S. Effect of Interleukin-6 Receptor Inhibition with Tocilizumab on Ischemic Stroke Outcome

Jacob Hudobenko, Biological Sciences

Advisor: Louise McCullough, Professor and Chair, Department of Neurology, University of Texas Health Sciences Center at Houston

Advisor: Richard Mains, Professor, Neuroscience, UConn Health

133. Construction of an Array of Movable Electrodes to Record Brain Activity in Behaving Rats

Stephanie Vu, Physiology and Neurobiology

Megan Pattoli, Pathobiology

Advisor: Etan Markus, Professor, Psychological Sciences

134F. Temporal Sequence Training in a Radial Arm Water Maze: A JoVE Methods Video

Ashlesha Dhuri, Cognitive Science

Advisor: Etan Markus, Professor, Psychological Sciences

134S. Attention Allocation in PTSD Symptoms: Symptom Profile and Attention

Susan Kusmierski, Psychology

Advisor: Kimberli Treadwell, Associate Professor, Psychological Sciences

135F. Changes in Activity and Hippocampal Theta Oscillations after Learning in Rats

Victoria Wickenheisser, Physiology and Neurobiology

Advisor: Etan Markus, Professor, Psychological Sciences

135S. Effects of Mutants in the I-Domain on Bacteriophage P22 Coat Protein Stability and Mature Capsid Structure

Fejiro Okifo, Molecular and Cell Biology

Advisor: Carolyn Teschke, Professor, Molecular and Cell Biology

136F. Comparison of Spatial Learning in a Water Maze in the Presence and Absence of Visual Information

Sarthak Patel, Physiology and Neurobiology

Kaylene King, Speech, Language, and Hearing Sciences

Ashlesha Dhuri, Cognitive Science

Advisor: Etan Markus, Professor, Psychological Sciences

136S. What do Arctic-Invading Killer Whales Eat? Insight from Blubber Fatty Acid Profile Comparisons of Managed-Care and Wild Orcas

Jessica August, Natural Resources

Jennifer Bourque, Environmental Science

Advisor: Melissa McKinney, Assistant Professor, Natural Resources and the Environment and Center for Environmental Sciences & Engineering (CESE)

137F. Localization of Drug Infusion Sites in Rats Performing a Temporal Sequence Task

Dana Lew, Physiology and Neurobiology

Nikita Roy, Biological Sciences and Individualized Major: Population Health

Advisor: Etan Markus, Professor, Psychological Sciences

137S. Bioaccumulation of PCBs and Organochlorine Pesticides in Killer Whales Invading Greenland

Conor Boba, Chemistry

Advisor: Advisor: Melissa McKinney, Assistant Professor, Natural Resources and the Environment and Center for Environmental Sciences & Engineering (CESE)

138F. Who's the Boss?: Dominance Roles in Male Rat Pairs during Exploration of a Novel Open Field

Logan Horbal, Physiology and Neurobiology

Saheeb Ahmed, Physiology and Neurobiology

Advisor: Etan Markus, Professor, Psychological Sciences

138S. Lateralization of Prosody in Specific Language Impairment

Agata Harabas, Biological Sciences and Psychology

Advisor: James Magnuson, Professor, Psychological Sciences

139F. Groundhog Day Memory Task and the Hippocampus: Keeping Track of Revisiting the Same Room Over and Over

John Pflomm, Physiology and Neurobiology

Mahathi Kumar, Physiology and Neurobiology

Aditi Agrawal, Physiology and Neurobiology

Karen Mathew, Physiology and Neurobiology

Advisor: Etan Markus, Professor, Psychological Sciences

139S. The Importance of Peer Socialization on Children's Development

Karianna Montalvo, Linguistics/Psychology

Advisor: Marie Coppola, Assistant Professor, Psychological Sciences and

Linguistics

140F. Investigating the Response of Individual Neurons as Rats Explore New Routes

David Katz, Physiology and Neurobiology and Psychology

Danni Dong, Physiology and Neurobiology

Advisor: Etan Markus, Professor, Psychological Sciences

141. Defining Orexin Neuron Diversity in the Lateral Hypothalamic Area

Brock Chimileski, Physiology and Neurobiology and Molecular and Cell Biology

Advisor: Alexander Jackson, Assistant Professor, Physiology and Neurobiology

142F. Unique Control of Vascular Tone in a Brainstem Respiratory Center

Ashley Trinh, Physiology and Neurobiology

Advisor: Daniel Mulkey, Associate Professor, Physiology and Neurobiology

142S. Transplacental Transport of Ovalbumin via FcRN Receptor

Farah Gazi, Physiology and Neurobiology

Advisor: Adam Matson, Assistant Professor of Pediatrics and Immunology, University of Connecticut School of Medicine

143. Regulation of Vascular Tissue in Animal Brainstem

Samana Zaidi, Biological Sciences

Advisor: Daniel Mulkey, Associate Professor, Physiology and Neurobiology

144. Longitudinal Evaluation of Ventricle Wall Gliosis and Periventricular Abnormalities in Age-Related Ventriculomegaly

Emily Norton, Physiology and Neurobiology

Samuel Schick, Statistics

Advisor: Joanne Conover, Associate Professor, Physiology and Neurobiology

145. Investigating the Mechanic Forces Required for Follicle Rupture in Drosophila

Risa Kiernan, Physiology and Neurobiology

Advisor: Jianjun Sun, Assistant Professor, Physiology and Neurobiology

146F. Phenotypic Respiratory Response of CTX-Mutated Mice Treated with KCNQ2-Specific Pharmacology

Melissa Kenney, Physiology and Neurobiology

Advisor: Anastasios Tzingounis, Associate Professor, Physiology and Neurobiology

146S. Examining Late Positive Potential: The Incorporation of Conscious Thinking to the Coping Mechanism by Both Black and White Participants in Response to Police Violence

Simon Archambault, Physiology and Neurobiology and Psychology

Advisor: Colin Leach, Professor, Psychology

147. The Role of HMGB2 in Liver Fibrosis

Tyler Cappello, Molecular and Cell Biology

Advisor: Li Wang, Professor, Physiology and Neurobiology

148. Effect of Transgenic Overexpression of Collybistin on GABAergic Synapses of the Cerebral Cortex

David Ahearn, Physiology and Neurobiology

Advisor: Angel de Blas, Professor, Physiology and Neurobiology

149F. Properties of KCNQ2 Encephalopathy Pathogenic Variants

Karen Vazquez, Physiology and Neurobiology

Advisor: Anastasios Tzingounis, Associate Professor, Physiology and Neurobiology

149S. With a Better Future in Mind: Investigating the Role of GABAergic Inhibitory Synapses in Temporal Lobe Epilepsy

John Bear Jr., Physiology and Neurobiology and Molecular and Cell Biology

Advisor: Angel de Blas, Professor, Physiology and Neurobiology

150F. A New Animal Model of Focal Cortical Dysplasia Reveals that Mutation of PIK3CA Disrupts Neurogenesis and Neuronal Differentiation

Christine Doherty, Physiology and Neurobiology

Advisor: Joseph LoTurco, Professor, Physiology and Neurobiology

151F. Evaluating Dietary Quality and Taste Preferences with a Simple Liking Survey: Application to Studying Individuals with Morbid Obesity

Marina Zoghbi, Allied Health Sciences

Advisor: Valerie Duffy, Professor, Allied Health Sciences

151S. Induced Pluripotent Stem Cells

Tiffany Tran, Molecular and Cell Biology

Advisor: Judith Brown, Associate Professor in Residence, Allied Health Sciences

152. Dietary Influences on Apolipoprotein C-III Expression

Nelson Del Pilar, Molecular and Cell Biology

Advisor: Alison B. Kohan, Assistant Professor, Nutritional Sciences

153. The Effects of DNA Polymorphisms on APOCIII

Emmanuel Marte, Biological Sciences and Nutritional Sciences

Advisor: Alison B. Kohan, Assistant Professor, Nutritional Sciences

154F. Effectiveness of a Nutrition Intervention for Irish Dance

Kayleigh Fay, Nutritional Sciences

Advisor: Nancy Rodriguez, Professor, Nutritional Sciences

154S. Biomarkers and Adiposity and Their Correlation with Lifestyle Factors and Psychological Well-Being Among College Students

Shelby Brewer, Allied Health Sciences

Sidharth Anand, Allied Health Sciences

Catherine Abraham, Allied Health Sciences

Sabrina Maher, Allied Health Sciences

Advisor: Bruce Blanchard, Assistant Clinical Professor, Allied Health Sciences

Advisor: Valerie Duffy, Professor, Allied Health Sciences

155. Development of Low-Calorie Enhanced Water Formulation Using Casein/Pectin Nanocomplex Delivery System

Shin Soyama, Nutritional Sciences

Advisor: Yangchao Luo, Assistant Professor, Nutritional Sciences

156. Health Benefits of Cranberries in Human Apolipoprotein AI Transgenic Mice on an Atherogenic diet

Christian Caceres, Nutritional Sciences

Advisor: Ji-Young Lee, Associate Professor, Nutritional Sciences

Advisor: Young-Ki Park, Assistant Research Professor, Nutritional Sciences

157. Antimicrobial Eugenol Nanoemulsion Prepared by Gum Arabic and Lecithin and Evaluation of Drying Technologies

Hannah Gerhard, Nutritional Sciences

Advisor: Yangchao Luo, Assistant Professor, Nutritional Sciences

158. Preventing Cardiovascular Disease May Start in the Small Intestine

Alyssa Zembroski, Nutritional Sciences

Advisor: Alison B. Kohan, Assistant Professor, Nutritional Sciences

159. The Influence of Female Athletic Trainers Working with Male Athletes

Abby Fisher, Athletic Training

Advisor: Stephanie Mazerolle, Assistant Professor, Kinesiology

160. Monitoring Vitamin D in Elite Athletes: Muscular Performance and Soreness in Collegiate Soccer Players

Garrett Fontaine, Exercise Science

Advisor: Douglas Casa, Professor, Kinesiology

161F. Developing Microsatellites for *Eurycea bislineata* Sibship Analysis

D. Cristina Macklem, Ecology and Evolutionary Biology and Spanish

Advisor: Tracy Rittenhouse, Assistant Professor, Natural Resources and the Environment

161S. Road Salt Application and Elevated Temperatures Interact to Influence the Performance of Wood Frog (*Lithobates sylvaticus*) and Spring Peeper (*Pseudaris crucifer*) Tadpoles

D. Cristina Macklem, Ecology and Evolutionary Biology and Spanish

Advisor: Tracy Rittenhouse, Assistant Professor, Natural Resources and the Environment

Advisor: Ashley Helton, Assistant Professor, Natural Resources and the Environment

162. The Effects of RNA Interference in the Melanin Pathway of Membracidae

Adam Chiu, Ecology and Evolutionary Biology

Advisor: Elizabeth Jockusch, Professor, Ecology and Evolutionary Biology

163. Centipedes of Southern Appalachia

Joseph DeSisto, Ecology and Evolutionary Biology

Advisor: Jane O'Donnell, Invertebrate Collections Manager, Ecology and Evolutionary Biology

164F. Cell and Tissue Allometry Within Pelargonium Leaves

June Arriens, Ecology and Evolutionary Biology

Advisor: Cynthia Jones, Professor, Ecology and Evolutionary Biology

164S. The Influence of Habitat on Bird Community Diversity in Northeastern Peru

Robert Turnbull, Ecology and Evolutionary Biology

Advisor: Chris Elphick, Associate Professor, Ecology and Evolutionary Biology

165. Through Genera and Generations: A New Batoid-Hosted Tapeworm Genus with Comments on Phylogenetic Relationships and Host Associations

Alison Koontz, Ecology and Evolutionary Biology

Advisor: Janine Caira, Distinguished Professor, Ecology and Evolutionary Biology

166. A 2-D Land-Building Model for Suspended Sediment in Coastal Diversions

Kezhen Wang, Environmental Science

Advisor: Anjali Fernandes, Visiting Assistant Professor, Integrative Geoscience

167. An Organic Molecular Record of Post-Glacial Climate and Fire Occurrence in a Southern New England Wetland Core

Chad Fagan, Geoscience and Environmental Science

Advisor: Michael Hren, Assistant Professor, Geoscience and Chemistry

Advisor: William Ouimet, Assistant Professor, Geoscience and Geography

168. Assessing Coastal Erosion Hazard Vulnerability in Connecticut

Nathan Corcoran, Geoscience

Advisor: William Ouimet, Assistant Professor, Geography

Advisor: Margaret Thomas, State Geologist, State Department of Energy and Environmental Protection

169F. Mutant Screen of *Mimulus verbenaceus*

Connor Hill, Molecular and Cell Biology

Sean Reilly, Molecular and Cell Biology

Advisor: Yaowu Yuan, Assistant Professor, Ecology and Evolutionary Biology

169S. TreeGenes and CartograTree: Community Resources for Forest Tree Genomics

Steven Demurjian Jr., Computer Science

Advisor: Jill Wegrzyn, Assistant Professor, Ecology and Evolutionary Biology

170F. Human Endosomal TLR Response Upon *Mycobacterium tuberculosis* Nucleic Acid Recognition

John Garcia, Allied Health Sciences

Advisor: Juan Salazar, Chair, Department of Pediatrics, and Professor of Pediatrics, University of Connecticut School of Medicine

170S. Comparative Genomic Analysis in Juglans

Sumaira Zaman, Biomedical Engineering

Advisor: Jill Wegrzyn, Assistant Professor, Ecology and Evolutionary Biology

HALLWAY

171. Role of Interleukin-6 on Muscle Regeneration in Tumor Bearing Animals

Dominique Martin, Animal Science

Advisor: Sarah Reed, Assistant Professor, Animal Science

172. Programming Heart Disease: Does Poor Maternal Nutrition Alter Expression of Cardiac Markers of Proliferation, Hypertrophy, and Fibrosis in Offspring?

Cathy Chun, Animal Science and Pathobiology

Advisor: Sarah Reed, Assistant Professor, Animal Science

173. The Effects of Poor Maternal Nutrition on Pancreatic Development and Function in Offspring

Mary Wynn, Animal Science

Advisor: Kristen Govoni, Associate Professor, Animal Science

Advisor: Sarah Reed, Assistant Professor, Animal Science

174. The Effects of Maternal Under- and Over-Feeding During Gestation on Liver and Renal Adipose Protein in Offspring

Carrie LaSala, Animal Science

Advisor: Steven Zinn, Professor and Department Head, Animal Science

Advisor: Kristen Govoni, Associate Professor, Animal Science

175. Poor Maternal Nutrition During Gestation Alters Mesenchymal Stem Cell (MSC) Metabolism in Offspring

Nicole H. Sereda, Animal Science

Advisor: Kristen Govoni, Associate Professor, Animal Science

176. Investigating the Efficacy of Phytochemicals in Increasing the Sensitivity of Methicillin-resistant *Staphylococcus aureus* (MRSA) and Vancomycin-resistant *Staphylococcus aureus* (VRSA) to Antibiotics

Leanne Jankelunas, Animal Science and Pathobiology

Advisor: Kumar Venkitanarayanan, Professor, Animal Science

Alphabetical Listing of Presenters with Poster Numbers

Abolafia, Victoria – 75F
Abraham, Catherine – 154S
Agrawal, Aditi – 139F
Ahearn, David – 148
Ahmed, Saheeb – 138F
Allam, Omar – 30F
Anand, Sidharth – 154S
Anant, Pavan – 103F
Archambault, Simon – 146S
Arif, Yumna – 124
Arriens, June – 164F
August, Jessica – 136S
Axon, Tyler – 32F
Bansal, Prakhar – 116
Barletta, Anthony – 37F
Bear Jr., John – 149S
Beechinor, Vashe – 79S
Bell, Andrew – 53
Bendar, Hailey – 3
Bisson, Kevin – 38
Boba, Conor – 137S
Bottelsen, Alexandria – 29S
Boudreau, Kate – 84
Bourque, Jennifer – 136S
Bozal, Suleyman – 32S
Brewer, Shelby – 154S
Brown, Megan – 41
Brown, William – 24
Burrick, Hannah – 75S
Caceres, Christian – 156
Cammisa, Allison – 132F
Cantara, Michael – 31S
Capozzi, Lena – 43F
Cappello, Tyler – 147
Carew, Sarah – 30S
Caron, Christian – 96F
Carr, Sydney – 101S
Casale, Kara – 74F
Castrellon, Maria – 19
Chan, Kelly – 61
Chan, William – 105
Chapman, Lauren – 78F
Chen, Henry – 14
Chimileski, Brock – 141
Chiu, Adam – 162
Chun, Cathy – 172
Ciurylo, John – 99S
Cleary, Laura – 127
Cole, Emily – 8
Coleman, Kathleen – 35
Coles, Kalea – 76F
Corcoran, Nathan – 168
Corey, Christina – 6F
Corsi, John – 59
Cotton, Thomas – 46F
Cruz, Selena – 96S
Davis, Kerry – 59
Davis, Lauren – 101F
Del Pilar, Nelson – 152
Demurjian Jr., Steven – 169S
DeRosa, Gabriel – 22
DeSisto, Joseph – 163
DeVoe, Jenna – 88S
Dhuri, Ashlesha – 134F, 136F
Dinisi, Katherine – 71
Doherty, Christine – 150F
Dong, Danni – 140F
Dowling, Caitlin – 66S
Drake, Victoria – 57
Dumaine, Ashley – 37F
Duncan, Gianna – 74F
Dunn, Eric – 43F
Eldirany, Sherif – 52
Fagan, Chad – 167
Fay, Kayleigh – 154F
Federico, Anthony – 48S
Feinberg, Samantha – 53
Figueiredo, Michael – 72S

Fisher, Abby – 159
 Fontaine, Garrett – 160
 Ford, Aiden – 131
 Forte, Shaina – 69
 Fregeau, Harrison – 85
 Friedland, Stephen – 45
 Fusco, Alaina – 78S
 Gagliano, Matthew – 1
 Garcia, John – 170F
 Gargano, Melissa – 80F
 Garneau, Abigail – 72F
 Gazi, Farah – 142S
 Gerhard, Hannah – 157
 Gherlone, Nicole – 106
 Goncalves, Lia – 9
 Greco, Brian – 113F
 Griggs, Elina Cate – 90
 Guay, Christopher – 93
 Guo, Jia “Henry” – 105
 Haley, Allison – 121F
 Hall, Justin – 1
 Harabasz, Agata – 138S
 Hardin, Margaret “Meg” – 74S
 Hasson, Riley – 95F
 Haupt, Sonya – 117
 Heckler, Brian – 120S
 Henry, Matthew – 63S
 Heyder, Michelle – 122S
 Hill, Connor – 169F
 Hillmon, Allison – 119F
 Hoque, Asahi – 10
 Horbal, Logan – 138F
 Hudobenko, Jacob – 132S
 Hughes, Phoebe – 122F
 Hushion, Christine – 123S
 Iwanicki, Kelsey – 86F
 Jankelunas, Leanne – 176
 Jiang, Kewa – 110
 Jiang, Stephen – 64S
 Johnkennedy, Rofina – 128
 Johnson, Zania – 108
 Jones, Jasmine – 4
 Kader, Leena – 70S
 Kamal, Shaan – 15
 Katz, David – 140F
 Kelly, Christopher – 99F
 Kenney, Melissa – 146F
 Kiernan, Risa – 145
 Kim, Hyunsung – 25
 Kim, Hyun-Young – 25
 Kim, Joel – 25
 King, Kaylene – 136F
 King, Ryan – 7F
 Kissane, Liam – 52
 Klink, Melanie – 82F
 Kloss, Mallory – 81
 Kolakowski, Steven – 65S
 Koomson, Rubby – 104S
 Koontz, Alison – 165
 Kumar, Mahathi – 139F
 Kusmierski, Susan – 134S
 Laffitte, Rachel – 100F
 LaMarre, Emily – 120F
 Lapierre, Roxanne – 68
 Laprise, Jessica – 13
 LaRosa, Luke – 29S
 LaSala, Carrie – 174
 Lau, Patrick – 109
 Leclair, Nathan – 112
 Lee, Angelica – 70S
 Lerch, Andrew – 100S
 Lew, Dana – 137F
 Lewis, Jake – 56
 Liu, Jessica – 86S
 Luchs, David – 103S
 Luft, Sarah – 89F
 Luxkaranayagam, Brandon – 129
 Macklem, D. Cristina – 161
 MacNaught, Emily – 28F
 Maher, Sabrina – 154S
 Majumdar, Rajeshwari – 88F
 Mancini, Rebecca – 98S
 Mandell, Laura – 67
 Mantese, John – 26

Manuel, Emma – 114
 Marquis, Brandon – 30S
 Marshall, Hayly – 120S
 Marte, Emmanuel – 153
 Martin, Dominique – 171
 Mathew, Karen – 139F
 Mazzucco, Ginamarie – 76S
 McCarty, Brian – 98F
 McInerney, Edward – 97
 McKenna, Morgan – 43F
 McQuade, Courtney – 44
 Messina, Michael – 47F
 Miller, Keesha – 77
 Monick, Julien – 6S
 Montalvo, Karianna – 139S
 Moore, Abigail – 12
 Muguerza, Renato – 94
 Naples, Jessica – 82F
 Nicholson, Madeline – 5
 Nip, Isabel – 111
 Norton, Emily – 144
 Novikov, Edward – 37S
 O'Callaghan, Michael – 6S
 O'Donnell, Fiona – 47S
 Ojha, Anurag – 63F
 Okifo, Fejro – 135S
 Oknin, Jessica – 79F
 Orvis, Patrick – 42
 Ormston, Leighanne – 107
 Ovia, John – 54
 Paiella, Giorgina – 29F
 Palmer, Clarke – 65F
 Park, Joshua – 25
 Patel, Sarthak – 136F
 Pattoli, Megan – 133
 Pesce, Donato – 28S
 Petkova, Iva – 102S
 Pflomm, John – 139F
 Pierce, Scott – 49
 Pingle, Srinath-Reddi – 118
 Plotke, Aaron – 83
 Polen, Case – 1
 Powell, Michael – 103F
 Quigley, Jared – 95S
 Raadmae, Robyn – 104F
 Radin, Miles – 20
 Ratliff, Christian – 31F
 Reilly, Sean – 169F
 Reynolds, Shanicka – 126
 Roy, Nikita – 137F
 Rudolph, Alexandra – 17
 Sakya, Sagune – 60
 Schick, Samuel – 144
 Schirmer, Christian – 48F
 Seng, Kagnica – 42
 Sereda, Nicole – 175
 Sifre, Emma – 92
 Singhviranon, Summit – 18
 Slater, Todd – 37F
 Smalec, Brendan – 130
 Smiley, Rachel – 21
 Smith, Kevin – 40
 Solari, Catherine – 87
 Somerville, Matthew – 125
 Son, Young – 2
 Soyama, Shin – 155
 Stassen, Emily – 119S
 Stempel, Zachary – 50
 Sternberg, Francis – 51
 Sturdevant, Rex – 7S
 Sturrock, Nikita – 16
 Such, Kyle – 58
 Sun, Yijia – 64F
 Sung, Anne – 115
 Sze, lu-Wei – 37F
 Tavarez, Isamar – 89S
 Tempo, Ornella – 55
 Thatcher, Zachary – 36
 Theriault, Kayla – 80S
 Thompson, Evrett – 62
 Topper, Jessica – 91
 Tran, Tiffany – 151S
 Trinh, Ashley – 142F
 Tripodi, Giuseppe – 127

Trotman, Rachel – 46S
Turnbull, Robert – 164S
Turovac, Casey – 73
Underwood, Carl – 22
Vazquez, Karen – 149F
Veres, Myroslava – 82S
Vickers, Cameron – 33
Vu, Stephanie – 133
Wang, Kezhen – 166
Warack, Sarah – 27
Welles, Rebecca – 42, 43S
Werth, Julia – 84
Wickenheisser, Victoria – 135F
Wojtyna, Nathan – 23
Wright, Nico – 34
Wynn, Mary – 173
Yung, Jenny – 70S
Zaccagnini, Jessica – 30S
Zabin, Alyssa – 11
Zafar, Nadia – 123F
Zaidi, Samana – 143
Zaman, Sumaira – 170S
Zembroski, Alyssa – 158
Zheng, Qiwei – 39
Zimmer, Margaret – 113S
Zoghbi, Marina – 151F

Special Thanks

The Office of Undergraduate Research wishes to thank the deans of the represented schools and colleges, the Provost's office, the Office of the Vice President for Research, and the generous donors to the Honors Program for their support of undergraduate research through contributions to the Summer Undergraduate Research Fund and OUR grant programs. In addition, we thank the following individuals for their support:

Susan Herbst, *President, University of Connecticut*

Mun Choi, *Provost and Executive Vice President for Academic Affairs*

Sally Reis, *Vice Provost for Academic Affairs*

Jennifer Lease Butts, *Assistant Vice Provost for Enrichment Programs and Director of the Honors Program*

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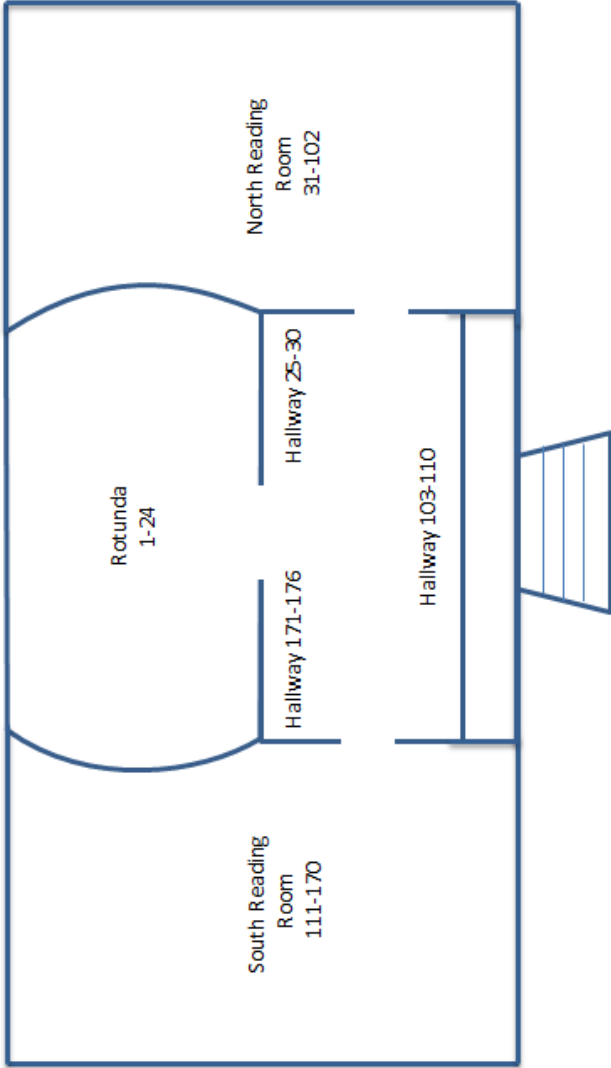
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