



2024 Fall Symposium
Friday, September 20
9:00AM

EVENT SCHEDULE



WELCOME

Dr. Vin Moscardelli

Director, Office of National Scholarships and Fellowships &
Coordinator of the Holster Scholar Program

(9:00 a.m.)

PANEL #1: ENGINEERING SOLUTIONS

(9:10 a.m.)

COFFEE BREAK

(9:50 a.m.)

PANEL #2: DATA, DIMENSIONALITY, AND LEARNING

(10:05 a.m.)

COFFEE BREAK

(10:45 a.m.)

PANEL #3: HOLSTER AT UCONN HEALTH – AN HONORS PARTNERSHIP

(11:00 a.m.)

CLOSING COMMENTS & THANKS

Dr. Jennifer Lease Butts

Associate Vice Provost for Enrichment Programs and
Director, UConn Honors Program

(11:45 a.m.)

PROGRAM

Panel #1: Engineering Solutions

LUCY HOMER

Characterization of Developmentally Downregulated Nfe2l3 in Retinal Ganglion Cell Survival and Axon Regeneration

KRISH BHUVA

Engineering Ceramic Ductility in Aluminum Oxide

THATCHER SLOCUM

Properties of High-Entropy Oxide Interfaces for Solid-State Battery Applications

Panel #2: Data, Dimensionality, and Learning

LUCY LIU

Measuring the Misplacement of Data from Multidimensional Scaling

ANSHUL RASTOGI

Reinforcement Learning to Optimize ICU Patient Mortality in an Interpretable Manner

ANNA KOPEC

Understanding Human Statistical Learning in Language Acquisition: Insights from Neural Networks

Panel #3: Holster at UConn Health – An Honors Partnership

VEDA REDDY

Understanding the Influence of Bone Marrow Endothelial Cells on Primary Human Megakaryocytic-Erythroid Progenitor Cell Fate

MACKENZIE ROBILLARD

A System to Investigate Combinatorial Dosage Sensitivity of X/Y Homologous Genes in Human iPSCs

KAVYA PODILA

Identification of Inflammatory Factors Contributing to Foaming in Atherosclerosis

Introducing the 2024 Holster Scholars



Krish Bhuva '27 (ENG), from Shrewsbury, MA, is a STEM Scholar majoring in materials science & engineering who intends to pursue graduate training in the engineering field. He has a broad range of interests in STEM which have been influenced by his prior experience as an intern for the Institute for Astrophysical Research at Boston University and the Gulf Coast Cardiology Group. Throughout high school, Krish spent his weekends balancing his work as an actor in commercials, voiceovers, and films with his commitment to running the family business. Since middle school, he has remained dedicated to social impact and continues to work for organizations like Project Just Because, Pan-Reformica, and his school's tutoring program. At UConn, he is the vice president of the Underwater Robotics Club, a member of the Beta Theta Pi Fraternity, and a participant on the Muay Thai team. In his free time, you may catch him out with his friends, reading a good book, or at the gym.

Project: Engineering Ceramic Ductility into Aluminum Oxide

Mentor: Prof. Bryan Huey, Dept. of Materials Science & Engineering





Lucy Homer '27 (CLAS & ENG), from West Hartford, CT, is pursuing a dual degree in molecular & cell biology and biomedical engineering, and intends to pursue graduate training in one of those two fields. In high school, she served as Chem4Kids president, vice-president and founding member of her school's chapter of CancerKidsFirst, and as a leader of Unified Theatre. Outside of school, she worked as a one-to-one camp counselor for children with special needs and as a staff member at her local elementary school's after-school program. Today at UConn, she serves as program director of UConn's Camp Horizons, treasurer of UConn's Hole in the Wall Gang Camp Club, and volunteers with Juniper Hills Assisted Living. Lucy hopes to find a way to use her knowledge of biology and engineering to better the lives of those with different abilities and those in the special needs community. In her spare time, Lucy loves going hiking, making friendship bracelets, and being with her friends and family.

Project: Characterization of Developmentally Downregulated Nfe2l3 in Retinal Ganglion Cell Survival and Axon Regeneration

Mentor: Prof. Ephraim Trakhtenberg, Dept. of Neuroscience (UCHC)





Anna Kopec '27 (CLAS) from Bethel, CT, is a cognitive science major focusing on artificial intelligence. In 2023, she graduated as the valedictorian of Immaculate High School. During her time there, she served as president of the Science National Honor Society and was an active member of the CyberPatriots team, Debate Team, and National Honor Society. Anna has received several awards for her academic performance, including first prize of the Angeles T. Arredondo STEM Scholarship, the 2023 Chester Lapinski Education Trust Scholarship, and the UConn Presidential Scholarship. During her junior year, she interned with Dr. Paola Vera-Licona at UConn Health, contributing to a paper on ensemble networks for computational fMRI analysis. An avid figure skater for 10 years, Anna is now a member of the UConn Figure Skating team. She is also passionate about art, winning gold and silver keys in the Connecticut Scholastic Art Awards, as well as having painted a mural for her town's local library. In her leisure time, Anna enjoys drawing, crocheting, playing video games, and reading science fiction novels.

Project: Understanding Human Statistical Learning in Language Acquisition: Insights from Neural Networks

Mentor: Prof. James Magnuson, Dept. of Psychological Sciences





Lucy Liu '27 (CLAS) from Mansfield, CT, is a STEM Scholar majoring in statistics. A graduate of Edwin O. Smith High School, Lucy was an officer of National Honor Society and the secretary of her school's Math Honor Society where she helped organize math tutoring. She was also a proud member of her school's Robotics team, Ocean Bowl team, Science Bowl and Science Olympiad teams. During high school, she discovered a passion for statistics and researched clustering methods. At UConn, she is the president of the Joint Statistical Club, and enjoys organizing and volunteering at statistics conferences. She is also the co-founder and vice president for the organization Science Olympiad at UConn, which seeks to host a UConn invitational to provide high school students more opportunities to engage in sciences. In her free time, Lucy enjoys singing, writing novels, drawing, and playing board games with her friends.

Project: Measuring the Misplacement of Data from Multidimensional Scaling

Mentor: Prof. Haim Bar, Dept. of Statistics





Kavya Podila '27 (PHARM), is a STEM Scholar and pharmacy major from Ridgefield, CT. In high school, she was an elected member of her class student government, a writer and layout editor for her school newspaper, a research analyst for the Ridgefield Commission on Aging, and graduated in the top 10 of her class. Through her school's Science Research program, she dedicated three years to designing and conducting a research project on the impact of Type 1 diabetes on the endocrine cells of the pancreas. Kavya is also a graduate in *Bharatanatyam* (Indian classical dance) after completing 13 years of training. At UConn, she raised money for Connecticut Children's Hospital leading up to Huskython, UConn's 18-hour dance marathon. Kavya is intrigued by the unknowns of human disease pathogenesis and plans to pursue a career in research. In her free time, she enjoys spending time with her friends and family, listening to music, and going on walks.

Project: Identification of Inflammatory Factors Contributing to Foaming in Atherosclerosis

Mentor: Prof. Beiyan Zhou, Dept. of Immunology (UCHC)





Anshul Rastogi '27 (ENG & CLAS), from Concord, NH, is a STEM and National Merit Scholar in the Special Program in Medicine pursuing a dual degree in computer science and molecular & cell biology. A graduate of the Virtual Learning Academy Charter School in NH, Anshul entered research via the NH Academy of Science and MIT PRIMES and was a fellow of the American Junior Academy of Science. He avidly tutored students in competitive mathematics and was on the math teams at the New Hampshire Technical Institute as well as Bishop Brady High School, where he was involved in the National Honor Society and served as chief co-editor of the arts and literary magazine. At UConn, Anshul serves as the *Undergraduate Science Journal's* head of web development and is a contributing artist in the *Long River Review*. He is also on the Special Program in Medicine/Dental Medicine's newsletter committees and in the art club. In his spare time, Anshul enjoys reading sci-fi/fantasy novels, writing poetry and short fiction, drawing and digital painting, and playing chess.

Project: Reinforcement Learning to Optimize ICU Patient Mortality in an Interpretable Manner

Mentor: Prof. Dongjin Song, Dept. of Computer Science & Engineering





Vedaamrutha Reddy '27 (CLAS), from Westwood, MA, is a STEM Scholar majoring in molecular & cell biology. In high school, Veda was a high honors student and a distinguished member of the National Honor Society, Tri-M Music Honor Society, French Honor Society (President), Chemistry Club (President), and Science Olympiad Team (Captain). Beyond academics, she was captain of the girls' varsity tennis team, a Girl Scout Ambassador, and a dedicated volunteer at her local dementia and Alzheimer's care center. Veda's research experiences at UT Southwestern and John Peter Smith (JPS) Hospital inspired her passion for healthcare, specifically in immuno-oncology and stem cell biology, where she contributed to projects on hereditary leiomyomatosis and renal cell cancer, urachal cancer, and hepatocellular carcinoma patient outcomes. At UConn, Veda is involved with Project Sunshine, Windham Hospital's volunteer program, Knit for NICU, and the UConn chapter of MedLIFE Movement. In her free time, you can find Veda on the courts, playing chess, or scrapbooking her latest adventures.

Project: Understanding the Influence of Bone Marrow Endothelial Cells on Primary Human Megakaryocytic-Erythroid Progenitor Cell Fate

Mentor: Prof. Vanessa Scanlon, Center for Regenerative Medicine & Skeletal Biology (UCHC)





Mackenzie Robillard '27 (CLAS), from Goshen, CT, is a molecular and cell biology major with a special interest in genetic research who intends to pursue a Ph.D. after graduating from UConn. Throughout her time at Wamogo Regional High School, she was secretary of the National Honors Society and Future Business Leaders of America. As a member of the FBLA, she placed in two statewide business competitions – journalism and cybersecurity – and competed nationally. In addition, she was captain of the swimming, field hockey, and tennis teams. At UConn, Mackenzie is a member of the Genome Ambassador Program, Canine Companions, marching band, and is a UNIV 1784 facilitator. In her free time, Mackenzie enjoys gardening, playing the saxophone, going for a swim, and spending time with her loving friends and family.

Project: A System to Investigate Combinatorial Dosage Sensitivity of X/Y Homologous Genes in Human iPSCs

Mentor: Prof. Stefan Pinter, Dept. of Genetics & Genome Sciences (UCHC)





Thatcher Slocum '27 (ENG), from West Hartford, CT, is a Stamps Scholar majoring in materials science and engineering and French. Thatcher attended Conard High School in West Hartford, where he was captain of its math and science teams. He enjoys teaching, having been a volunteer peer mentor and trumpet tutor at Braeburn Elementary and an instructor at Mathnasium. He is also passionate about nature, which combined with his interest in the sciences, drives him to pursue a career in materials research for energy applications to contribute to a more sustainable future. At UConn, Thatcher serves as Secretary of UConn's Material Advantage Chapter and Treasurer of UConn's Birding Club. He is a researcher in Dr. Alexander Dupuy's lab, which investigates the processing-property relationships of high-entropy ceramics and their applications to technologies such as batteries. Outside of academics, Thatcher enjoys hiking, birdwatching, reading, and spending time with friends and family.

Project: Properties of High-Entropy Oxide Interfaces for Solid-State Battery Applications

Mentor: Prof. Alexander Dupuy, Dept. of Materials Science & Engineering



ABOUT ROBERT & CARLOTTA HOLSTER



Robert Holster and Carlotta Detomaso Holster both entered UConn in 1964. Bob was a member of the inaugural cohort admitted to the Honors Program. They are proud Class of 1968 alums: Bob graduated with a B.A. in Economics and Carlotta graduated with a B.S. in Family Studies.

The Honors Program wishes to acknowledge and thank the Holsters for their enduring gift and its lasting impact on all Holster Scholars.



HOLSTER SCHOLARS THROUGH THE YEARS



2011



2012



2013



2014



2015



2016



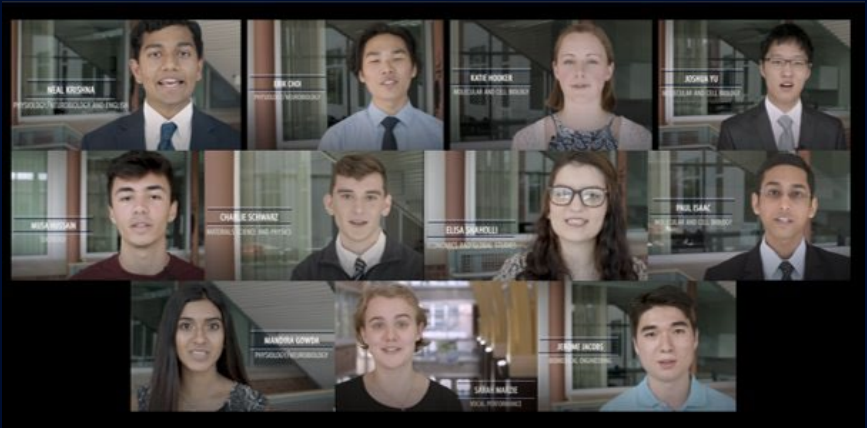
2017



2018



2019



2020



The 2021 Holster Scholars

(Credits: Defining Studios)

2021



2022



2023