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

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
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 Provatas, 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 Csizmadia, 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

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

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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

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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: 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 Harabasz, 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 Venticulomegaly
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

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

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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
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Special Thanks

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