



# **22nd Annual FRONTIERS**

## **IN UNDERGRADUATE RESEARCH POSTER EXHIBITION**

**April 12, 2019**

2:00-3:30 p.m. • 4:00-5:30 p.m.

**April 13, 2019**

10:00-11:30 a.m. • 12:00-1:30 p.m.

# Schedule of Events

## Poster Exhibition

### Friday, April 12, 2019

Session 1: 2:00 p.m. – 3:30 p.m.

Session 2: 4:00 p.m. – 5:30 p.m.

### Saturday, April 13, 2019

Session 3: 10:00 a.m. – 11:30 a.m.

Session 4: 12:00 p.m. – 1:30 p.m.

## Student and Faculty Reception

Friday, April 12, 2019

5:30 p.m. – 6:30 p.m.

## Introduction and Welcome

**Caroline McGuire**, Director, Office of Undergraduate Research

## Presentation of the Mentorship Excellence Awards

### *Faculty Awards*

**Seok-Woo Lee**, Assistant Professor, Materials Science and Engineering

Presented by **Hetal Patel '19** (ENG)

**Charles W. Mahoney**, Professor, English

Presented by **Lauren Cenci '19** (CLAS)

### *Graduate Student Award*

**Elizabeth Knapp**, Ph.D. Candidate, Physiology and Neurobiology

Presented by **Celina Caetano '19** (CLAS) and **Ekatarina Skaritanov '20** (CLAS)

## Closing Remarks

**Jennifer Lease Butts**, Assistant Vice Provost, Enrichment Programs and Director, 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 2019 is the twenty-second annual Frontiers event sponsored by the Office of Undergraduate Research (OUR). This year's exhibition includes 303 students presenting posters for 269 research and creative projects.

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

## **About the Office of Undergraduate Research**

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

Many of the Frontiers presenters have received financial support for their projects from the OUR, which awarded over \$500,000 in 2017-18 in support of students' research and creative endeavors. These awards are funded by the Office of Undergraduate Research with generous support from the Office of the Provost, the Office of the Vice President for Research, the Deans of the schools and colleges, and private donations from alumni, parents, and other friends of UConn and undergraduate research.

# **Sequential Listing of Poster Presentations**

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

- Friday Session 1 presentations are listed on pages 3-12.
- Friday Session 2 presentations are listed on pages 13-21.
- Saturday Session 3 presentations are listed on pages 22-30.
- Saturday Session 4 presentations are listed on pages 31-39.
- An alphabetical listing of presenters begins on page 41.

## **SESSION 1 PRESENTATIONS**

### **1. CreateAT - Making Assistive Technology**

Nancy Kuhn, Allied Health Sciences

Karl Douglass Mueller, Materials Science and Engineering & German Studies

Advisor: Alyssa Marinaccio, Assistive Technology Coordinator, Center for Students with Disabilities

### **2. Prismatic: Reflections on Transgender and Non-Binary Identity**

Blue Wallick, Art – Printmaking

Advisor: Laurie Sloan, Associate Professor, Art and Art History

### **3. Exploring the Relationship between District Income Segregation and Achievement in Connecticut**

Michael Reid Jr., English

Advisor: Betsy McCoach, Professor, Educational Psychology

### **4. The Asian American Educational Experience**

Clarissa Tan, English & Secondary English Education

Advisor: Catherine Little, Professor, Educational Psychology

Advisor: Cathy Schlund-Vials, Associate Dean, College of Liberal Arts and Sciences, and Professor, English & Asian/Asian American Studies

### **5. Wordsworth's Elegiac Mode**

Lauren Cenci, English

Advisor: Charles Mahoney, Professor, English

Advisor: A. Harris Fairbanks, Associate Professor, English

Advisor: Yohei Igarashi, Assistant Professor, English

**6. The Black Hole of Modernism: Transgressive Realism by African-American Writers in Modernist Literature**

Brianna McNish, English

Advisor: Sean Forbes, Professor, English

**7. The Social Influence on HIV Testing Among Black Students at a PWI**

Caira Ward, Human Development and Family Studies

Advisor: Edna Brown, Associate Professor, Human Development and Family Studies

**8. Comparing the Efficacy of Sexual Health Intervention Techniques among Sexually Active and Abstinent Hispanic and Latino Youth in the United States: Results from a Meta-Analysis**

Geycel Muniz, Allied Health Sciences

Ashley Holmes, Psychological Sciences

Melanie Moreno, Allied Health Sciences

Advisor: Tania Huedo-Medina, Associate Professor, Allied Health Sciences

**9. Understanding the Experience of Parents Utilizing Car Bed Travel**

Christina O'Connor, Nursing

Advisor: Jacqueline McGrath, Professor Emeritus, Nursing

Advisor: Michele DeGrazia, Director of Nursing Research, Neonatal Intensive Care Unit, Boston Children's Hospital

**10. Family Attitudes on Aromatherapy Use in a Pediatric Setting**

Maria Zinter, Nursing

Advisor: Deborah McDonald, Associate Dean and Associate Professor, Nursing

**11. Neonatal Nurses' Self-Reported Practices, Knowledge and Attitudes toward use of Maternal Voice for Preterm Infants**

Selena Williamson, Nursing

Advisor: Jacqueline McGrath, Professor Emeritus, Nursing

Advisor: Deborah McDonald, Associate Dean and Associate Professor, Nursing

**12. Caring for the Family of the Neonate: A Descriptive Analysis of Nurse Beliefs**

Anna Baxter, Nursing

Advisor: Deborah McDonald, Associate Dean and Associate Professor, Nursing

**13. Is the Green Revolution Making Farmers Sick?: Agricultural Transformation and Chronic Kidney Disease of Unknown Etiology (CKDu) in Sri Lanka**

Fajar Alam, Molecular and Cell Biology

Advisor: Stephen Schensul, Professor, Community Medicine and Healthcare

**14. Urinary Analysis on the Effects of Dietary Intake on Sulfur-Containing Metabolites in Newborns at Risk for Autism Spectrum Disorder (ASD)**

Ama Appiah, Molecular and Cell Biology & Communication

Meeshali Patel, Allied Health Sciences

Sejal Patel, Molecular and Cell Biology

Sai Vietla, Physiology and Neurobiology

Advisor: Ruth Lucas, Assistant Professor, Nursing

Advisor: Geoffrey Tanner, Assistant Professor in Residence, Physiology and Neurobiology

**15. Maternal Healthcare Accessibility and Quality for Refugee Women in Greece: A Human Rights Perspective**

Usra Qureshi, Human Rights & Molecular and Cell Biology

Advisor: Kathryn Libal, Associate Professor, Social Work & Human Rights

**16. Advocacy and Action: Improving Food Security for UConn Students**

Wanjiku Gatheru, Environmental Studies

Abhishek Gupta, Molecular and Cell Biology & Sociology

Advisor: Phoebe Godfrey, Assistant Professor in Residence, Sociology

**17. West Indian Diasporic Consciousness: The Case of Hartford, CT**

Leann McLaren, Political Science and History

Advisor: Evelyn Simien, Professor, Political Science

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

Advisor: Fiona Vernal, Associate Professor, History

**18. Six Years to Life: The Impact of Term Length on Judicial Independence**

Frederick Augur, Political Science

Advisor: Virginia Hettinger, Associate Professor, Political Science

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

**19. A Study of the Relationship Between Race, Gender and Victim Blaming on College Campuses**

Odia Kane, Cognitive Science and Political Science

Advisor: Shayla Nunnally, Associate Professor, Political Science

**20. The Feminine Touch: How Female Representation Affects the Legislative Success of Women's Issues Legislation**

Jessica Weaver, Political Science

Advisor: Virginia Hettinger, Associate Professor, Political Science

**21. Presidential Power Couples: Does a Strong First Lady Correlate with a Strong President?**

Misha Jethwa, Political Science & Economics

Advisor: Jeffrey Ladewig, Associate Professor, Political Science

**22. Determining Defense: Bureaucracy, Threat and Missile Defense**

Emilyn Tuomala, Individualized Major: International Security & Political Science

Advisor: Evan Perkoski, Assistant Professor, Political Science

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

**23. In The Eye of the Storm: An Anthropological Perspective of Risk and Preparedness in Connecticut**

Akhil Choudhary, Anthropology

Advisor: Eleanor Ouimet, Assistant Professor In Residence, Anthropology

**24. Dyadic Worry Induced in a Laboratory Setting Increases Anxiety Between Friends**

Carly Danziger, Psychological Sciences

Seyenah Lopez, Psychological Sciences & Human Development and Family Studies

Izabela Zubrzycka, Biological Sciences & English

Advisor: Kimberli Treadwell, Associate Professor, Psychological Sciences

**25. Can Discussing Worries Promote Anxiety Contagion? An Observational Study of Worry Conversations**

Kimberly Morais, Psychological Sciences & Human Development and Family Studies

Advisor: Kimberli Treadwell, Associate Professor, Psychological Sciences

**26. Dyadic Worry Amongst Friends**

Nathan Rivera, Psychological Sciences

Jeffrey Hunt, Psychological Sciences

Advisor: Kimberli Treadwell, Associate Professor, Psychological Sciences

**27. The Influence of Talker Idiolect on Dynamic Phonetic Adaptation**

Ana Hernandez, Biological Sciences & Psychological Sciences

Advisor: Emily Myers, Associate Professor, Speech, Language, and Hearing Sciences

**28. Be Quiet! Activity and Noise Level Characteristics of Mandated Periods of Quiet in College Students with Varied Noise Exposure Histories**

Claire Murphy, Speech, Language, and Hearing Sciences

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

**29. Finding the Self Through the Narratives We Tell**

Madeline Eldredge, Psychological Sciences & Speech, Language, and Hearing Sciences

Advisor: Letitia Naigles, Professor, Psychological Sciences

**30. Testing the Test: Implicit Theory of Mind Measurements**

Samantha Richards, Speech, Language, and Hearing Sciences

Advisor: Marie Coppola, Associate Professor, Psychological Sciences

Advisor: Deanna Gagne, Assistant Professor, Linguistics, Gallaudet University

**31. Evaluating Cross-Site Reliability of Relationships among Cortical Structure and Age in Children and Adolescents**

Vidyalaxmi Kandarpa, Biomedical Engineering & Molecular and Cell Biology

Arun Narikatte, Molecular and Cell Biology

Emma Wolfman, Psychological Sciences

Advisor: Nicole Landi, Associate Professor, Psychological Sciences

**32. Distinguishing Electrode Placement in Dorsal and Ventral Hippocampus using the Microorganism *Bacillus Subtilis***

Nathalia Hernandez, Molecular and Cell Biology & Spanish

Advisor: Etan Markus, Professor, Psychological Sciences

Advisor: Patricia Rossi, Assistant Professor in Residence, Molecular and Cell Biology

Advisor: Peter Setlow, Distinguished Professor, Molecular Biology and Biophysics



**33. Rat Observational Learning in a Working Memory Task**

Judie Wang, Physiology and Neurobiology & Psychological Sciences

Nathalia Hernandez, Molecular and Cell Biology & Spanish

Thomas Shao, Physiology and Neurobiology

Advisor: Etan Markus, Professor, Psychological Sciences

**34. Developing a Reliable Rating System for Observing Oral Tremor in Rodents**

Emily Robertson, Physiology and Neurobiology

Advisor: John Salamone, Distinguished Professor, Psychological Sciences

**35. Behavioral Score and Neuroanatomical Correlation in a Rat Model of Hypoxic Ischemic Brain Injury Measuring the Effect of Caffeine Treatment**

Sara Rohde, Physiology and Neurobiology & Psychological Sciences

Advisor: R. Holly Fitch, Professor, Psychological Sciences

**36. The Ketogenic Diet on Seizure Reduction in a Drosophila Model**

Anna Vaeth, Physiology and Neurobiology

Adeline Bray, Physiology and Neurobiology

Advisor: Geoffrey Tanner, Assistant Professor in Residence, Physiology and Neurobiology

**37. Resistance Training for Health Related Outcomes in the Elderly Population**

Charles Abrams, Individualized Major: Exercise Physiology and Health

Advisor: Craig Denegar, Professor, Kinesiology

**38. Extracellular HSP Responses to Endurance Running in a High-Risk Race for Exertional Heatstroke**

Zoha Sarwat, Physiology and Neurobiology

Advisor: Elaine Lee, Assistant Professor, Kinesiology

**39. Identification and Characterization of the Roles of MicroRNA Sequences in *Salpa thompsoni***

Melinda Wei, Molecular and Cell Biology

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

**40. Examining the Potential for Nitrogen Fixation by Bacteria Present in the *Trachymyrmex septentrionalis* Fungus Gardens**

Brandon O'Sullivan, Molecular and Cell Biology

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

**41. Endogenous MyoF complementation in  $\Delta$ Ku80- $\Delta$ MyoF *Toxoplasma gondii* Parasites**

Raphael Britt, Molecular and Cell Biology

Advisor: Aoife Heaslip, Assistant Professor, Molecular and Cell Biology

**42. Virtual Modeling and Analysis of EGFR molecules**

Kelvin Peterson, Molecular and Cell Biology

Advisor: Leslie Loew, Professor, Cell Biology & Computer Science and Engineering

**43. Single Cell RNA Sequencing Analysis to Identify Genetic Deviations That Lead to Colorectal Cancer**

Ramsha Khan, Molecular and Cell Biology & Human Development and Family Studies

Advisor: Carolyn Teschke, Professor, Molecular and Cell Biology

**44. Tracking Illegal Logging: Cyberinfrastructure for Data Collection and Management of Georeferenced Trees**

Peter Richter, Computer Science and Engineering

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

**45. Multi-responsive Chromic System**

Mengting Zhu, Chemical Engineering

Advisor: Luyi Sun, Professor, Chemical and Biomolecular Engineering

**46. Advances in 3D Printing Using Image Projection**

Justin Schroeder, Mechanical Engineering & Computer Science and Engineering

Advisor: Xu Chen, Assistant Professor, Mechanical Engineering

**47. 3D Bioprinting for Application to Drug Manufacturing**

Eric Lepowsky, Mechanical Engineering

Advisor: Savas Tasoglu, Assistant Professor, Mechanical Engineering & Biomedical Engineering

Advisor: Luyi Sun, Professor, Chemical and Biomolecular Engineering

Advisor: Sharareh Emadi, Assistant Professor in Residence, Biomedical Engineering

**48. Assembly of Compact Neurostimulator Circuit Board for Neuroprosthetic Applications**

Amanda Johnson, Biomedical Engineering

Advisor: Martin Han, Associate Professor, Biomedical Engineering

**49. Characterization of Biopotential Electrodes**

Michaela Green, Biological Sciences

Advisor: Insoo Kim, Assistant Professor, Medicine

**50. The Morphological and Molecular Responses of Articular Cartilage to Mechanical Load**

Kelsey Richard, Individualized Major: Global Health

Advisor: Caroline Dealy, Associate Professor, Center for Regenerative Medicine and Skeletal Development, Cell Biology, & Orthopedic Surgery

Advisor: David Pierce, Associate Professor, Mechanical Engineering & Biomedical Engineering

**51. Deferoxamine Conjugated Hydrogel Effects on Bone Regeneration in Mice**

Paige Holden, Biomedical Engineering

Advisor: Lakshmi Nair, Associate Professor, Orthopedic Surgery

**52. A Novel Cerebral Spinal Fluid Shunt**

Ariane Garrett, Biomedical Engineering & Spanish

Advisor: Kazunori Hoshino, Associate Professor, Biomedical Engineering

**53. The Utilization of Dental Burrs to Create a Tibial Growth Plate Injury in Col2 x Col10 x Col3.6 Genetic Reporter Mice**

Natasha Patel, Molecular and Cell Biology

Advisor: Liisa Kuhn, Associate Professor, Center for Regenerative Medicine and Skeletal Development & Biomedical Engineering

**54. MYB Transcription Factors influence on Flavonoid Production in Aronia**

Liam Iorio, Molecular and Cell Biology

Advisor: Huanzhong Wang, Associate Professor, Plant Science and Landscape Architecture

**55. Lighting up the Route to the Photocatalytic Oxidative Transformation of Amines to Amides**

Joshua Paolillo, Chemistry

Advisor: Nicholas Leadbeater, Associate Professor, Chemistry

**56. Determination of PFC's in Bloodspots Using Rapid Liquid-Liquid Extraction Followed by Analysis Using UPLC-MS/MS**

Patrick Kaplita, Chemistry

Son Nguyen, Chemistry

Eric Noi, Chemical Engineering

Advisor: Anthony Provatas, Academic Assistant II, Center for Environmental Sciences and Engineering

**57. A Canonical Metacommunity Structure in a Hurricane-Prone Tropical Forest**

Eve Cullerton, Natural Resources and the Environment

Advisor: Michael Willig, Distinguished Professor, Ecology and Evolutionary Biology

**58. Analysis of Insecticides in Lobster and Shellfish using GC-MS/MS followed by Rapid Quechers Extraction and Phospholipid Sample Purification**

Myagmarsuren Otgonbayar, Biological Sciences

Patrick Nguyen, Biological Sciences

Lynn Vo, Biological Sciences

Advisor: Anthony Provatas, Academic Assistant II, Center for Environmental Sciences and Engineering

**59. No Droplet Too Small: Nanoliter Blood Osmolality Measurements**

Rebecca Bullers, Biological Sciences

Advisor: Eric Schultz, Professor, Ecology and Evolutionary Biology

**60. Phenological Changes in Avian Migration Revealed by Local Long-Term Data From Northeast Connecticut**

Sarah Rumsey, Ecology and Evolutionary Biology

Advisor: Morgan Tingley, Assistant Professor, Ecology and Evolutionary Biology

**61. Diversity of Terrestrial Green Algae from Chile and Panama, with a focus on *Diplosphaera* (Trebouxiophyceae, Chlorophyta)**

Maryam Shahabadi, Biological Sciences

Advisor: Louise Lewis, Professor, Ecology and Evolutionary Biology

**62. Macro- and Microevolution of Salinity-specific Ionocyte Morphologies in Euryhaline Fishes**

Melinda Gosselin, Natural Resources

Advisor: Eric Schultz, Professor, Ecology and Evolutionary Biology

**63. Sediment Oxygen Consumption and Denitrification in Wequetequock Cove**

Clare Schlink, Marine Sciences & Chemistry

Advisor: Julie Granger, Associate Professor, Marine Sciences

Advisor: Craig Tobias, Professor, Marine Sciences

**64. Seasonal Patterns of Denitrification in Salt Marshes**

Kayleigh Granville, Environmental Sciences

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

Advisor: Beth Lawrence, Assistant Professor, Natural Resources and the Environment

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

**65. Deicing Salt-Induced Cation Exchange in Roadside Soils**

Katherine Bell, Environmental Sciences & Molecular and Cell Biology

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

Advisor: John Volin, Vice Provost for Academic Affairs and Professor, Natural Resources and the Environment

**66. Poor Maternal Nutrition During Gestation Alters Placental IGF-I, IGF-II, and IGFBP-3 mRNA Expression in Sheep**

Caitlyn Splaine, Animal Science

Advisor: Sarah Reed, Associate Professor, Animal Science

**67. Force Applied to the Horse's Head by Bitted and Bitless Bridles**

Kelli Knapp, Animal Science

Advisor: Jenifer Nadeau, Associate Professor, Animal Science

**68. Bending Borders – An Exploration of Social, Political, and Economic Implications of Language in Catalonia Through Documentary Film**

Sahil Laul, Molecular and Cell Biology & Individualized Major: Global Health

Michael Costello, Biomedical Engineering

Advisor: Gustavo Nanclares, Associate Professor, Literatures, Cultures, and Languages

Advisor: Catherine Masud, Adjunct Faculty, Digital Media and Design

## **SESSION 2 PRESENTATIONS**

### **1. Making Welcome: Space Material and Human Centered Design**

Olivia Crosby, Art – Graphic Design

Advisor: Ray DiCapua, Professor, Art and Art History

Advisor: Gary Krewson, Machine Shop Engineer/Manager, School of Fine Arts

### **2. Issues of Gender and Modernism in Ralph Vaughan Williams' Folksongs of the Four Seasons**

Christine Goss, Music History

Advisor: Eric Rice, Associate Professor, Music

Advisor: Jessica VonVillas-Dickerson, Assistant Professor in Residence, Music

### **3. Moving Day: A Reimagining of LGBT Families in Children's Books**

Kenneth Glazer, Art – Illustration/Animation

Advisor: Alison Paul, Assistant Professor, Art and Art History

### **4. Make History Accessible: The Case for YouTube**

Rohit Kandala, History

Advisor: Frank Costigliola, Distinguished Professor, History

### **5. Vignettes of Physician Experience**

Dhruv Shah, Molecular and Cell Biology & English

Advisor: Bruce Cohen, Instructor in Residence, English

### **6. An Interdisciplinary Education: Just A Bridge Away**

Nicole Gerardin, Secondary English Education & English

Advisor: Hannah Dostal, Associate Professor, Curriculum and Instruction

### **7. Assessing the Mindsets of Introductory Physics Students through the Lens of Intellectual Humility (IH)**

Meagan Sundstrom, Mathematics/Physics

Advisor: Fabiana Cardetti, Professor, Mathematics

### **8. Associations Between Low Birthweight and Cognitive Development in Early Childhood**

Kristen Cardascia, Human Development and Family Studies & Speech, Language, and Hearing Sciences

Advisor: Caitlin Lombardi, Assistant Professor, Human Development and Family Studies

**9. Child Birth Weight and Reading Skills: A Moderation by Race**

Kalea Coles, Human Development and Family Studies & Psychological Sciences  
Advisor: Annamaria Csizmadia, Associate Professor, Human Development and Family Studies

**10. Bullying Experiences of Children of Immigrants**

Alyssa Sullivan, Human Development and Family Studies  
Advisor: Linda Halgunseth, Associate Professor, Human Development and Family Studies

**11. College Students' Perceptions of On-Campus Civility as Influenced by Communication Processes in Families of Origin**

Casey Cunningham, Human Development and Family Studies & Psychological Sciences

Valerie Girard, Human Development and Family Studies & Psychological Sciences

Jordyn Isabelle, Psychological Sciences

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

**12. Support for Mothers and Families: A Battle on Neonatal Abstinence Syndrome**

Amberly Lao, Nursing

Tessa Weidig, Nursing

Advisor: Xiaomei Cong, Associate Professor, Nursing

Advisor: Valarie Artigas, Assistant Clinical Professor, Nursing

**13. Low Breastfeeding Rates in Infants Born with Neonatal Abstinence Syndrome**

Sarah Squillace, Nursing

Advisor: Xiaomei Cong, Associate Professor, Nursing

**14. Health Literacy, Cognitive Impairment, and Diabetes Knowledge among Incarcerated Persons Transitioning to the Community: Considerations for Innovative Intervention Development**

Sarah Todd, Nursing

Advisor: Louise Reagan, Assistant Professor, Nursing

**15. The Acceptability of a Self-Management Intervention for Irritable Bowel Syndrome (IBS)**

Carleen Joyce Tan, Nursing

Advisor: Angela Starkweather, Associate Dean and Professor, Nursing

**16. Perceived Discrimination, Health Behavior, and Health Status among Muslims Living in the US**

Anita Luxkaranayagam, Physiology and Neurobiology

Sania Saeed, Biological Sciences

Advisor: Rick Gibbons, Professor, Psychological Sciences

Advisor: Meg Gerrard, Research Professor, InCHIP and Psychological Sciences

**17. Party Differences in Candidate Emergence and Successes in the 2018 House Elections**

Kyle Adams, Political Science & Economics

Advisor: Paul Herrnson, Professor, Political Science

**18. Cooperation or Conflict: Using Alliance Theory to Explain the Current Gulf Cooperation Council Crisis**

Pierre Aguirre, Political Science & Economics

Advisor: Evan Perkoski, Assistant Professor, Political Science

**19. The Positive Impact of Decentralization on Public Services in Khyber Pakhtunkhwa, Pakistan**

Mishaal Afteb, Political Science

Advisor: Betty Hanson, Professor Emeritus, Political Science

**20. Native American Children's Access to Nutritional Food in the Age of Qualification: How Food Insecurity on Native American Reservations Underscores Children's Realization of the Right to Health**

Emily Dodson, Political Science & Human Rights

Advisor: Francoise Dussart, Professor, Anthropology

**21. Immigration in the Media: Political Ideologies of Online Media Sites and Their Effects on Immigration Discourse**

Rosella Aluia, Individualized Major: Crime, Law, and Justice

Advisor: Charles Venator-Santiago, Associate Professor, Political Science

**22. The Education of American Political Elites**

Brian Forbes, History

Gianna Demasi, Economics

Advisor: David Weakliem, Professor, Sociology

**23. Predicting Tone Discrimination Abilities from Characteristics of Autism**

Anusha Mohan, Psychological Sciences

Advisor: Inge-Marie Eigsti, Associate Professor, Psychological Sciences



**24. Mindful Muse? Assessing Tools to Help College Students Manage Mental Health: A Randomized Controlled Trial**

Mareyna Simon, Psychological Sciences & Individualized Major: Neuroscience

Jacob Kustra, Biological Sciences

Spencer Low, Individualized Major: Computational Neuroscience

Advisor: Blair Johnson, Distinguished Professor, Psychological Sciences

**25. How Timing Cues Enhance and Bias Categorical Perception of Sound**

Vishruthi Palanivel, Physiology and Neurobiology & Psychological Sciences

Advisor: Heather Read, Associate Professor, Psychological Sciences

**26. Matching the Mismatch: How Bilinguals' MMN Reflects the Interaction between Perceptual and Conceptual Cues in Speech Perception**

Lina Kane, Speech, Language, and Hearing Sciences & Human Development and Family Studies

Ashley Lombardi, Speech, Language, and Hearing Sciences

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

**27. My Dominant Hand Speaks My Language: Hand Effects are Specific to Linguistic Experience**

Calli Smith, Cognitive Science

Cynthia Dias, Cognitive Science

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

**28. Finding Familiarity in the Unfamiliar: Native Speech Perception in Different Linguist Contexts**

Eilis Welsh, Speech, Language, and Hearing Sciences

Sam Beacham, Speech, Language, and Hearing Sciences

Crystal Flores, Speech, Language, and Hearing Sciences & Anthropology

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

**29. Effects of Lisdexamfetamine on Selection of Voluntary Physical Activity in a Rat Model of Binge-Eating Disorder**

Olivia DiMarco, Psychological Sciences & Physiology and Neurobiology

Advisor: John Salamone, Distinguished Professor, Psychological Sciences

**30. Overexpression of Cyclin D1 in the Development of Parathyroid Adenomas and Hyperparathyroidism**

Mitali Banerjee, Physiology and Neurobiology & Molecular and Cell Biology

Advisor: Andrew Arnold, Murray-Heilig Chair in Molecular Medicine and Professor, Medicine & Genetics and Genome Sciences

Advisor: Jessica Costa-Guda, Assistant Research Professor, Center for Molecular Oncology

**31. Microtubule Acetylation in Drosophila Germ Cell Development**

Taylor Simao, Molecular and Cell Biology

Advisor: Mayu Inaba, Assistant Professor, Cell Biology

**32. Subcellular Localization of Protocadherin Gamma C4 and Protocadherin 8 in Relation to GABAergic Synapses in the Rat Brain**

Michael Taylor, Biological Sciences

Advisor: Angel de Blas, Professor, Physiology and Neurobiology

**33. Dietary Effects on Lifespan and Fertility in a Drosophila Model of Traumatic Brain Injury**

Salaheddine Madhoun, Molecular and Cell Biology

Advisor: Geoffrey Tanner, Assistant Professor in Residence, Physiology and Neurobiology

**34. Investigating the Ketogenic Diet as a Treatment in a Drosophila Model of Chronic Traumatic Encephalopathy**

Krishna Vali, Physiology and Neurobiology

Advisor: Geoffrey Tanner, Assistant Professor in Residence, Physiology and Neurobiology

**35. Pxt Plays an Active Role in Oocyte Maturation and Ovulation**

Celina Caetano, Physiology and Neurobiology & Molecular and Cell Biology

Advisor: Jianjun Sun, Assistant Professor, Physiology and Neurobiology

**36. Neuroanatomical and Behavioral Analysis of GABAergic Neurons in the Lateral Hypothalamic Area**

Eric Beltrami, Physiology and Neurobiology & Molecular and Cell Biology

Advisor: Alexander Jackson, Assistant Professor, Physiology and Neurobiology

**37. Defining a Tachykininergergic Projection to Melanin-Concentrating Hormone (MCH) Neurons in the Lateral Hypothalamic Area (LHA)**

Lily Zhong, Physiology and Neurobiology

Advisor: Alexander Jackson, Assistant Professor, Physiology and Neurobiology

**38. Neuroanatomical Characterization of Lateral Hypothalamic Neurotensin and Somatostatin Neurons and their Projections in the Mouse Brain**

James Costanzo, Physiology and Neurobiology

Advisor: Alexander Jackson, Assistant Professor, Physiology and Neurobiology

**39. Developmental Changes to the Brain Stem Cell Niche in Fetal-Onset Hydrocephalus**

Saurabh Kumar, Physiology and Neurobiology

Patrick Briody, Physiology and Neurobiology

Advisor: Joanne Conover, Professor, Physiology and Neurobiology

**40. Mechanisms of Stem Cell Division in the V-SVZ Stem Cell Niche**

Patrick Briody, Physiology and Neurobiology

Amar Kalaria, Physiology and Neurobiology

Saurabh Kumar, Physiology and Neurobiology

Derek Pan, Molecular and Cell Biology

Advisor: Joanne Conover, Professor, Physiology and Neurobiology

**41. Interactions of the C11orf95-RELA Oncogene and NF- $\kappa$ B Subunits in the Development of Ependymoma Brain Tumors in Mice**

Ericka Randazzo, Physiology and Neurobiology & Pathobiology

Advisor: Joseph LoTurco, Professor, Physiology and Neurobiology

**42. Preparation and Characterization of Gastrointestinal Stable Nanoparticles as an Oral Delivery Vehicle for Lipophilic Nutrients**

Nikolas Rodriguez, Nutritional Sciences

Advisor: Yangchao Luo, Assistant Professor, Nutritional Sciences

**43. Cracking Protein Clumps: Characterization of Phenylalanine Self-Assembly**

Alexis Barrera, Biomedical Engineering

Advisor: Anna Tarakanova, Assistant Professor, Mechanical Engineering & Biomedical Engineering

**44. The Characterization of the Tropoelastin-Fibrillin Complex through Molecular Modeling**

Helena Newandee, Biomedical Engineering

Advisor: Anna Tarakanova, Assistant Professor, Mechanical Engineering & Biomedical Engineering

**45. Stem Cell Spheroids for Cartilage Regeneration**

Ming-Yeah Hu, Molecular and Cell Biology & Allied Health Sciences

Advisor: Syam Nukavarapu, Associate Professor, Biomedical Engineering

**46. Vascular Laser Induced Thermolysis of Vessels Varying in Size**

Fawaz Mohsin, Biomedical Engineering

Advisor: Thomas Milner, Professor, Biomedical Engineering, University of Texas at Austin

**47. Development of a Sonically Powered Biodegradable Nanogenerator for Bone Regeneration**

Avi Patel, Molecular and Cell Biology & Individualized Major: Health, Medicine, and Society

Advisor: Thanh Nguyen, Assistant Professor, Mechanical Engineering

Advisor: David Goldhamer, Professor, Molecular and Cell Biology

**48. Analyzing Driver Fatigue and Testing Reduced Graphene Oxide Electrodes**

John Nelson, Physiology and Neurobiology

Advisor: Insoo Kim, Assistant Professor, Medicine

**49. Computational Analysis of Assembly of CPLS Nanoparticles**

Alessandro Fisher, Mechanical Engineering & Molecular and Cell Biology

Advisor: Ying Li, Assistant Professor, Mechanical Engineering

**50. Computational Study of Designed Tau Protein Antibodies with Enhanced Binding Characteristics**

Aberdeen Taylor, Structural Biology and Biophysics

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

**51. The Effect of the Microbiome on Alzheimer's Diseases Pathogenesis**

Michael Zhu, Molecular and Cell Biology & Economics

Advisor: Nichole Broderick, Assistant Professor, Molecular and Cell Biology

**52. Signaling Pathways of Metallothionein-Mediated Chemotaxis in Breast Cancer**

Jennifer Messina, Molecular and Cell Biology

Advisor: Michael Lynes, Professor, Molecular and Cell Biology

**53. The Hunt for Rare Genes in Salty Communities**

Marlene Abouaassi, Molecular and Cell Biology & Sociology

Advisor: Johann Peter Gogarten, Distinguished Professor, Molecular and Cell Biology

**54. Chemical Trends in Al-Cu and Al-Ag Interfaces from First-Principles Theory**

Cassidy Atkinson, Materials Science and Engineering

Advisor: Pamir Alpay, GE Professor in Advanced Manufacturing, Materials Science and Engineering

**55. The Effect of the Tip Radius on Dislocation Nucleation in [0 0 1] Tungsten Single Crystal Under Spherical Nanoindentation**

Hetal Patel, Materials Science and Engineering

Advisor: Seok-Woo Lee, Assistant Professor, Materials Science and Engineering

**56. NTRUEncrypt in a Quantum World: Using and Implementing Post-Quantum Cryptosystems**

Sam Markelon, Computer Science

Advisor: Walter Krawec, Assistant Professor, Computer Science and Engineering

**57. Continuous Biometric Authentication in Haptic Users**

Stephen Sam, Computer Science

Advisor: Paolo Gasti, Assistant Professor, Computer Science, New York Institute of Technology

Advisor: Kiran Balagani, Assistant Professor, Computer Science, New York Institute of Technology

**58. Subset Clustering for Analyzing Seasonal Trends in Energy Usage at UConn**

Hang Zeng, Mathematics and Statistics

Advisor: Ming-Hui Chen, Professor, Statistics

**59. Temperature Bin Model (TBM) for Comparative Assessment of Energy Usage**

Ziyi Kang, Statistics

Advisor: Ming-Hui Chen, Professor, Statistics

**60. Adaptive Box-Cox Transformation Models for Analyzing Energy Usage at UConn**

Yutong Chen, Statistics, Psychological Sciences, & Finance

Advisor: Ming-Hui Chen, Professor, Statistics

**61. The Effect of Lactic Acid Bacteria on Terpene Biosynthesis in Cannabis Flowers**

Evert McKee, Sustainable Plant and Soil Systems

Advisor: Gerald Berkowitz, Professor, Plant Science and Landscape Architecture

**62. The Effect of Density and Diet Quality on Lepidopteran Larvae  
Melanization**

Nikki Pirtel, Environmental Sciences

Amanda Minicucci, Ecology and Evolutionary Biology & Psychological Sciences

Advisor: Robert Bagchi, Assistant Professor, Ecology and Evolutionary Biology

**63. Detection of Dairy Cattle Mastitis Using Ultrasound**

Alexander Calvi, Animal Science

Advisor: Sheila Andrew, Professor, Animal Science

**64. The Effects of Poor Maternal Nutrition on Fetal Brain Development**

Lauren Engels, Animal Science

Advisor: Kristen Govoni, Associate Professor, Animal Science

**65. Effects of Restricted Maternal Nutrition and Realimentation during  
Gestation on the Fetal Progenitor Cell Population in Semitendinosus  
Muscle of Sheep**

Michaela Mitchell, Animal Science

Advisor: Sarah Reed, Associate Professor, Animal Science

**66. Differential Expression of Needle Abscission Zones to Study the  
Progression of Autumn Senescence in a Gymnosperm**

Olivia Maher, Biological Sciences

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

**67. Strategies to Improve Annotation and Assembly for Complex and Large  
Plant Genomes**

Alyssa Ferreira, Pathobiology

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

**68. Utilizing Blockchain Trade Finance to Promote Financial Inclusion**

Bryce Ciccaglione: Individualized Major: Global Finance and Political Economy

Advisor: Stanley McMillen, Adjunct Faculty, Economics

Advisor: Richard Langlois, Professor, Economics

## **SESSION 3 PRESENTATIONS**

### **1. The Color of You**

Regan Kilkenny, Digital Media and Design

Lucian Hatfield, Theater Studies

Christian Partenio, Digital Media and Design

Advisor: Vincent Tycker, Assistant Professor in Residence, Dramatic Arts

### **2. Catharsis Theory: A Graphic Novel Exploring LGBT Adolescence and Coming of Age**

Taylor Grunert, English and Ecology and Evolutionary Biology

Advisor: Cathy Schlund-Vials, Associate Dean, College of Liberal Arts and Sciences, and Professor, English & Asian/Asian American Studies

### **3. Musket Ball Analysis of the 17th Century Pequot War in Southern New England**

Srishti Sadhir, Ecology and Evolutionary Biology & Anthropology

Advisor: Kevin McBride, Associate Professor, Anthropology

### **4. Cultural Influences on Traditional Chinese Medicine (TCM) Decision Making**

Maria Latta, Pharmacy Studies

Advisor: Nathaniel Rickles, Associate Professor, Pharmacy Practice

### **5. Comparing the Influence of Gender on Female College Students Majoring in Physics and/or Human Rights**

Jillian Rastinejad, Human Rights and Physics

Advisor: Shareen Hertel, Associate Professor, Political Science & Human Rights

### **6. Child Marriage in the United States**

Chineze Osakwe, Political Science and Human Rights

Advisor: Françoise Dussart, Professor, Anthropology

### **7. Sexual Assault Recovery in the LGBTQIA+ Community**

Danielle Hartshorn, Individualized Major: Film and Global Activism & Human Rights

Advisor: David Richards, Associate Professor, Political Science & Human Rights

### **8. Maternal Perceptions in Comparison to Infant Breastfeeding Behavior**

Anusha Basnet, Physiology and Neurobiology

Advisor: Ruth Lucas, Assistant Professor, Nursing

**9. Physiological Feeding Behavior Comparison Between Pre-Term and Full-Term Infants**

Ajeetej Rai, Psychological Sciences & Physiology and Neurobiology

Advisor: Ruth Lucas, Assistant Professor, Nursing

**11. Males vs. Females: Who Uses it Most? A Meta-analysis of the Disparities in Condom Use Outcomes from Sexual Health Interventions among Hispanic and Latino Youth in the United States**

Melanie Moreno, Allied Health Sciences

Ashley Holmes, Psychological Sciences

Geycel Muniz, Allied Health Sciences

Advisor: Tania Huedo-Medina, Associate Professor, Allied Health Sciences

**12. Islands in Limbo: An Argument to Anchor U.S. Virgin Islands' Citizenship in the Fourteenth Amendment**

Garrett D'Amato, Political Science & Individualized Major: Law and Society

Advisor: Charles Venator-Santiago, Associate Professor, Political Science

**13. Executive Approval in Latin America**

Shankara Narayanan, Political Science & History

Advisor: Matthew Singer, Associate Professor, Political Science

**14. Temporary Protected Status for El Salvador as a Foreign Policy Response**

Veronica Rollins, Political Science & Individualized Major: Law and Immigration

Advisor: Charles Venator-Santiago, Associate Professor, Political Science

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

**15. The Scholio Project: Designing Online News Comments to Promote Intellectual Humility in Public Discourse**

Brendan Hogan, Political Science & Psychological Sciences

Advisor: Michael Morrell, Associate Professor, Political Science

**16. Seizing the News Cycle: The Coverage of Terrorism in American Hard and Soft News Sources**

Mary Szarkowicz, Political Science & Accounting

Advisor: Evan Perkoski, Assistant Professor, Political Science



**17. Analyzing the Impact of Behavioral Modification in Delaying the Progression of Chronic Kidney Disease of Unknown Etiology (CKDu) Amongst Rural Laborers in Sri Lanka: A Multidisciplinary Approach**

Jonathon Hastings, Molecular and Cell Biology & Individualized Major: Community Health

Advisor: Stephen Schensul, Professor, Community Medicine and Healthcare

**18. Is Villainy Written in the Star (War)s?**

Rachel Sullivan, Political Science

Advisor: Stephen Dyson, Associate Professor, Political Science

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

**19. "I Grew It, I Made It, I Ate It!" Evaluating a Bilingual Curricular Intervention for Middle School Students**

Celeste Kurz, Nutritional Sciences

Advisor: Michael Puglisi, Assistant Extension Professor, Nutritional Sciences

Advisor: Hedley Freake, Professor, Nutritional Sciences

Advisor: Phoebe Godfrey, Associate Professor in Residence, Sociology

**20. Race-Gender Identities in the 2018 House Elections**

Isabelle Geller, Political Science

Advisor: Paul Herrnson, Professor, Political Science

**21. Family Perspectives on Accessing Community Resources to Mitigate Toxic Stress**

Maria Antony, Molecular and Cell Biology & Allied Health Sciences

Advisor: Aoife Heaslip, Assistant Professor, Molecular and Cell Biology

Advisor: Sharon Smith, Adjunct Professor, Molecular and Cell Biology

**22. Pediatric Nasal Burns During Operative Cautery: Are Aural Speculums More Protective Than Nasal Speculums?**

Anika Makol, Molecular and Cell Biology & Human Rights

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

**23. Risk Factors and Exposure to Violence in Pediatric Emergency Department Patients**

Maryyam Ali, Molecular and Cell Biology

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

**24. Vocabulary and Speed-Accuracy Tradeoffs in Three Different Executive Function Tasks**

Maria Sol Anyosa, Psychological Sciences & Human Development and Family Studies

Advisor: Nicole Landi, Associate Professor, Psychological Sciences

**25. Relationships between Personality, Coping and Medication Adherence among Female College Students**

Mairead Deacy, Psychological Sciences

Advisor: Dean Cruess, Professor, Psychological Sciences

**26. The EEG Mu Rhythm and Temperament in 6- and 12-Month-Olds**

Christina Flores, Psychological Sciences

Advisor: Kimberly Cuevas, Associate Professor, Psychological Sciences

**27. Effects of Age Stereotypes on Hireability Ratings: Examining the Right Fit for a Job Within the Five Factor Framework**

Sam Strizver, Psychological Sciences and English

Advisor: Janet Barnes-Farrell, Professor, Psychological Sciences

**28. Investigating Speech Perception in Noise and Noise Exposure Patterns in College Musicians**

Helena Sun, Speech, Language, and Hearing Sciences & Music

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

**29. Using Quantitative Methods to Assess Language Use in the Home Environment: A Feasibility Study**

Madison Thompson, Psychological Sciences & Speech, Language, and Hearing Sciences

Sarah Arnett, Speech Language, and Hearing Sciences & Cognitive Science

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

**30. Investigating Molecular Targets of Dietary Therapies for Seizure-Like Event in Drosophila Metabolic Mutants**

Jazmine Riley, Physiology and Neurobiology

Mirella Fernandez, Physiology and Neurobiology

Advisor: Geoffrey Tanner, Assistant Professor in Residence, Physiology and Neurobiology

**31. Ketogenic Diet Treatment for Cognitive Deficits in a Drosophila Model of Glial Tauopathy**

Muhammad Shahzad, Physiology and Neurobiology

Xuezhi Zhang, Physiology and Neurobiology

Advisor: Geoffrey Tanner, Assistant Professor in Residence, Physiology and Neurobiology

**32. Effects of the VMAT-2 Inhibitor Tetrabenazine on Effort-Related Choice Behavior Using Mouse Touchscreen Procedures**

Arsal Shah, Biological Sciences

Taina Quiles, Biological Sciences

Advisor: John Salamone, Distinguished Professor, Psychological Sciences

**33. Investigating the Neurobiology of Motivational Deficiencies in Major Depressive Disorder: 5-HT1B Receptor Involvement in Behavioral Effects of Fluoxetine (Prozac)**

Sarah Ferrigno, Psychological Sciences & Molecular and Cell Biology

Advisor: John Salamone, Distinguished Professor, Psychological Sciences

**34. The Effect of Different Rhythmic Frequencies on Negative Mean Asynchrony**

Danielle LaMay, Individualized Major: Computational Neuroscience

Advisor: Edward Large, Professor, Psychological Sciences

**35. The Role of Vasculature Tone in the Retrotrapezoid Nucleus in Response to Hypoxia**

Carlos Calderón Valero, Physiology and Neurobiology

Advisor: Daniel Mulkey, Professor, Physiology and Neurobiology

**36. The Role of ApoC-III on Circulating Immune Cells in Response to a Western Diet**

Nicholas Tambini, Allied Health Sciences

Advisor: Alison Kohan, Assistant Professor, Nutritional Sciences

**37. Identification of Early Gene Differentiation Markers in Progenitor Cells Involved in the Onset of Fibrodysplasia Ossificans Progressiva (FOP)**

Annie Jin, Molecular and Cell Biology & Nutritional Sciences

Advisor: David Goldhamer, Professor, Molecular and Cell Biology

**38. Identification of Enterohemorrhagic *Escherichia coli*-Encoded Noncanonical Inflammasome Inhibitors**

Sree Kolli, Biomedical Engineering

Advisor: Sivapriya Kailasan Vanaja, Assistant Professor, Immunology

**39. Cranial Neural Crest-Targeted Deletion of Cdc73 Results in Embryonic Lethality**

Lilia Shen, Biological Sciences

Advisor: Jessica Costa-Guda, Assistant Research Professor, Center for Molecular Oncology

Advisor: Andrew Arnold, Murray-Heilig Chair in Molecular Medicine and Professor, Medicine & Genetics and Genome Sciences

**40. Effects of Bone Morphogenetic Proteins and Fibroblast Growth Factors on Mammalian Cells**

Jolene Addi, Psychological Sciences

Advisor: Wai Hong (Kevin) Lo, Assistant Professor, Medicine & Endocrinology

Advisor: Cato Laurencin, University Professor, Albert and Wilda Van Dusen Distinguished Professor of Orthopedic Surgery, and Professor of Chemical, Materials, and Biomedical Engineering

**41. Identity of Downstream Partners of Sma0113**

Daniel Netting, Molecular and Cell Biology

Advisor: Daniel Gage, Professor, Molecular and Cell Biology

**42. Investigating the Role of RhoD in the Regulation of Autophagy**

Jessica Lohret, Molecular and Cell Biology

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

**43. Muscle Activation in Patients with a History of Anterior Cruciate Ligament Reconstruction (ACLR)**

Elena Masiello, Exercise Science

Advisor: Adam Lepley, Assistant Professor, Kinesiology

**44. Imatinib Reduces the Efficacy of Cytotoxic Chemotherapy Agents**

Willie Dong, Physiology and Neurobiology

Advisor: Andrew Wiemer, Associate Professor, Pharmaceutical Sciences

**45. Molecular Mechanisms of Phenylalanine Aggregation**

Samuel Kokomoor, Electrical Engineering, Computer Engineering, & Computer Science

Advisor: Anna Tarakanova, Assistant Professor, Mechanical Engineering & Biomedical Engineering

**47. Galaxies Which Hosted Multiple Type IA Supernova in the Dark Energy Survey and Pan-STARRS**

Aisha Massiah, Mathematics/Physics

Advisor: Daniel Scolnic, Assistant Professor, Physics, Duke University

Advisor: Cara Battersby, Assistant Professor, Physics

**48. Preparation of Single Stranded Modified Vectors for Mutagenesis Studies in Bacteria and Mammalian Cells Using Recombinant DNA Technology**

Mishil Nana, Physiology and Neurobiology

Advisor: Ashis Basu, Professor, Chemistry

**49. Geochemical Signatures of Life in an Extreme Environment: Chemical "Footprints" of a Martian Analogue?**

Benjamin Teerlinck, Molecular and Cell Biology and Geoscience

Advisor: Michael Hren, Assistant Professor, Chemistry

**50. Development of an Open-Source Physiologically-based Pharmacokinetic Model to Predict Maternal-fetal Exposures of CYP450-metabolized Drugs**

Madeleine Gastonguay, Applied Mathematical Sciences

Advisor: Ahmed Elmokadem, Research Scientist, Metrum Research Group

Advisor: Matthew Riggs, Chief Science Officer, Metrum Research Group

**51. A Modular Approach to Multiscale Modeling of Invasive Pulmonary Aspergillosis**

Yu Mei, Computer Science

Advisor: Reinhard Laubenbacher, Professor, Cell Biology & Computational Biology

**52. Role of CD13 in Focal Adhesion Turnover and Its Significance in the Formation of Tunneling Nanotubes**

Brian Aguilera, Molecular and Cell Biology

Advisor: Mallika Ghosh, Assistant Professor, Cell Biology & Center for Vascular Biology

Advisor: Linda Shapiro, Professor, Cell Biology & Center for Vascular Biology

**53. Soluble Epidermal Growth Factor Receptor Isoforms: Functional Roles and Potential Therapeutic Application in Rheumatoid Arthritis**

Tyler Ackley, Pharmacy & Molecular and Cell Biology

Advisor: Caroline Dealy, Associate Professor, Center for Regenerative Medicine and Skeletal Development, Cell Biology, & Orthopedic Surgery

**54. Cellular Response to Biodegradable Stent in Vascular Bioreactor**

Vinayak Mishra, Molecular and Cell Biology

Advisor: Laura Niklason, Professor, Anesthesiology and Biomedical Engineering, Yale University

**55. Low-Cost Wearable Rhythmic Auditory Stimulation Device for Gait Enhancement**

Ryanne Ramadan, Biomedical Engineering & Electrical Engineering

Advisor: Patrick Kumavor, Assistant Professor, Biomedical Engineering

**56. Evaluation of Gallium Nitride Power Devices**

Hamza Malik, Electrical Engineering

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

**57. Effect of Targeted Delivery of Hyaluronan by a Polymer-Peptide System on Ocular Surface Lubrication**

Robert Driscoll, Biomedical Engineering

Advisor: Tannin Schmidt, Associate Professor, Biomedical Engineering

**58. CartograTree: A Web-based Landscape Genomics Tool for Georeferenced Trees**

Ronald Santos, Computer Science

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

**59. Creating a Deep Learning Pipeline to Improve the Accuracy and Efficiency of Non-Model Genome Annotation**

Jeremy Bennett, Biomedical Engineering & Computer Science and Engineering

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

**60. Assessing the Accuracy of Gene Tree Rooting Methods on Prokaryotic Gene Families**

Taylor Wade, Biomedical Engineering

Advisor: Mukul Bansal, Assistant Professor, Computer Science and Engineering

**61. Analyzing Microplastics in Long Island Sound**

Julia Lineweber, Environmental Engineering

Caroline Anastasia, Chemistry

Advisor: James Stuart, Senior Research Scientist, Center for Environmental Sciences and Engineering and Professor Emeritus, Chemistry

Advisor: Christopher Perkins, Academic Assistant II, Center for Environmental Sciences and Engineering

**62. Mastitis Trends in Dairy Herds in Connecticut: A Retrospective Analysis**

Kelsey Tyler, Animal Science

Advisor: Guillermo Risatti, Associate Professor, Pathobiology and Veterinary Science

**63. Culicoides Vectors Involved in the Transmission of Epizootic Hemorrhagic Disease Virus-6 in the State of Connecticut**

Sarah Srivichitranond, Molecular and Cell Biology & Pathobiology

Advisor: Guillermo Risatti, Associate Professor, Pathobiology and Veterinary Science

**64. Road Salts Influence Ranavirus Outbreaks in Wood Frog (*Lithobates sylvaticus*) Tadpoles**

Sarah Jacobson, Natural Resources

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

**65. How Does Sea Level Rise Alter Salt Marsh Plant Biomass Allocation and Nitrogen Content**

Fiona Liu, Ecology and Evolutionary Biology

Advisor: Beth Lawrence, Assistant Professor, Natural Resources and the Environment

**66. Impacts of Salt Marsh Vegetation and Sea-Level Rise on Soil Carbon Stability**

Alaina Bisson, Environmental Sciences

Advisor: Beth Lawrence, Assistant Professor, Natural Resources and the Environment

**67. Learning How To Improve Sanitation Practices in the Peruvian Andes: Community-Led Total Sanitation and Citizen Science**

Mateo Escobar, Biomedical Engineering & Materials Science and Engineering

Caitlin Turney, Chemical Engineering & German Studies

Advisor: Jonathan Mellor, Assistant Professor, Civil and Environmental Engineering

**68. Something Scary: Exploring Otherness through the Art of Horror**

Kat Folker, Puppetry

Advisor: Bart Roccoberton, Professor, Dramatic Arts

Advisor: John Bell, Associate Professor, Dramatic Arts

Advisor: Lewis Gordon, Professor, Philosophy

## **SESSION 4 PRESENTATIONS**

### **1. Anonymous is a Woman**

Isabella Saraceni, Art – Painting

Advisor: Ray DiCapua, Professor, Art and Art History

### **2. Painting with Plants**

David Rascati, Sustainable Plant and Soil Systems

Advisor: Eleanor Ouimet, Assistant Professor in Residence, Anthropology

Advisor: Julia Kuzovkina, Professor, Plant Science and Landscape Architecture

### **3. Out of Sight**

Mei Buzzell, Art – Graphic Design

Advisor: Janet Pritchard, Professor, Art and Art History

Advisor: Edwin Yegir, Associate Professor, Art and Art History

Advisor: Kelly Dennis, Associate Professor, Art and Art History

### **4. What Are You? Documenting Filipino American Diversity Through Film**

Nina Drozdenko, Digital Media and Design

Advisor: Matthew Worwood, Assistant Professor in Residence, Digital Media and Design

### **5. The Great Forest Beast**

Carly Martin, Secondary English Education & English

Advisor: Alison Paul, Assistant Professor, Art and Art History

### **6. When Trends and Sustainability Clash: The Environmental Impacts of the Fast Fashion Industry**

Taylor Muncy, History & Human Rights

Advisor: Shareen Hertel, Associate Professor, Political Science

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

### **7. Linguistic Contact and Conflict in the Balkans**

Geoffrey Horvath, Individualized Major: Historical Linguistics

Advisor: Andrea Calabrese, Professor, Linguistics

### **8. Understanding Nigeria's Energy Security Paradox: A Cross Regional Case Study of Niger Delta and Lagos**

Matthew Byanyima, Political Science & Economics

Advisor: Oksan Balyugen, Associate Professor, Political Science



**9. The New Deal: Elements of Socialism in American Capitalism**

Dea Ballij, Political Science & Economics

Advisor: Stacy Maddern, Adjunct Faculty, Urban and Community Studies

**11. Ideological Inquiry: An Analysis of the Rhetoric Nominees Face In Supreme Court Confirmation Hearings**

Michael Cocchiola, Political Science

Advisor: Virginia Hettinger, Associate Professor, Political Science

**12. Domestic Minors in Sex Trafficking: Victims or Criminals?**

Cyrene Nicholas, Physiology and Neurobiology & Anthropology

Advisor: Françoise Dussart, Professor, Anthropology

**13. Measuring the Impacts of Regional Violence against Women Treaties on Domestic Practice**

Amelia Henkel, Physics and Human Rights

Advisor: David Richards, Associate Professor, Political Science & Human Rights

**14. Relationships Between Prejudice, Hate Crimes, and Gun Violence**

Joshua Lovett-Graff, Women's, Gender, and Sexuality Studies & Chemical Engineering

Advisor: Blair Johnson, Distinguished Professor, Psychological Sciences

**15. Can Educational Attainment Help Reduce the Gun Violence Crisis in the United States?**

Rachel Rogerson, Political Science & Statistics

Advisor: Thomas Hayes, Assistant Professor, Political Science

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

**16. Spit Take: The Surprisingly Under-Regulated Realm of Direct-To-Consumer Genetic Testing**

Haley Hinton, Political Science and Individualized Major: Law, Science, and Technology

Advisor: Molly Land, Professor, Human Rights & Law

Advisor: Kristin Kelly, Associate Professor, Political Science

**17. To Blame or Back the Blue: The Socio-Political Development of *Miranda v. Arizona* on Television Crime Dramas from 1967 to 1987**

William Weishaupt, Political Science & American Studies

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

**18. Global Terrorism: Examining the Radicalization of Terrorist Organizations Worldwide**

Shreya Murthy, Individualized Major: Criminology, Human Rights, Finance

Advisor: David Richards, Associate Professor, Political Science & Human Rights

**19. Courts and Torts: How Tort Reform Influences Public Opinion of the Civil Justice System**

Mary Vlamis, Economics & Political Science

Advisor: Virginia Hettinger, Associate Professor, Political Science

**20. In the Best Interests of the Child: A 50-State Comparison of Statutes**

Maryanne Bowman, Human Development and Family Studies

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

**21. The Implications of Caregiver-Child Racial/Ethnic Match on Children's Early Care Quality and Developmental Outcomes**

Hayley McDonald, Human Development and Family Studies

Advisor: Caitlin Lombardi, Assistant Professor, Human Development and Family Studies

**22. To Cohabit or Not to Cohabit: Do Selection Factors Influence Marital Success or Dissolution?**

Amanda Blazka, Human Development and Family Studies

Advisor: Caitlin Lombardi, Assistant Professor, Human Development and Family Studies

**23. Sexting Behaviors and Justifications in Heterosexual and Homosexual Young Adults**

Emily Karr, Human Development and Family Studies

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

**24. #EATINGFORTWO: What are People Posting about When They Use This Hashtag in Instagram Posts about Diet, Physical Activity, and Weight Gain during Pregnancy?**

Caitlyn Sward, Dietetics

Advisor: Molly Waring, Assistant Professor, Allied Health Sciences

**25. Filling Gaps by Creating Webs to Support Student Mental Health: Applying a Multi-Tiered Systems of Support Framework to Postsecondary Education**

Ireti Adegbesan, Human Development and Family Studies

Corona Zhang, Anthropology

Advisor: Sandra Chafouleas, Distinguished Professor, Educational Psychology

**26. Testing Components of Yoga's Influence on Proposed Psychosocial Mechanisms of Yoga**

Chrystal Charles, Psychological Sciences

Advisor: Crystal Park, Professor, Psychological Sciences

**27. Modelling Visual Attention During Natural Optic Flow**

Andrew Banasiak, Psychological Sciences

Advisor: Ian Stevenson, Assistant Professor, Psychological Sciences

**28. Pain in African American Young Adults and Their Pain Reduction Strategies**

Bright Eze, Nursing

Advisor: Deborah McDonald, Associate Dean and Associate Professor, Nursing

**29. A Survey of Parent Engagement in the Neonatal Intensive Care Unit (NICU)**

Joeanna Novak, Nursing

Advisor: Dorothy Vittner, Assistant Clinical Professor, Nursing

Advisor: Deborah McDonald, Associate Dean and Associate Professor, Nursing

**30. Near Infrared Spectroscopy to Diagnose Statin-Associated Muscle Symptoms: Reflections on A Student Learning Experience**

Isabella Sanchez, Allied Health Sciences

Advisor: Beth Taylor, Associate Professor, Kinesiology

**31. Size Threshold for Sonographic Follow-up of Simple Postmenopausal Adnexal Cysts: 1 cm versus 3 cm?**

Mallika Shekhar, Physiology and Neurobiology

Advisor: Priyanka Jha, Assistant Professor, Radiology and Biomedical Imaging, University of California, San Francisco

**32. INP Enhancement of Radiation Dosage and its Localization within U87 Tumors**

Ferris El-tayyeb, Biological Sciences

Advisor: Henry Smilowitz, Associate Professor, Cell Biology

**33. Computational Pathway Analysis and Categorization of Colorectal Cancers**

Raven Vella, Structural Biology and Biophysics and Spanish

Advisor: Charles Giardina, Professor, Molecular and Cell Biology

**34. A Robust Delivery System for RNA Therapeutics**

Suleyman Bozal, Structural Biology and Biophysics

Advisor: Diane Burgess, Distinguished Professor, Pharmaceutical Sciences

Advisor: Antonio Costa, Assistant Research Professor, Pharmaceutical Sciences

**35. The Effect of Stress on the Microbiome and Physiology of *Drosophila melanogaster***

Sabrina Yum-Chan, Psychological Sciences & Molecular and Cell Biology

Advisor: Nichole Broderick, Assistant Professor, Molecular and Cell Biology

**36. Assessing the Level of Shiga Toxin Production in *Escherichia coli* Strains**

Corey Mallozzi, Structural Biology and Biophysics

Advisor: Sivapriya Kailasan Vanaja, Assistant Professor, Immunology

**37. The Highly Conserved Intron of the DBP2B Gene May Effect Cis-Splicing in *T. Brucei***

Zachary O'Connor, Molecular and Cell Biology

Advisor: Arthur Gunzl, Professor, Genetics and Genome Sciences

**38. Investigating: Carbon Source Utilization by Symbiotic Bacteria in the Hawaiian Bobtail Squid, *Euprymna scolopes***

Abishek Arokiadoss, Physiology and Neurobiology

Advisor: Spencer Nyholm, Associate Professor, Molecular and Cell Biology

**39. Antifouling Effects Provided by Bacterial Symbionts in the Hawaiian Bobtail Squid Egg**

Hope Dieffenbach, Biological Sciences

Advisor: Spencer Nyholm, Associate Professor, Molecular and Cell Biology

**40. Microglia Invasion and Activation in Low Grade Glioma Brain Tissue**

Veolette Hanna, Physiology and Neurobiology

Advisor: Joseph LoTurco, Professor, Physiology and Neurobiology

**41. Investigating the ETS Transcription Factor, Pointed, for its Role in *Drosophila* Ovulation**

Ekaterina Skaritanov, Physiology and Neurobiology

Advisor: Jianjun Sun, Assistant Professor, Physiology and Neurobiology

**42. Construction of a 64-Channel Microelectrode Array for In-vivo, Single Neuron Recording in Rats**

Neha Mathew, Physiology and Neurobiology

Advisor: Etan Markus, Professor, Psychological Sciences

**43. Cyp4e2 is a Marker for *Drosophila* Trichogen Cells in Antenna Sensilla**

Monica Nagalla, Physiology and Neurobiology

Advisor: Karen Menuz, Assistant Professor, Physiology and Neurobiology

Advisor: Linnaea Ostroff, Assistant Professor, Physiology and Neurobiology

Advisor: Rahul Kanadia, Associate Professor, Physiology and Neurobiology

**44. The Effects of Lipopolysaccharide-Induced Inflammation on Effort-Related Choice Behavior**

Jason Gallo, Physiology and Neurobiology

Advisor: John Salamone, Distinguished Professor, Psychological Sciences

**45. Effects of the Novel Atypical Dopamine Transporter Blocker (S)-CE-123 on Effort-Based Choice: Studies with a Progressive Ratio/Chow Feeding Choice Procedure**

Shanna Samels, Physiology and Neurobiology & Psychological Sciences

Advisor: John Salamone, Distinguished Professor, Psychological Sciences

**47. FISHing in the Eye: An Investigation into the Mechanisms of Axon Regeneration**

Kathleen Renna, Diagnostic Genetic Sciences

Advisor: Ephraim Trakhtenberg, Assistant Professor, Neuroscience

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

**48. Delayed Delivery of Simvastatin Using Biomimetic Materials in Elderly Mouse Calvarial Defects**

Michael Nicolson, Biomedical Engineering

Advisor: Liisa Kuhn, Associate Professor, Center for Regenerative Medicine and Skeletal Development & Biomedical Engineering

**49. Prototyping and Development of a Hands Free Umbrella System**

Ryan Newell, Biomedical Engineering

Advisor: Savas Tasoglu, Assistant Professor, Mechanical Engineering & Biomedical Engineering

**50. Developing Approaches for Genotyping Assay Design for Complex and Repetitive Plant Genomes**

Ava Fritz, Biomedical Engineering

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

**51. Mimubase: A Genomics Database for the Monkeyflower Research Community**

Charles Demurjian, Biological Sciences

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

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

**52. Platform to Custom Pattern Electrospun Nanofibers to Study Cell-Material Interaction**

Joshua Moskow, Biomedical Engineering and Materials Science and Engineering

Advisor: Sangamesh Kumbar, Associate Professor, Orthopedic Surgery

**53. Exploring New Materials For Nanopositioning: Strontium Titanate as a Cryogenic Piezoelectric**

Emerson Dang, Physics

Advisor: Ilya Sochnikov, Assistant Professor, Physics

**54. Novel Script for Finding Unique Gene Combinations for scRNAseq Clusters**

Jacky Yang, Molecular and Cell Biology

Advisor: Ephraim Trakhtenberg, Assistant Professor, Neuroscience

**55. Coupling of Markov Chains**

Mason DiCicco, Mathematics & Computer Science

Advisor: Iddo Ben-Ari, Associate Professor, Mathematics

**56. School Policy Evaluated with Reversible Discrete Time Markov Chain**

Trajan Murphy, Applied Mathematical Sciences

Advisor: Iddo Ben-Ari, Associate Professor, Mathematics

**57. Pricing VIX and TYVIX Options Using a Risk-Neutralized Historical Returns Distribution**

Anthony Sisti, Mathematics/Statistics

Advisor: Marcel Blais, Professor, Mathematical Sciences, Worcester Polytechnic Institute

Advisor: Stephan Sturm, Associate Professor, Mathematical Sciences, Worcester Polytechnic Institute

**58. Molecular Mechanisms of Tropoelastin Elasticity**

Julia Oppenheimer, Mechanical Engineering

Michael Bernard, Mechanical Engineering

Advisor: Anna Tarakanova, Assistant Professor, Mechanical Engineering & Biomedical Engineering

**59. Molecular Design of Soluble Zein Protein**

Kaixiang Lin, Computer Science and Engineering and Engineering Physics

Advisor: Anna Tarakanova, Assistant Professor, Mechanical Engineering & Biomedical Engineering

**60. Analyzing Perfluorinated Alkyl Acids in Surface Water by Solid Phase Extraction Followed by Ultra High-Performance Liquid Chromatography/Tandem Mass Spectrometry**

Trevor McBrine, Chemistry

Jacob Cortigiano, Chemistry

Advisor: James Stuart, Senior Research Scientist, Center for Environmental Sciences and Engineering and Professor Emeritus, Chemistry

Advisor: Anthony Provatas, Academic Assistant II, Center for Environmental Sciences and Engineering

Advisor: Christopher Perkins, Academic Assistant II, Center for Environmental Sciences and Engineering

**61. Electron Delocalization in Nitrile-Functionalized Oligopolyphenylenes**

Reid Wilson, Chemistry

Advisor: Tomoyasu Mani, Assistant Professor, Chemistry

**62. Silver Nanoparticle Toxicity and the Effect on Soil Protists**

Daniel Zeigher, Environmental Engineering

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

**63. Microbial Succession of a Newly Developed Aquaponics System**

Tanzin Begam, Biological Sciences

Advisor: Kendra Maas, Academic Assistant III, Microbial Analysis, Resources, and Services (MARS)

**64. Causes of Synchrony in Food Provisioning to Nestlings and Its Relationship to Nest Success in Forest Fragments**

Benjamin Ranelli, Ecology and Evolutionary Biology & English

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

**65. Investigating Geographical Differentiation in Sculpin (*Cottus* spp.) Morphology in Connecticut Watersheds**

Joshua Tellier, Ecology and Evolutionary Biology

Advisor: Eric Schultz, Professor, Ecology and Evolutionary Biology

**66. The Relationship Between Soil Conditions, Forest Composition, and Morph Frequencies of a Woodland Salamander, *Plethodon cinereus***

Ryan Mayer, Ecology and Evolutionary Biology

Advisor: Elizabeth Jockusch, Professor, Ecology and Evolutionary Biology

**67. The Effects of Maternal Nutrient Restriction Followed by Realimentation on Offspring Immunity and Metabolism**

Veronica Pleasant, Animal Science & Pathobiology

Advisor: Kristen Govoni, Associate Professor, Animal Science

**68. The Role of Probiotic Lactic Acid Bacteria in Treating *Clostridium Difficile* Infections**

Jamie Georgelos, Molecular and Cell Biology

Advisor: Kumar Venkitanarayanan, Associate Dean, College of Agriculture, Health, and Natural Resources, and Professor, Animal Science



## **Special Thanks**

The Office of Undergraduate Research wishes to thank the deans of the represented schools and colleges, the Office of the Provost, the Office of the Vice President for Research, and the generous donors to 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*

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Rowena Grainger, *Health Research Program Advisor*

### **OUR Peer Research Ambassadors**

Divya Ganugapati '19 (CLAS)

Ariane Garrett '20 (ENG, CLAS)

Wawa Gatheru '20 (CAHNR)

Jamie Georgelos '19 (CLAS)

Priscilla Grillakis '19 (CLAS)

Brendan Hogan '21 (CLAS)

Shahan Kamal '19 (CLAS)

Natasha Patel '19 (CLAS)

Veronica Pleasant '19 (CAHNR)

Emily Regan '19 (SFA)

## Alphabetical Listing of Presenters with Poster Numbers

*S1 denotes a Session 1 presentation – Friday, April 12 at 2:00 p.m.*

*S2 denotes a Session 2 presentation – Friday, April 12 at 4:00 p.m.*

*S3 denotes a Session 3 presentation – Saturday, April 13 at 10:00 a.m.*

*S4 denotes a Session 4 presentation – Saturday, April 13 at 12:00 p.m.*

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Abrams, Charles – 37 (S1)	Britt, Raphael – 41 (S1)
Ackley, Tyler – 53 (S3)	Bullers, Rebecca – 59 (S1)
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Addi, Jolene – 40 (S3)	Byanyima, Matthew – 8 (S4)
Adegbesan, Ireti – 25 (S4)	Caetano, Celina – 35 (S2)
Afteb, Mishaal – 19 (S2)	Calderón Valero, Carlos – 35 (S3)
Aguilera, Brian – 52 (S3)	Calvi, Alexander – 63 (S2)
Aguirre, Pierre – 18 (S2)	Cardascia, Kristen – 8 (S2)
Alam, Fajar – 13 (S1)	Cenci, Lauren – 5 (S1)
Ali, Maryyam – 23 (S3)	Charles, Chrystal – 26 (S4)
Aluia, Rosella – 21 (S2)	Chen, Yutong – 60 (S2)
Anastasia, Caroline – 61 (S3)	Choudhary, Akhil – 23 (S1)
Antony, Maria – 21 (S3)	Ciccaglione, Bryce – 68 (S2)
Anyosa, Maria Sol – 24 (S3)	Cocchiola, Michael – 11 (S4)
Appiah, Ama – 14 (S1)	Coles, Kalea – 9 (S2)
Arokiadoss, Abishek – 38 (S4)	Cortigiano, Jacob – 60 (S4)
Atkinson, Cassidy – 54 (S2)	Costanzo, James – 38 (S2)
Augur, Frederick – 18 (S1)	Costello, Michael – 68 (S1)
Ballij, Dea – 9 (S4)	Crosby, Olivia – 1 (S2)
Banasiak, Andrew – 27 (S4)	Cullerton, Eve – 57 (S1)
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Barrera, Alexis – 43 (S2)	D'Amato, Garrett – 12 (S3)
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Begam, Tanzin – 63 (S4)	Demasi, Gianna – 22 (S2)
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Bernard, Michael – 58 (S4)	Dieffenbach, Hope – 39 (S4)
Bisson, Alaina – 66 (S3)	DiMarco, Olivia – 29 (S2)
Blazka, Amanda – 22 (S4)	Dodson, Emily – 20 (S2)
Bowman, Maryanne – 20 (S4)	Dong, Willie – 44 (S3)
Bozal, Suleyman – 34 (S4)	Driscoll, Robert – 57 (S3)
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 Eze, Bright – 28 (S4)  
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 Girard, Valerie – 11 (S2)  
 Glazer, Kenneth – 3 (S2)  
 Goss, Christine – 2 (S2)  
 Gosselin, Melinda – 62 (S1)  
 Granville, Kayleigh – 64 (S1)  
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 Hastings, Jonathon – 17 (S3)  
 Hatfield, Lucian – 1 (S3)  
 Henkel, Amelia – 13 (S4)  
 Hernandez, Ana – 27 (S1)  
 Hernandez, Nathalia – 32, 33 (S1)  
 Hinton, Haley – 16 (S4)  
 Hogan, Brendan – 15 (S3)  
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 Hu, Ming-Yeah – 45 (S2)  
 Hunt, Jeffrey – 26 (S1)  
 Iorio, Liam – 54 (S1)  
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 Kurz, Celeste – 19 (S3)  
 Kustra, Jacob – 24 (S2)  
 LaMay, Danielle – 34 (S3)  
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 Latta, Maria – 4 (S3)  
 Laul, Sahil – 68 (S1)  
 Lepowsky, Eric – 47 (S1)  
 Lin, Kaixiang – 59 (S4)  
 Lineweber, Julia – 61 (S3)  
 Liu, Fiona – 65 (S3)  
 Lohret, Jessica – 42 (S3)  
 Lombardi, Ashley – 26 (S2)  
 Lopez, Seyenah – 24 (S1)  
 Lovett-Graff, Joshua – 14 (S4)  
 Low, Spencer – 24 (S2)  
 Luxkaranayagam, Anita – 16 (S2)  
 Madhoun, Salaheddine – 33 (S2)  
 Maher, Olivia – 66 (S2)  
 Makol, Anika – 22 (S3)  
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 Mallozzi, Corey – 36 (S4)  
 Markelon, Sam – 56 (S2)  
 Martin, Carly – 5 (S4)  
 Masiello, Elena – 43 (S3)

Massiah, Aisha – 47 (S3)  
 Mathew, Neha – 42 (S4)  
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 McBrine, Trevor – 60 (S4)  
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 McLaren, Leann – 17 (S1)  
 McNish, Brianna – 6 (S1)  
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 Mohsin, Fawaz – 46 (S2)  
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 Nelson, John – 48 (S2)  
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 Noi, Eric – 56 (S1)  
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 Oppenheimer, Julia – 58 (S4)  
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 O'Sullivan, Brandon – 40 (S1)  
 Otgonbayar, Myagmarsuren – 58 (S1)  
 Palanivel, Vishruthi – 25 (S2)  
 Paolillo, Joshua – 55 (S1)  
 Partenio, Christian – 1 (S3)  
 Patel, Avi – 47 (S2)  
 Patel, Hetal – 55 (S2)  
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 Pirtel, Nikki – 62 (S2)  
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 Qureshi, Usra – 15 (S1)  
 Rai, Ajeetej – 9 (S3)  
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 Randazzo, Ericka – 41 (S2)  
 Ranelli, Benjamin – 64 (S4)  
 Rascati, David – 2 (S4)  
 Rastinejad, Jillian – 5 (S3)  
 Reid Jr., Michael – 3 (S1)  
 Renna, Kathleen – 47 (S4)  
 Richard, Kelsey – 50 (S1)  
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 Richter, Peter – 44 (S1)  
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Shen, Lilia – 39 (S3)	Vietla, Sai – 14 (S1)
Simao, Taylor – 31 (S2)	Vlamiš, Mary – 19 (S4)
Simon, Mareyna – 24 (S2)	Vo, Lynn – 58 (S1)
Sisti, Anthony – 57 (S4)	Wade, Taylor – 60 (S3)
Skaritanov, Ekaterina – 41 (S4)	Wallick, Blue – 2 (S1)
Smith, Calli – 27 (S2)	Wang, Judie – 33 (S1)
Splaine, Caitlyn – 66 (S1)	Ward, Caira – 7 (S1)
Squillace, Sarah – 13 (S2)	Weaver, Jessica – 20 (S1)
Srivichitranond, Sarah – 63 (S3)	Wei, Melinda – 39 (S1)
Strizver, Sam – 27 (S3)	Weidig, Tessa – 12 (S2)
Sullivan, Alyssa – 10 (S2)	Weishaupt, William – 17 (S4)
Sullivan, Rachel – 18 (S3)	Welsh, Eilis – 28 (S2)
Sun, Helena – 28 (S3)	Williamson, Selena – 11 (S1)
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Szarkowicz, Mary – 16 (S3)	Yang, Jacky – 54 (S4)
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Tan, Clarissa – 4 (S1)	Zeng, Hang – 58 (S2)
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Thompson, Madison – 29 (S3)	Zinter, Maria – 10 (S1)
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