AGENDA

9:30 – 9:45 am  Welcome (Academic Rotunda Room)
Caroline Dealy, Director, TIP Innovation Fellows Program
Abhijit Banerjee, Associate Vice President, Innovation & Entrepreneurship
Mostafa Analoui, Executive Director, UConn Ventures
Rowena Grainger, Assistant Director for Research and Fellowship Programs, Enrichment Programs
Rajesh Lalla, Associate Dean for Research, School of Dental Medicine
Caroline McGuire, Executive Director, Enrichment Programs
Jose Cruz, Associate Dean for Graduate Programs, School of Business

9:45 – 10:30 am  Short Talks, Session 1 (Academic Rotunda Room)

Supporting Nutrition Education and Behavior Change with NourishedRx
Kayla O’Connor ‘22 MS (Health Promotion Sciences, CAHNR)
Host TIP Company: NourishedRx, Stamford TIP
Sponsors: College of Agriculture, Health, and Natural Resources and UConn Technology Commercialization Services

Clean Water Paradigm in Sustainability
Kashish Manchanda ‘23 MBA (Business Analytics and Finance, BUS), UConn Hartford
Host TIP Company: Aqualumos, Storrs TIP
Sponsor: UConn Technology Commercialization Services

Frequency Therapeutics
Asirva Alahari ‘25 (Management and Engineering for Manufacturing, BUS & ENG)
Host TIP Company: Frequency Therapeutics, Farmington TIP
Sponsor: School of Engineering

Protecting Connecticut Forests from Invasive Plant Species
Shashika Himandi Gardeye Lamahewage ‘23 MS (Natural Resources, CAHNR)
Host TIP Company: BirdHabitatBot, Storrs TIP
Sponsors: College of Agriculture, Health, and Natural Resources and UConn Technology Commercialization Services

Remarks
Paul Parker, Director, Technology Incubation Program
Tony Hwang, State Senator, 28th District
Amy Morrin Bello, State Representative, 28th District

10:30 – 11:30 am  Poster Session 1 (Academic Rotunda Hallways, see map on next page)

11:30 am – 12:30 pm  Lunch (provided for student presenters)
12:30 – 1:30 pm  
**Poster Session 2** (Academic Rotunda Hallways, see map below)

1:30 – 2:15 pm  
**Short Talks, Session 2** (Academic Rotunda Room)

*Data-Driven Communities in Connecticut with FootTraffic Stats*

**Jacinth Attada** ’22 MS (Business Analytics and Program Management, BUS), UConn Hartford  
Host TIP Company: [FootTraffic Stats](#), Stamford TIP  
Sponsor: School of Business

*My Experience as a Fellow at Oscillo Biosciences*

**Emma Graebner** ’22 (Statistics, CLAS & Music, SFA)  
Host TIP Company: [Oscillo Biosciences](#), Farmington TIP  
Sponsor: College of Liberal Arts & Sciences

*Creating Data Stories Through QBO Using Conversational Analytics*

**Ben North** ’23 MBA (Business Analytics and Finance, BUS), UConn Hartford  
Host TIP Company: [Unscrambl](#), Stamford TIP  
Sponsor: School of Business

*Dissemination and Democratization: Citizen Journalism with Social Labs*

**Claire Lee** ’24 (Ecology and Evolutionary Biology & Political Science, CLAS)  
Host TIP Company: [Social Labs](#), Stamford TIP  
Sponsor: College of Liberal Arts and Sciences

2:15 – 2:30 pm  
**Closing** (Academic Rotunda Room)
1. *The Development of a Voluntary Head Restraint System for Attentional Set Shifting Tasks*
   **Mark Cristino** '24 (Biomedical Engineering, ENG)
   HRP Mentor: Timothy Spellman, Assistant Professor, Neuroscience

2. *Asymmetric Histone Inheritance and Transposon De-Depression in the Drosophila Male Germline*
   **Emma Kristine Beard** '24 (Molecular and Cell Biology, CLAS)
   HRP Mentor: Mayu Inaba-Oguro, Assistant Professor, Cell Biology

3. *Testing the Bactericidal Properties of Modified Surfaces*
   **Molly Schiffer** '23 MS (Microbial Systems Analysis, CLAS)
   Sponsor: College of Liberal Arts and Sciences
   **Chloe Hurme** '24 (Pharmaceutical Sciences, PHR)
   Sponsor: School of Pharmacy
   Host TIP Company: DeBogy Molecular, Farmington TIP

4. *BioSymmetrix*
   **Krishna Chinmai Dongar** '24 (Biomedical Engineering, ENG)
   HRP Mentor: Liisa Kuhn, Associate Professor, Biomedical Engineering

5. *Summer at UConn Technology Commercialization Services: Patents & Licensing*
   **Thomas Koba** '23 MS (Biomedical Engineering, ENG)
   **Luis Raya-Hernandez** '24 (Management and Engineering for Manufacturing, BUS & ENG), UConn Waterbury
   Host and Sponsor: UConn Technology Commercialization Services

6. *Maternal Perspectives on Pandemic Parenting*
   **Denise Brown** '23 (Biological Sciences, CLAS)
   HRP Mentor: Margaret Briggs-Gowan, Associate Professor, Psychiatry

7. *Effect of Monoiodoacetate Dose on Pain Development in a Rat Osteoarthritis Model*
   **Aydin Calsetta** '25 (Physiology and Neurobiology, CLAS)
   HRP Mentor: Lakshmi Nair, Associate Professor, Orthopaedic Surgery, Connecticut Convergence Institute

8. *Studying Cortical Circuitry with GEVI Voltage Imaging*
   **Abigail Edelstein** '24 (Biological Sciences, CLAS)
   HRP Mentor: Srdjan Antic, Associate Professor, Neuroscience

9. *High-Throughput Tumor-on-a-Chip Platform for Personalized Colon Cancer Treatment Regimens*
   **Alicia Predom** '22 MS (Applied Genomics, CLAS)
   Sponsor: College of Liberal Arts and Sciences
   **Duran Gonzalez** '23 MS (Applied Genomics, CLAS)
   Sponsor: UConn Technology Commercialization Services
   Host TIP Company: Encapsulate, Farmington TIP
10. Crucial Role of LSD1 in Cisplatin Induced Kidney Damage
Elizabeth Carrizzo ’23 (Biomedical Engineering, ENG)
HRP Mentor: Yanlin Wang, Professor, Medicine

11. Expression of Genes in the Colon through Comprehensive RNA-Sequencing
Lauren Chance ’24 (Molecular and Cell Biology & Mathematics/Statistics, CLAS)
HRP Mentor: Marmar Moussa, Assistant Professor, Medicine

12. Innovation to Take the ‘Forever’ out of Forever Chemicals
Jonathan Dias ’22 (Biological Sciences, CLAS)
Host TIP Company: Aqualumos, Storrs TIP
Sponsor: College of Liberal Arts and Sciences

13. Investigating Femoral Phenotype of PRG4 Gene-Trap Mice
Erica Doyle ’24 (Biomedical Engineering, ENG)
HRP Mentor: Tannin Schmidt, Associate Professor, Biomedical Engineering

14. Role of TEAD1 in TGF-β1 Induced EMT and Renal Fibrosis
Lavana Gulati ’24 (Molecular and Cell Biology, CLAS)
HRP Mentor: Melanie Tran, Instructor, Medicine

15. The Development of Antibacterial and Biocidal Surfaces on Urinary Catheter
Mei Qiong Xue ’23 (Molecular and Cell Biology, CLAS)
Host TIP Company: DeBogy Molecular, Farmington TIP
Sponsor: UConn Technology Commercialization Services

16. Late-Life Depression and Markers of Immunosenescence
Medha Illindala ’25 (Physiology and Neurobiology, CLAS)
HRP Mentor: Breno Diniz, Assistant Professor, Psychiatry and UConn Center on Aging

17. Automation Software to Minimize Human Errors While Interacting with Complex Computer Graphical User Interfaces in Research Settings
Anastasiia Drozdova ’25 (Computer Science and Engineering, ENG)
HRP Mentor: Manuel Castro-Alamancos, Professor, Neuroscience

Giuliana Judge ’25 (Chemistry, CLAS)
HRP Mentor: Ping Yan, Assistant Professor, Richard D. Berlin Center for Cell Analysis and Modeling

19. Investigating the Catalytic Properties of Mixed Metal Oxide Ceramics Using UV-Vis Spectroscopy
Danialy Athar ’24 (Molecular and Cell Biology, CLAS)
Host TIP Company: Nanoionix, Farmington TIP
Sponsor: UConn Technology Commercialization Services

20. Feasibility Study on Medication Reconciliation App Feedback from Pharmacy Team’s Perspective
Yesenia Contreras ’23 (Allied Health Sciences, CAHNR)
HRP Mentor: Thomas Agresta, Professor, Family Medicine and Center for Quantitative Medicine
   Delia Lin ’24 (Molecular and Cell Biology & Statistics, CLAS)
   HRP Mentor: Jennifer Garza, Assistant Professor, Medicine

22. Market Evaluation of a Novel Postbiotic to Treat Diabetes & Prediabetes in Pets
   Pritesh Kadu ’23 MBA (Business Analytics and Finance, BUS), UConn Hartford
   Host TIP Company: Bactana, Farmington TIP
   Sponsor: UConn Technology Commercialization Services

POSTER SESSION 2
12:30-1:30 pm

1. Plasma Sprayed Coatings to Improve Engine Efficiency
   Amy Weiss ’23 (Chemical Engineering, ENG)
   Host TIP Company: Solution Spray Technologies, Storrs TIP
   Sponsored by UConn Technology Commercialization Services

2. Buprenorphine-Assisted Treatment For Opioid Use Disorder: Impact of Psychiatric Disorder Severity on Substance Use Treatment Outcomes
   Jenna Polidoro ’23 (Physiology and Neurobiology, CLAS)
   HRP Mentor: Carla Rash, Associate Professor, Medicine

3. Demystifying Data: Making Your Insights Work for You
   Nayara Zainadine ’22 (Biomedical Engineering, ENG)
   Sponsor: UConn’s Louis Stokes Alliance for Minority Participation (LSAMP) Program
   Shruti Susarla ’25 (Biological Sciences, CLAS), TIP WiMSE Fellow (Women in Math, Science, and Engineering)
   Sponsor: UConn TIP and Technology Commercialization Services
   Host TIP Company: Unscrambl, Stamford TIP

4. Quantitative Model of Cellular Iron Regulation
   Jacob Sauerhoefer ’23 (Physics, CLAS)
   HRP Mentor: Pedro Mendes, Professor, Cell Biology & Director, Center for Cell Analysis and Modeling

5. Examining RUNX2 Expression during Odontoblasts Differentiation and Repair in Mouse Incisors
   Kaila Lujambio ’25 (Allied Health Sciences, CAHNR)
   HRP Mentor: Mina Mina, Professor, Pediatric Dentistry & Craniofacial Sciences

6. Asthma and Long-COVID Engagement that’s Fun and Impactful
   Aarush Kolli ’25 Pharm.D.
   Sponsor: School of Pharmacy
   Oliver Cloiseau ’24 (Nursing, NUR)
   Sponsor: School of Nursing
   Host TIP Company: Foottraffic Stats, Stamford TIP
7. SLO-1 and PCDR-1 Regulate Sleep Neuron RIS Activity in C. elegans
Juwon Kang ’24 (Biological Sciences, CLAS)
HRP Mentor: Zhao-Wen Wang, Professor, Neuroscience

8. Role of CD13 in Macrophage Fusion
Fraser McGurk ’25 (Molecular and Cell Biology, CLAS)
HRP Mentor: Mallika Ghosh, Assistant Professor, Cell Biology

9. CRISPR Gene Editing to Test the Function of DNA Mismatch Repair in Cancer-Associated Variants
Patrick Pagano ’25 (Allied Health Sciences, CAHNR)
HRP Mentor: Christopher Heinen, Professor, Medicine

10. Wave Aerospace Research Fellowship
Tasbita Ahmed ’24 (Chemical Engineering, ENG), TIP WiMSE Fellow (Women in Math, Science, and Engineering)
Host TIP Company: Wave Aerospace, Stamford TIP
Sponsor: UConn First Year Programs and Learning Communities

11. Localization of Cancer Stem Cells and Iodine Nanoparticle Labeling of Advanced Orthotopic Glioma Mice
Jessica Ortega ’23 (Pathobiology, CAHNR)
HRP Mentor: Henry Smilowitz, Associate Professor, Cell Biology

12. Parents’ Magnification of Children’s Negative Emotions: Ties to Children’s Depression and Anxiety
Yamini Pant ’23 (Psychological Sciences, CLAS)
HRP Mentor: Carolyn Greene, Assistant Professor, Psychiatry

13. Evolving Intrinsically Disordered Peptides for Biosensor Development
Aiden Reilly ’24 (Biomedical Engineering, ENG)
HRP Mentor: Yi Wu, Associate Professor, Genetics and Genome Sciences

Ryan Mercier ’24 (Computer Science, ENG), TIP Innovation House Fellow
Sponsor: UConn First Year Programs and Learning Communities
Varsha Rathore ’23 (Computer Science & Engineering, ENG)
Sponsor: School of Engineering
Host TIP Company: PatentPlus, Stamford TIP

15. The Effects of Acidic Challenge on Bone in Ex Vivo Models
Sydney Whittaker ’25 (Biological Sciences, CLAS)
HRP Mentor: Alix Deymier, Assistant Professor, Biomedical Engineering

16. Gene Regulation in Borrelia burgdorferi, the Lyme Disease Spirochete
Om Sinojia ’25 (Biological Sciences, CLAS)
HRP Mentor: Melissa Caimano, Associate Professor, Medicine

17. Handwarmer Heating System for CRISPR-Based Molecular Detection
Daniel Schreiber ’23 (Biomedical Engineering, ENG)
HRP Mentor: Changchun Liu, Associate Professor, Biomedical Engineering
18. Re-Envisioning Journalism through Digital Verification & Organization  
Siddarth Pai ’22 MS (Business Analytics and Program Management, BUS), UConn Hartford  
Sponsor: UConn Technology Commercialization Services

Nashwa Siddique ’22 (Management Information Systems, BUS)  
Sponsor: UConn Technology Commercialization Services  
Host TIP Company: Social Labs, Stamford TIP

19. Examining Event Related Potentials in Response to Affective Stimuli  
Sheela Tavakoli ’24 (Individualized: Behavioral Neuroscience, CLAS)  
HRP Mentor: Damion Grasso, Associate Professor, Psychiatry

20. Identifying Downstream Targets of P2X4R after Ischemic Brain Injury  
Kiana Klafter ’24 (Physiology and Neurobiology & History, CLAS)  
HRP Mentor: Rajkumar Verma, Assistant Professor, Neuroscience

21. A Remodeling-based Approach for Osteochondral Allograft Integrative Repair  
Arsalan Zaki ’25 (Physiology and Neurobiology, CLAS)  
HRP Mentor: Caroline Dealy, Associate Professor, Craniofacial Sciences, Cell Biology, Orthopedic Surgery, and Biomedical Engineering

22. Role of CNN2 in Acute Kidney Injury (AKI)  
Zachary Palanza ’23 (Molecular and Cell Biology, CLAS)  
HRP Mentor: Dong Zhou, Assistant Professor, Medicine

23. Reducing Carbon Footprints via NFTS  
Darius Stallone ’22 MS (Business Analytics and Program Management, BUS), UConn Stamford  
Host TIP Company: MetaCarbon, Stamford TIP  
Sponsor: School of Business

Abhiram Gunti ’24 (Computer Science, ENG)  
Host TIP Company: NoteworthyAi, Stamford TIP  
Sponsor: UConn Technology Commercialization Services
ACKNOWLEDGEMENTS

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We thank the University’s Interim President, Radenka Maric, for her sustained commitment to developing experiential learning opportunities for our students and to fostering creativity, innovation, and entrepreneurship in education and research.

The Office of Undergraduate Research wishes to thank the sponsors of the Health Research Program:

- Interim Provost Anne D’Alleva, Vice Provost Michael Bradford, Interim Vice Provost Amy Gorin, and the Office of the Provost
- Interim Vice President for Research, Innovation, and Entrepreneurship Pamir Alpay, Associate Vice President Michelle Williams, and the Office of the Vice President for Research
- Dean Bruce Liang and the UConn School of Medicine
- Dean Steven Lepowsky and the UConn School of Dental Medicine
- Associate Vice Provost Jennifer Lease Butts and Enrichment Programs

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- Interim Vice President for Research, Innovation, and Entrepreneurship Pamir Alpay and the Office of the Vice President for Research
- Mostafa Analoui, Executive Director, UConn Ventures, and Paul Parker and Margaret Feeney, Directors, Technology Incubation Program (TIP)
- Dean John Elliott and the School of Business
- Dean Kazem Kazerounian and the School of Engineering
- Dean Juli Wade and the College of Liberal Arts and Sciences
- Dean Indrajeet Chaubey and the College of Agriculture, Health, and Natural Resources
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Finally, we thank the student participants for their curiosity, enthusiasm, and commitment to deep engagement with their summer projects.
PRESENTER INDEX

Poster presenters are listed with their poster session number (PS1 for session 1 or PS2 for session 2) followed by their poster number. Short talk presenters are listed with their short talk session (ST1 for session 1 or ST2 for session 2). Please refer to the agenda for the timing of each session.

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