

UNIVERSITY OF DELAWARE

UNDERGRADUATE RESEARCH PROGRAM

SYMPOSIUM FOR UNDERGRADUATE RESEARCH AND CREATIVE ACTIVITY



2025 Symposium for Undergraduate Research and Creative Activity¹

Harker ISE Lab

Thursday, August 14, 2025

8:30 a.m. – 5:00 p.m.

8:00 - 8:25	Poster Session I Set-Up	Commons
8:30 - 10:00	<i>Poster Session I</i> 8:30-9:15 (ODD-numbered posters present) 9:15-10:00 (EVEN-numbered posters present)	Commons
8:30 - 9:45	<i>Oral Session 1</i> 1. Caring for Communities: Research on Environmental and Social Interventions 2. Academic Inquiries into Displacement, Identity, and Collective Action 3. Music, Learning, and the Shaping of Culture	ISE 202 ISE 205 ISE 302
10:00 - 10:15	Switch Posters for Session II	Commons
10:15 – 11:45	<i>Poster Session II</i> 10:15-11:00 (ODD-numbered posters present) 11:00-11:45 (EVEN-numbered posters present)	Commons
10:00 - 11:15	<i>Oral Session 2</i> 1. Political Action, Rights, and Government Response 2. Exploring Sustainability, Identity, and Technology in Fashion 3. Material Culture Interdisciplinary Cohort 4. Exploring Justice System Practices and Their Impact 5. The Power of Art in Shaping Visual Narratives	ISE 202 ISE 205 ISE 207 ISE 302 ISE 305
11:30 – 12:45	<i>Oral Session 3</i> 1. Urban Renewal, Environmental Justice, and Social Narratives 2. Advancements in Chemical Engineering, Biochemistry, and Food Sciences 3. Technology, Gender, and Political Thought 4. Visual Communication in Shaping Identity and Society	ISE 202 ISE 205 ISE 207 ISE 302
11:45 - 12:00	Switch Posters for Session III	Commons
12:00 - 1:30	<i>Poster Session III</i> 12:00-12:45 (ODD-numbered posters present) 12:45-1:30 (EVEN-numbered posters present)	Commons
12:00 - 2:30	BOXED LUNCHES AVAILABLE Rodney Room - Perkins Student Center	

1:30 - 1:45	Switch Posters for Session IV	Commons
1:45 - 3:15	<i>Poster Session IV</i> 1:45-2:30 (ODD-numbered posters present) 2:30-3:15 (EVEN-numbered posters present)	Commons
2:00 - 3:15	<i>Oral Session 4</i> 1. Conservation, Craft, and Cultural Reconstruction 2. Studies in Psychology and Brain Sciences 3. Technology, Identity, and Social Impact 4. Exploring Identity, Memory, and Culture Through Art	ISE 202 ISE 205 ISE 207 ISE 302
3:15 - 3:30	Switch Posters for Session V	Commons
3:30 - 5:00	<i>Poster Session V</i> 3:30-4:15 (ODD-numbered posters present) 4:15-5:00 (EVEN-numbered posters present)	Commons
3:30 - 4:45	<i>Oral Session 5</i> 1. Narratives of Place, Memory, and Connection 2. Bridging Cultures: From Ancient Civilizations to Contemporary Poetics and Performance 3. Innovative Approaches in Youth Education and Healthcare	ISE 202 ISE 205 ISE 207
3:00-5:00	UD Creamery Ice Cream	Commons

¹Please pardon any misspellings or errors



August 2025

Dear Attendees of the 16th Annual Symposium for Undergraduate Research and Creative Activity,

It is my great pleasure to welcome you to this annual celebration of the research accomplishments of our talented young scholars.

Forty-two years ago, in the summer of 1983, I was an undergraduate researcher myself, participating in an NSF REU program at Woods Hole Oceanographic Institution. That experience profoundly shaped my career. It sparked my curiosity to advance the state of knowledge, gave me confidence to work both independently and collaboratively to solve complex problems, taught me how to communicate challenging concepts to others, and even led to my first journal publication. It is no exaggeration to say that my path to becoming an educator, engineer, and now Interim Vice Provost for Undergraduate Education and Dean of the Honors College began with that summer of research.

To our student presenters: I hope your research experience this summer has been equally transformative. Research can be challenging and unpredictable, but through those obstacles come growth—the art of persistence, the satisfaction of discovery, and the skills that will serve you in any future endeavor. We are all born as curious explorers, intently studying the world around us. By choosing to continue that pursuit of knowledge, you have taken steps toward a lifetime of problem-solving and innovation. Who knows what you will discover next, or how your work might one day benefit others?

To our mentors: Thank you for your invaluable guidance and encouragement. Your willingness to involve students in meaningful scholarly work sustains the long tradition of undergraduate research that is a hallmark of the University of Delaware. I hope the experience has been as rewarding for you as it has been for your mentees.

And to all of our attendees: thank you for being here to engage with our students' work. I hope you leave today as inspired and impressed as I always am by what our students can accomplish in just ten short weeks.

Cordially,

Michael Chajes, Ph.D., P.E.

Interim Vice Provost for Undergraduate Education

Dean of the Honors College

Professor of Civil, Construction, and Environmental Engineering



August 2025

Dear Friends of Undergraduate Research:

Welcome to the University of Delaware's 16th Annual Symposium for Undergraduate Research and Creative Activity. Over the past ten weeks, over 500 students have been engaged in conducting research projects across all academic disciplines. This Symposium empowers undergraduate students to share their research process, their ideas, or their creative work through poster or oral presentations.

Research and creative activity has the potential to illuminate shared human experiences, to provide answers to complex problems, to make groundbreaking discoveries. Throughout the summer, students have spent countless hours in research labs, libraries, design studios, field sites, and other settings developing their research and creative skills. This time spent out of the classroom is invaluable as it enhances interest and engagement in learning, provides a space to discover and explore students' passions, and can open new career pathways. Faculty members, graduate students, and industry partners played a critical role in students' research process by providing expertise and mentorship.

The summer programs that provide research opportunities for students and today's event would not be possible without the collaboration and support from extraordinary people and offices across campus. I especially want to thank the staff of the Undergraduate Research Program for making this event possible. Special gratitude is also due to faculty, mentors, staff, community partners, and donors who give generously of their expertise, time and resources to broaden our students' learning through research and creative activities.

The Symposium provides an opportunity to see the research and creative activity that is at the heart of learning experiences at the University of Delaware. On behalf of the Office of Undergraduate Research, thank you for joining us at the 2025 Symposium.

Sincerely,

Rosalie Rolón-Dow, Ph.D.
Faculty Director, Undergraduate Research Program
Associate Professor, College of Education and Human Development

Key:

Student last name, Student first name
(Program), Student major, University if other
than UD, Faculty advisor, Faculty advisor's
department
Project title

POSTER SESSION I

8:30 - 10:00AM

1. **Nunez, Sebastian** (DSU+UD Summer Engineering Research Experience), Electrical Engineering, Delaware State University, Aziz Banawi
Developing a Cost-Effective Prototype for Residential and Agricultural Desalination Using Vapor Condensation Technology
2. **Galindo, Wilkin** (DSU+UD Summer Engineering Research Experience), Electrical Engineering, Delaware State University, Ken Barner
SAM-Powered Object Removal in Ariel 3D Reconstruction
3. **Chavez, Galicia Juan Pablo** (DSU+UD Summer Engineering Research Experience), Computer Science, Delaware State University, Sunita Chandrasekaran
AI-Powered Security Scanning: Next-Generation Website Vulnerability Detection
4. **Beckford, Kioni-Lee** (DSU+UD Summer Engineering Research Experience), Engineering Physics, Delaware State University, Paul Imhoff
Evaluating the Impact of Biochar on Soil Functionality: Mitigating Runoff and Improving Water Retention in Compacted Roadside Soils
5. **Hinshaw, Bethany**, Bridgewater College, Nathan Lazarus, Electrical and Computer Engineering
Wearable Liquid Metal Haptics for Medical Applications
6. **Papili, Samantha** (Community Engagement Initiative), Health Behavior Science, Elizabeth Orsega-Smith, Health Sciences
Exergame Play and the Relationship to Psychosocial Factors in Older Adults
7. **Garcia, Joseth** (DSU+UD Summer Engineering Research Experience), Computer Science, Delaware State University, Satwik Patnaik
LoPher: SAT-Hardened Logic Embedding on Block Ciphers
8. **Lewis, Kamari** (McNair Scholars Program), Health Behavior Science, Elizabeth Orsega-Smith, Health Behavior & Nutrition Sciences
Exploring Physical and Cognitive Contributors to Virtual Bowling Scores in Senior Center Participants
9. **Amamio, Jimmart** (Community Engagement Initiative), English, Lois Stoehr, Art/Museum Studies
Milford Museums and Landmark internship experience
10. **Diaz, Mariel**, Rowan University, Nektarios Tsoutsos, Electrical and Computer Engineering
TUF-Luck: A Secure 3D Printing Bootloader
11. **Urbanavage, Abigail** (UD Envision), Pre-Veterinary Medicine, Benham Abasht, Animal and Food Science
Primer Design and PCR Optimization for High-Multiplex Long-Range Amplification
12. **McDine, Marissa** (INBRE), Communication, Jennifer Accord
Enhancing Communication at the Delaware Museum of Nature and Science

13. **Munson, Hope** (Advanced Research Projects Admin. and Department of Energy), Mechanical Engineering, Suresh Advani, Center for Composite Materials
Examining the Structural and Microscopic Differences of Carbon Fiber, Epoxy, and UV Resin Composites with Varying Resin Ratios and Compaction Levels
14. **Purdue, Russell** (Department of Energy), Mechanical Engineering, Suresh Advani, Center for Composite Materials
TBD
15. **Yaroch, Benjamin** (Department of Energy), Mechanical Engineering, Suresh Advani, Center for Composite Materials
PRODUCTION OF CARBON FIBER 3D PRINT FILAMENT WITH CONSISTANT FIBER LENGTH
16. **Nichols, Matthew** (Rochester Institute of Technology), Mechanical Engineering, Suresh Advani, Center for Composite Materials
EFFECT OF THERMOPLASTIC BINDERS ON INTERLAMINAR SHEAR STRENGTH OF ADDITIVELY MANUFACTURED THERMOSET COMPOSITES
17. **Fevrin, Alexander** (Summer Scholars Program), Mechanical Engineering, Suresh Advani, Mechanical Engineering
Composite Manufacturing and Material Processing
18. **Segura, Christopher** (U.S. Army CCDC Army Research Laboratory and Department of Energy), Mechanical Engineering, Suresh Advani, Center for Composite Materials
VARIATION OF UV-EPOXY RATIOS AND COMPACTION PRESSURES IMPACT ON PART CONSOLIDATION
19. **Bielewicz Levi** (Summer Scholars Program), Chemistry, Jocelyn Alcántara-García, Chemistry and Biochemistry
Single-sided NMR as a Tool for Non-invasive Oil Classification and Quality Control
20. **Chowdhury, Shayon** (Newark Charter), Mollav Ali, Center for Composite Materials
TBD
21. **Pallus, Sarah** (Delaware-INBRE Summer Scholar), Biochemistry, Ariel Alperstein, Chemistry and Biochemistry
Understanding the Impact of ATP on α B-crystallin's Chaperone Function
22. **Flaiz, Xavier** (Summer Scholars Program), Biochemistry, Ariel Alperstein, Chemistry and Biochemistry
Monitoring Cell-Plastic Interactions in Cultured Lung Cells through Raman Microscopy
23. **Culley, Magnus** (Summer Scholars Program), Computer Science, John Aromando, Computer and Information Sciences
Measuring the Application of Various Open Source AI Models for Intro Computer Science Course Integration
24. **Patel, Haiya and Layton, Emily** (Summer Scholars Program), Computer Science, John Aromando, Computer and Information Sciences
Enhancing Blackpy's Instructor Interface and Tools: Identification and Isolation of Key Data Points to Track Student Struggle
25. **Mans, Eric** (Saint Louis University), Austin Brockmeier, Electrical and Computer Engineering
Pinpointing EEG Components Spatial Origin from their Temporal Content
26. **Aubain, Angelina** (INBRE), Bio-Chemistry, Spelman College, Alfred Bacon
SER-109 (Vowst) in Prevention of Clostridioides Difficile in High-Risk Population

27. **Pang, Ethan** (Swarthmore College), Mohsen Badiey, Electrical and Computer Engineering
Passive Acoustic Monitoring for Fish Sounds in the Delaware Bay
28. **Nunez-Zavala, Jaime and Glass, Brendan** (Summer Scholars Program), Electrical Engineering, Mohsen Badiey, Electrical Engineering
M.A.R.S. Rx (Marine Acoustic Recording System)
29. **Andrade, Paige** (UD Envision), Pre-veterinary Medicine, Kali Kniel, Animal and Food Sciences
Surveillance of Zoonotic Bacterial Pathogens in Agricultural Environments
30. **Jones, Adia** (UD Envision), Pre-Veterinary Medicine, Harsh Bais, Plant and Soil Science
Role of Synthetic communities (SynCom) in ergothioneine uptake in plants
31. **Chen, Hannah** (CANR Summer Institute), Computer Engineering, Texas A&M University, Yin Bao, Plant and Soil Science
Ground-Based Robotic Phenotyping: Early Season Stand Counting
32. **Nguyen, Anh Van “Summer”** (Graduate College), Psychology, University of South Florida, Christina, Barbieri, School of Education
Parents’ Experience during Negative Life Events: How COVID-19 Stress and Perceived Impacts Predict Parent-Child Informant Discrepancies
33. **Nazari, Brishna** (Computer Information Sciences & INBRE), Computer Science, R. Leila Barmaki, Computer & Info Sciences
ACA in Action: A Personalized AI Companion for Alzheimer’s Support
34. **Blackburn, Logan** (Summer Scholars Program) Computer Engineering, Kenneth Barner, Electrical Engineering
Adapting 3D Gaussian Splatting for Photorealistic Drone Mapping
35. **Borodin, Evan** (Summer Scholars Program), Environmental Science, Chandranath Basak, Geological Sciences
Stable Carbon Isotopes as a Proxy for Bottom Water Oxygenation in the Labrador Sea
36. **Beringer, Victoria** (INBRE), Applied molecular biology and biotechnology, Mona Batish, Medical Molecular Sciences
Role of CircZNF609 in Ewing Sarcoma: Molecular Insights and Therapeutic Potential
37. **Bolanos, Andres** (Summer Scholars Program), Chemical Engineering, Alexandra Bayles, Chemical Engineering
Interfacial Behavior and Transport of PFAS-Analog Surfactants in Biomimetic Systems
38. **Danduri, Varsha** (INBRE), Computer Science, Rahmat Beheshti, Computer & Info Sciences
TBD
39. **Scholl, Meyer** (UD Envision), Chemistry and Plant Science, Jesus Beltran, Plant and Soil Science
Investigating the Influence of Temperature on Pollen Development and Tube Growth
40. **Yiournas-KneippZoe** (UD Envision), Agriculture and Natural Resources, Jesus, Beltran, Plant and Soil Science
Effect of Absciscic Acid (ABA) on Leaf Angle Modulation in Arabidopsis thaliana and Tomato (Solanum lycopersicum)
41. **Baker, Phoebe**, Plant Science, Alyssa Betts, PLSC
Investigating variation of zoospore production among Pythium graminicola isolates from DE corn fields
42. **Douglass, Matthew** (Biology & INBRE), Biological Sciences (BS), Jeremy Bird, Biology
Protecting E. coli Against T4 Bacteriophage Infection Using a

43. **Villa, Isabella** (INBRE) Applied Molecular Biology and Biotechnology Interest, Jeremy Bird. Biology
How the COX2 Promoter's Unique Sequence Affects the First Step of Mitochondrial Transcription Initiation
44. **Fletcher, Sean** (College of Health Sciences & INBRE), Honors Medical Diagnostics, Subhasis Biswas, Medical Molecular Sciences
Dissecting HPV Pathogenicity: An Integrated Machine Learning Framework to Identify Critical Oncogenic Features in the E1 Helicase
45. **Sajjad, Tayyaba** (Summer Scholars Program), Applied Molecular Biology and Biotechnology, Esther Biswas, Health and Exercise Sciences
Extraction and Optimization Experiments of the ABCA4 ECD1 Domain by Detergent and Affinity-Based Methods
46. **Alam, Hamza** (Summer Scholars Program), Chemical Engineering, Mark Blenner, Chemical Engineering
Split Aptamer-SENTR Integration: Conditional Gene Expression Through RNA Splicing
47. **Bedekar, Arnav** (Summer Scholars Program), Chemical Engineering, Mark Blenner, Chemical Engineering
Incorporation of Nonstandard Amino Acids and Development of a High-throughput Screen for Enzymatic Plastic Oxidation
48. **Gottlieb, Shirly** (Summer Scholars Program), Chemical Engineering, Mark Blenner, Chemical Engineering
*Optimizing Linker Length and Flexibility for Enhanced Surface Display in *Y. lipolytica**
49. **Nicosia, Jacob** (Summer Scholars Program), Chemical Engineering, Mark Blenner, Chemical Engineering
50. **Weissman, Andrew** (Summer Scholars Program), Chemical Engineering, Mark Blenner, Chemical Engineering
Development of a Tunable Genetic Fuse for Biocontainment
51. **Zdanowicz, Magdalena** (Summer Scholars Program), Applied Molecular Biology and Biotechnology, Mark Blenner, Chemical Engineering
Establishing a 3D Tumor Spheroid Co-Culture Containing TAMs for the Future Evaluation of CAR-M Polarization
52. **Robinson, Mackenzie** (Summer Scholars Program), Chemistry, Svilen Bobev, Chemistry and Biochemistry
The Synthesis and Characterization of NaCaSb
53. **Schaeffer, Caden** (Summer Scholars Program), Chemical Engineering, Arijit Bose, Physics and Astronomy
Determining plasma parameters from X-ray images in Inertial Confinement Fusion
54. **Alvarez, Camilo** (Summer Fellows), Economics, Thomas Bridges, Economics, Generational and Gender Differences in Discretionary Consumption Under Economic Precarity: Post-COVID Trends Among Gen Z
55. **Jacard, Martin** (Summer Fellows), Economics, Thomas Bridges, Economics
Subsidizing Inequality: The Socioeconomic Composition and Externalities of Greek Life
56. **Melanson, Samantha** (Summer Scholars Program), Wildlife Ecology Conservation Jeffrey Buler, Entomology and Wildlife Ecology
Nesting Activity and Behavior of the Diamondback Terrapin

57. **McKenna, Kaitlyn** (Summer Scholars Program), Neuroscience, Roxana Burciu, Kinesiology and Applied Physiology
Resting-State Functional Connectivity Changes in Prodromal Individuals Progressing to Parkinson's Disease
58. **Fields, Taryn** (INBRE), Human Physiology, Katie Butera, Physical Therapy
Higher MEP is associated with shorter stride length in adults with low back pain
59. **Bailey, Alexis** (INBRE), Public Health, Delaware State University, Kimberly Canter
TBD
60. **Farley, Virginia** (Summer Scholars Program), Marine Science, Aaron Carlisle, Marine Studies
*Mouth Gape of Facultative Ram Ventilating Sharks (*Squalus acanthias*) in Response to Increased Swim Speed*
61. **Ortiz, Amber** (Summer Scholars Program), Marine Biology, Aaron Carlisle, Marine Studies
*Do Atlantic Spiny Dogfish Share a Menu?: Exploring Intra-School Diet Variability of Atlantic Spiny Dogfish (*Squalus acanthias*) Through Stable Isotope Analysis*
62. **Binns, Desiree** (Summer Fellows), Biomedical Engineering, Joshua Cashaback, Biomedical Engineering
Continuous Reaching Reveals Real Time Decision Dynamics Under Sensory Uncertainty
63. **Charles, Farrah** (McNair Scholars Program), Health Behavior Science, Sheau Ching Chai, Health Behavior & Nutrition Sciences
Associations Between Added Sugar Intake and Bone Mineral Density in Postmenopausal Women
64. **Hutchinson, Alexander** (CHARM REU), Materials Science & Eng., Physics, Chitrleema Chakraborty, MSE, PHYS
A Facile and Deterministic Transfer Method for 2D van der Waals Heterostructures in Quantum Devices
65. **Nguyen, Anthony** (INBRE), Health Sciences, Clara Chan, Earth Sciences
*Defining Foundational Media Conditions for Enriching the Isolation-Resistant *Leptothrix ochracea**
66. **Jose, Angeline and Parks, Jasmine** (Summer Scholars Program), Neuroscience, Clara Chan, Biological Sciences
*Purification and characterization of metal-oxidizing proteins from *Leptothrix cholodnii* SP-6*
67. **Hou, Alex** (CUR), CHEG, Northwestern University, Wilfred Chen, CHEG
Immobilization of Ethanol Dehydrogenase on Encapsulin Nanoparticles
68. **Rowland, Madeline** (INBRE), Psychology and English, Williams College, Hungcheng Chen
Tattoo-less Radiation Therapy: Assessing Setup Accuracy with Surface Guided Imaging
69. **Chittakone, Samantha** (Summer Scholars Program), Environmental Engineering, Yu-Ping Chin, Civil and Environmental Engineering
Summer Scholars 2025: Stemflow-Groundwater Interactions in Mid-Atlantic Ghost Forests
70. **Kim, Ryan** (Summer Scholars Program), Environmental Engineering, Yu-Ping Chin, Civil and Environmental Engineering
Unraveling the Impact of Wildfire Smoke on Canopy-Derived Dissolved Organic Matter and Dissolved Black Carbon Dynamics
71. **Fadadu, Nova** (Summer Scholars Program), Mechanical Engineering, Gregory Chirikjian, Mechanical Engineering
YOLOv11 Model Comparison Using COCO128

72. **Singh, Ankit** (Pei C. Chiu Graduate Student Support Fund), Chemistry (biochemistry), University of North Carolina at Chapel Hill, Pei Chiu, Civil, Construction, and Environmental Engineering
The Capacity and Mechanism with which Microbes Interact with Biochar
73. **Armstrong, Navin** (INBRE), Neuroscience, Johns Hopkins University, Ho Ming Chow, Communication Sci & Disorders
TBD
74. **Marly, Aiden** (Summer Scholars Program), Statistics, Sebastian Cioaba, Mathematical Sciences
Disproving Conjectures in Spectral Graph Theory Using AI
75. **Neal, Kayla** (Graduate College), Biotechnology, James Madison University, Deb Jaisi, Plant & Soil Science
Recycling Cow Bone Wastes for Novel Slow-Release Phosphorus Fertilizer
76. **Dennis, Kyle** (Summer Scholars Program), Environmental Science, Vaishnavi Tripuraneni, Environmental Science
Inequities in the urban environment - tree canopy cover and redlining in Wilmington, DE
77. **Salako, Olumuyiwa** (Summer Scholars Program), Operations Management, Edward Hartono, Operations Management
The Evolution of Business Analytics in Big Corporations
78. **Bossard, Xen** (Summer Scholars Program), English, Mahasveta Barua, English

An Analysis of the Effectiveness of Delaware's MLL Strategic Plan

79. **Anokye, Roselyn** (DSU+UD Summer Engineering Research Experience), Engineering Physics: Bioengineering, Delaware State University, Bill Sharfarman
Quantifying Pinhole Defects in CdTe Thin Films for Solar Cell Applications

POSTER SESSION II 10:15 - 11:45AM

1. **Donovan, Peyton** (CHARM REU), Mechanical Engineering, University of Maryland Baltimore County, Comes Ryan, MSE
Potential real-time optimization of thin film synthesis via RHEED machine learning
2. **Oulkar, Pratima** (INBRE/EDH Summer Scholars), Biomedical Engineering, Stephanie Cone, Biomedical engineering
Wearable Mechanical Stimulators and Shear Wave Tensiometry Devices for Improving Tendon Function and Recovery
3. **Cooke, Ashley** (INBRE), Nursing, Lauren Covington, Nursing
TBD
4. **Saylor, Ethan** (Community Engagement Initiative), Art, Jon Cox, Robyn O'Halloran, Art
Animated Ghost Storytelling
5. **Hayes, Kayla** (Cooperative Extension), Human Development and Family Sciences Gina Crist, Cooperative Extension
Understanding Current Family Learning Needs: Human Development and Relationships

6. **Sharett, Ava** (CANR Summer Institute), Environmental Science, Spelman College, Michael Crossley, Entomology and Wildlife Ecology
Effect of Food Waste Composition on Growth of Black Soldier Fly Larvae at UD's Upcycling Site
7. **Plumitallo Jessica** (ENWE Summer Scholars), Insect Ecology & Conservation (minor in Landscape Horticulture), Michael Crossley, Entomology and Wildlife Ecology
Monitoring the Migration of Pest Species Over Delaware from Suction Trap Data
8. **Antoszewski, Trinity** (ENWE Summer Scholars / UD Envision), Insect Ecology & Conservation (minor in Environmental Soil Sciences), Michael Crossley, ENWE
"Who's that nematode?" Morphological identification of slug-associated nematodes in the Mid-Atlantic US
9. **Heintzelman, Elizabeth** (INBRE Animal Bioscience), Michael Crossley, Entomology and Wildlife Ecology
Monitoring human pathogens in insects farmed on food waste
10. **Harrison, Todd** (UD Envision Animal Science), Pennsylvania State University, Michael Crossley, Entomology and Wildlife Ecology
*Black soldier fly (*Hermetia illucens*) larvae used to break down food waste attract abundance of blowflies (*Diptera: Calliphoridae*), but are not negatively affected by their presence*
11. **Dominguez Coterio, Elizabeth** (McNair Scholars Program), University Studies, Sambaeta Das, Mechanical Engineering
TBD
12. **Bell, Teri** (INBRE), Biology, Psychology Delaware State University, Kim Davidow
TBD
13. **Mehta, Simran** (UD Envision), Environmental and Resource Economics, Kelly Davidson, Applied Economics and Statistics
Subsidized Insurance Use and Floodplain Location: Exploring Prevented Planting Among Agricultural Landowners
14. **Replogle, Timothy** (Summer Scholars Program), Mechanical Engineering, Chelsea Davis, Mechanical Engineering
Fast Track Restoration
15. **Bryant, Jared** (DSU+UD Summer Engineering Research Experience), Information Technology, Delaware State University, Yixiang Deng
Key Cellular Measurements for Accurate Breast Tumor Classification
16. **Li, Winnie** (INBRE), Computer Science, Yixiang. Deng, Computer & Info Sciences
TBD
17. **Lange, Ryan** (DEI), CHEG, Vlachos Dionisios, CHEG
Tuning Oxygen Functionalities in Carbon for Enhanced Microwave-Assisted Catalysis
18. **Roberts, Elisabeth** (DEI), CHEG, Vlachos Dionisios, CHEG
Effects of Branching on Polyethylene Adsorption on Catalyst Surfaces
19. **Tolocka, Ashley** (DEI), CHEG, Vlachos Dionisios, CHEG
Pretreatment of Polyamide-6 Multilayer Films by Hydrolysis over TiO₂ to Enable Hydrocracking Deconstruction
20. **Castle, Lucas** (Army Research Laboratory), Computer Science, Sagar Doshi, Center for Composite Materials
TBD
21. **Joseph, Scilla** (National Science Foundation and Department of Energy), Mechanical Engineering, Sagar Doshi, Center for Composite Materials
TBD

22. **Szulc, Olivia** (Arts & Sciences & INBRE), Biological Sciences (BS) & Psychology (BA), Mary Dozier, Psychological & Brain Sciences
Parental Sensitivity as Related to Infant Hippocampal and Amygdala Volume
23. **Bordelon, Lily** (INBRE), Psychology Mary Dozier, Psychological & Brain Sciences
The Association Between Parental Intrusiveness and Friendship Quality in Adolescence
24. **Steinman, Evelyn** (Mentor & INBRE), Psychology, Mary Dozier, Psychological & Brain Sciences
Cascading Effects of Maternal Emotional Neglect on Parenting and Child Outcomes
25. **Neyra, Madelynn** (Summer Scholars Program), Neuroscience, Mary Dozier, Psychology
Parental Sensitivity Moderates the Association Between Cortical Thickness and Depressive Symptoms
26. **Billings, Anna** (INBRE), Nutrition and Medical Sciences, Wayne Duffus
TBD
27. **Mast, Isabelle** (UD Envision), Animal Biosciences, Aditya Dutta, Animal and Food Science
Investigating Proteomic Master Regulators to Enhance Reproductive Efficiency in Broiler Breeders
28. **Ortega, Esmeralda** (Graduate College), Psychology, University of California, Berkeley, F. Sayako Earle, Communication Sciences & Disorders
The Impact of Sleep on Executive Function: Exploring the Roles of Stress and Chronotype
29. **Gaeta, Natalie** (Summer Scholars Program), Biomedical Engineering, Dawn Elliott, Biomedical Engineering
Evaluating Intervertebral Disc Geometry using Magnetic Resonance Imaging
30. **Bonelli, Hailey** (ART Summer Scholar), Biomedical Engineering, Dawn Elliott, Biomedical Engineering
The effect of sex differences on tendon mechanics following overload
31. **Kalb, Isabella** (CANR Unique Strengths), Wildlife Ecology and Conservation, Vincenzo Ellis, Entomology and Wildlife Ecology
Borrelia burgdorferi prevalence and ectoparasite diversity in white-footed mice
32. **Hess, Jenna** (Summer Scholars Program), Chemical Engineering, Thomas Epps, Chemical Engineering
Leveraging the anion-binding ability of lignin-inspired compounds to enhance Li⁺ transference number in solid polymer electrolytes
33. **Hegge, Ian**, CHEG, Thomas Epps, CHEG
Toward Predictive Structure–Depolymerization Relationships in Polyesters
34. **Tavares, Devin**, CHEG, Thomas Epps, CHEG
Understanding the Influence of Structural Sugar Content on Product Yields in a Forest Residue Biorefinery
35. **Pham, Laura**, Chemical Engineering, Thomas Epps, Chemical Engineering
The effect of thickness on conductivity of Nafion-based blend membranes
36. **Mahugu, Arielle** (University of Delaware Research Foundation), Biological Sciences Ibra Fancher, Kinesiology & Applied Physiology
Visceral Adipose Tissue-Derived Fatty Acids Impair Endothelial Kir2.1 Channels in Obesity
37. **Higginson, Charlotte** (Summer Scholars Program), Human Services, Heather Farmer, Human Services

Discrimination as a Psychosocial Risk Factor for Multimorbidity: A Literature Review Centered on the Health of Black Adults

38. **Szelestei, Logan** (McNair Scholars Program), Human Services, Psychology
Heather Farmer, Education & Human Development
Lifetime Trauma and Purpose in Life Among Older Adults
39. **Sobet, Gem** (McNair Scholars Program), Political Science, Alicia Fontnette, Africana Studies
The Politics of Today's Traditional Womanhood: Empowerment or Oppression?
40. **Maletta, Gabriella** (INBRE), Human Physiology and Medical Scholars, Velia Fowler, Biology
Identification and Localization of Septins in Human Erythroblasts
41. **Brenner, Benjamin** (Summer Scholars Program), Biochemistry, Joseph Fox, Chemistry and Biochemistry
Stereoselective Alpha Alkylation of Trans-Cyclooctene and Analysis of Conditions-Dependent Product Ratios
42. **Sergi, Sarah** (NIH), CHEG, Cathy Fromen, CBE
Development of Photodegradable PEG-based Nanoparticles to Investigate Macrophage Survival
43. **Akala, Vilina** (Summer Scholars Program), Biomedical Engineering, Catherine Fromen, Chemical Engineering
Optimizing Magnetic Bead Capture to Analyze Inflammatory and Anti-Inflammatory Extracellular Vesicles
44. **Anilkumar, Adhya** (Summer Scholars Program), Biomedical Engineering, Catherine Fromen, Chemical Engineering
Characterization of Bacteriophage and Macrophage Interactions for Applications in Pulmonary Therapeutics
45. **Svenson, Ryan** (Summer Scholars Program), Chemical Engineering, Catherine Fromen, Chemical Engineering
ECM-mimetic Peptides to Modulate Human Macrophages
46. **Thomas, John** (Summer Scholars Program), Chemical Engineering, Catherine Fromen, Chemical Engineering
Generating Realistic Breathing Profiles for the TIDAL Model
47. **Sherwood, Emerson** (INBRE), Marine Sciences, Concentration in Marine Biology
Jeff Fuhrmann, Plant & Soil Sciences
TBD
48. **Barone, Francesco** (Summer Scholars Program), Chemical Engineering, Eric Furst, Chemical Engineering
Passive Microrheology on a Phone
49. **Stare, Dylan** (Summer Scholars Program), Chemical Engineering, Eric Furst, Chemical Engineering
Interaction of Coiled Coil Peptides
50. **Morrell, Chandler** (McNair Scholars Program), Neuroscience, Psychology, Philip Gable, Psychological and Brain Sciences
Neurological Similarities in Incentivized Goal-Pursuit Between College-Aged Young Adults and Addicts in Recovery
51. **Wehner, Marian** (INBRE), Biological Sciences, Deni Galileo, Biological Sciences
The Impact of Sublethal Doses of Radiation on Behavior and Marker Expression in Glioblastoma Stem Cells
52. **Shuhay, Matthew** (INBRE), Biological Sciences, Deni Galileo, Biology
Investigating FGFR and FAK Signaling in Glioblastoma Stem Cells
53. **Cooper, Caroline** (Summer Scholars Program), Mathematical Sciences, Mahya Ghandehari, Mathematical Sciences
Limit Structures and Quantum Games

54. **Chesley, Aeila** (INBRE), Applied Molecular Biology and Biotechnology, Arit Ghosh, Bio-Imaging Center
TBD
55. **Southwick, Ashton** (Summer Scholars Program), Physics, John Gizis, Physics and Astronomy
Time Series Analysis of a Flaring L-Dwarf: WISEP J190648.47+401106.8
56. **McKeown, Victoria** (INBRE), Biomedical Engineering, Jason Gleghorn, Biomedical Engineering
Modeling Flow-Induced Deformation of Hydrogel Stromal Compartment in a Microphysiological Device
57. **Ngo, Dylan** (INBRE), Liberal Studies (Medical Scholars Concentration), Jason Gleghorn, Biomedical Engineering
Engineering immunomodulatory capacity on lymph node-targeted drug delivery carriers
58. **Cruz, Agnes** (McNair Scholars Program), Biological Sciences, Jason Gleghorn, Biomedical Engineering
TBD
59. **Maniyatte, Aaron** (Summer Fellows), Biomedical Engineering, Jason Gleghorn, Biomedical Engineering
TBD
60. **Buckley, Emily** (Summer Scholars Program), Biological Sciences, Jason Gleghorn, Biomedical Engineering
Validating an In Vitro Controlled Membrane Buckling Platform to Study Gut Physiology
61. **Chatfield, Ryann** (Summer Scholars Program), Biomedical Engineering, Jason Gleghorn, Biomedical Engineering
Investigating Alginate Loading and Release Kinetics for Controlled Delivery Applications
62. **Cybyk, Lydia** (Summer Scholars Program), Biomedical Engineering, Jason Gleghorn, Biomedical Engineering
Controlled Membrane Buckling to Pattern Complex Epithelial Morphology in Microphysiological Systems
63. **Desai, Harsh** (Summer Scholars Program), Biomedical Engineering, Jason Gleghorn, Biomedical Engineering
Optimizing Primary Cell Membrane Isolation for Improved Biomimetic Drug Delivery Technology Manufacturing
64. **Peleg, Tamar** (Summer Scholars Program), Applied Molecular Biology and Biotechnology, Jason Gleghorn, Biomedical Engineering
Protify: a Low Code Protein Property Prediction Tool – Subcellular Localization and Taxonomy Case Studies
65. **Mey, Kara** (Community Engagement Initiative), Cognitive Science, Roberta Golinkoff, Education
Hocus Pocus, The Magic of Language in Focus: A Language Sciences Outreach Program for Elementary School Children
66. **Orzelowski, Jessica**, Kinesiology, Karin Gravare Silbernagel, Physical Therapy
Achilles Tendon Morphology and Symptom Severity at the Insertion with Injury
67. **Mochache, Joy** (AHA), Nutrition and Medical Sciences, Jody Greaney, Health Behavior and Nutrition Sciences
Rapid onset blood pressure reactivity to acute stress in young adults with major depressive disorder
68. **Miller, Conor** (INBRE), Biomedical Engineering, Neel Greer
Using shotgun metagenomics to sequence a human serum sample from an unsolved public health case
69. **Friedman, Dylan** (UD Envision), Pre-veterinary Medicine, Tanya Gressley, Animal and Food Science

70. **Dunn, Jarrod** (Summer Scholars Program), Mathematical Sciences, Dominique Guillot, Mathematical Sciences
Positive Definite Functions over Finite Fields
71. **Christine, Parrish** (CHARM REU), Chemical Engineering, Chemistry, University of Tulsa, Lars Gundlach, CHEM, PHYS
Precise Calibration of THz Electric Field amplitude and Application to Novel Materials Characterization
72. **Downs, Kathleen** (Mentor & INBRE), Kinesiology, Jocelyn Hafer, Kinesiology & Applied Physiology
Gait and Fatigue in Response to Walking in Knee Osteoarthritis
73. **O'Cain, Jonluke** (Summer Scholars Program), Marine Biology, Edward Hale, Marine Studies
Comparing Epibiont Recruitment Adjacent to Oyster Aquaculture and Natural Habitat in Delaware Bay, USA
74. **Wilen, Kayla** (UD Envision), Landscape Architecture, ZachHammaker, Plant and Soil Science
Designing Resilience: A Community Framework for Greening the Route 9 Corridor
75. **Moore, Jada** (DSU+UD Summer Engineering Research Experience), Engineering Physics: Bioengineering, Delaware State University, Michael Hast
Additive Manufacturing of PCL Scaffolds for Bone Regeneration
76. **Whitcomb, Jackson** (Industry Summer Scholar), Landscape Architecture, Anna Wik
Riverview Cemetery 5-Year Plan
77. **WABUKOYA, SONIA** (DSU+UD Summer Engineering Research Experience), ELECTRICAL ENGINEERING, Delaware State University, Monique Head
Thermal Behavior Monitoring of Microplastic-Embedded Concrete Using Raspberry Pi and Digital Sensors
78. **Sabir, Aleena** (Industry Summer Scholar), Landscape Architecture, James Zimmerman
Developing a Framework for Campus Landscape Management Planning
79. **Baker, Jacob** (Summer Scholars Program), Computer Engineering, Steven Hegedus, Electrical Engineering
Study of Degradation in Electrical Conductivity of Carrier Transport Materials for Perovskite Solar Cells
80. **Horn, Amelia** (Industry Summer Scholar), Landscape Architecture, James Zimmerman
Blending Ecology and Design: Creating a Woodland Fern Garden
81. **Benitez-Cruz, Maribel** (Summer Scholars Program), Computer Engineering, Steven Hegedus, Computer Engineering
Evaluating Perovskite Solar Cell Stability Through J-V Testing and Light Soaking Analysis
82. **Ramos, Eddiel** (Center for Plastics Innovation), Chemical Engineering, University of Puerto Rico- Humacao, Emil Hernandez-Pagan, Chemistry and Biochemistry
Polymorph selectivity through halide precursors in the synthesis of metal chalcogenides nanomaterials
83. **Azato, Nina** (Summer Scholars Program), Chemistry, Emil Hernández-Pagán, Chemistry and Biochemistry
Colloidal Synthesis and Characterization of κ -In₂Se₃
84. **Adodoadji, Patience**, Department of Chemistry & Biochemistry, Environmental

Science, Emil Hernández-Pagán, Chemistry and Biochemistry

Converting Glycerol into Added-Value Products using Electrochemistry and Metal Oxide Catalysts

85. **Génesis, Arroyo-Santana** (CHARM REU), Chemistry, University of Puerto Rico - Río Piedras, Emil Hernandez-Pagan, CBEMSE

Synthesis of Colloidal Inorganic Nanocrystals for Broadband Light Harvesting in Organic/Inorganic Hybrid Systems

86. **Diego, Castillo-Mora** (CHARM REU), Chemistry, University of Puerto Rico - Río Piedras, Emil Hernandez-Pagan, CBEMSE
Functionalized Interfaces for Hybrid Photocatalytic Materials

87. **Broussard, Alessandra** (Education Human Dev & INBRE), Biological Sciences (BS) and International Relations, Allison Karpyn, Human Development
Reducing Food Stigma Through Community-Centered Pantry Practices

88. **Duggal, Mikul** (IEDH), Neuroscience, Michael, Hast, Mechanical Engineering
Markerless Motion Tracking Effectively Quantifies Gait Kinematics in Canines with Cranial Cruciate Ligament Repairs

Correlates of Self-Care Behaviors in Adults with Heart Failure: A Secondary Analysis of 2021-2023 NHANES Data

3. **Riley, Amber** (Graduate College), Public Health, West Chester University, Jennifer Horney, Epidemiology
Frontline Perspectives: WIC Clinic Emergency Preparedness Following Hurricane Helene
4. **Fay, Jacob** (CANR Unique Strengths), Wildlife Ecology and Conservation, Alex Huddell, Plant and Soil Science
Testing a non-destructive method for estimating corn nitrogen uptake
5. **Kery García, Naomi** (Center for Plastics Innovation), Chemical Engineering, Polytechnic University of Puerto Rico, Marianthi Ierapetritou, CBE
Simulation and Quantification of a Novel PU Recycling Process
6. **Billbrough, Cole** (INBRE), English, Chijioke Ikomi
TBD
7. **Kikuchi, Moe** (CANR Summer Institute), Cellular and Molecular Biology and Global Health, DePauw University, Deb Jaisi, Plant and Soil Science
Assessment of Phosphorus Adsorption and Desorption Characteristics on Micronutrient Doped Biochar
8. **Yeargan, Cate** (UD Envision), Chemistry (Environmental Concentration), Deb Jaisi, Plant and Soil Science
Exploring the mechanisms of phosphorus uptake and recycling in soils using the stable isotope labeling technique
9. **Hoffman, Celia**, Ecology and Evolution, University of Pittsburgh, Deb Jaisi, Plant and Soil Sciences
Effects of Land Use on Soil Phosphorus Fractions in the Florida Everglades

POSTER SESSION

III

12:00 - 1:30PM

1. **Monroe, Kaeden** (Summer Scholars Program), Mechanical Engineering, Jill Higginson, Mechanical Engineering
Magnitude and Timing of Smart Sensor Loads During Walking
2. **Thomas, Rachel** (INBRE), Nursing, Chris Hoch, Nursing

10. **McGrane-Moffitt, Nolan**, Grinnell College, Jamie Phillips, Electrical and Computer Engineering
Material Parameters and Device Models for Thermoradiative Energy Conversion
11. **Lugo, Victoria** (McNair Scholars Program), Psychology, English, John Jeka, Kinesiology & Applied Physiology
Effects of Transcranial Photobiomodulation on Motor Symptoms in Individuals with Parkinson's Disease – A Pilot Study
12. **Hofstetter, Sydney** (CHARM REU), Chemical Engineering, University of Maryland Baltimore County, Xinqiao Jia, BISC, BME, MSE
Bioorthogonal Polymerization of Coiled-Coil Bundlemer Peptides and Elastin-Like Peptides to introduce thermal responsiveness into the hybrid copolymer
13. **Bischoff, Meggan** (Summer Scholars Program), Neuroscience, Curtis Johnson, Biomedical Engineering
Using Magnetic Resonance Elastography to Characterize Tissue Mechanics of the Aging Rodent Brain
14. **Caridi, Abigail** (Summer Scholars Program) Biomedical Engineering, Curtis Johnson, Biomedical Engineering
MRE Use in Skeletal Muscle Biomechanical Property Characterization
15. **Penna, Kaelin** (Summer Scholars Program), Biological Sciences, Curtis Johnson, Biomedical Engineering
Exploring Hippocampal Changes in Ovariectomized Rats using Magnetic Resonance Elastography
16. **Cunningham, Jessica and Vitz, Connor** (Summer Scholars Program), Computer Science, Nazim Karaca, Computer and Information Sciences
Analyzing Content Validity of Exams in Introduction to Computer Science I
17. **Arora, Daivik** (Biology & INBRE), Biological Sciences, Austin Keele, Biology
How do neurons mature? Discerning factors that control the development of somatosensory neurons.
18. **Marovich, Justin** (INBRE), Biological Sciences, Austin Keeler, Biology
TBD
19. **Varshney, Aadi** (Summer Fellows), Biological Sciences, Austin Keeler, Biological Sciences
Investigation of Sexually Dimorphic Cold-Induced Nociception and Response using Cold Allodynia Assays in Mice
20. **Snouffer, Lily** (Mentor & INBRE), Biological Sciences, William Kenkel, Psychological & Brain Sciences
TBD
21. **Seth, Brielle** (Summer Fellows), Neuroscience, William Kenkel, Neuroscience
Methodological studies assessing context-dependent conditioning in prairie voles
22. **Tran, Rachel** (Summer Scholars Program), Biomedical Engineering, Will Kenkel, Psychology
Using Implantable Radiotelemetry to Assess Energy Balance in Rats Delivered by Cesarean Section
23. **Park, Somin** (Summer Scholars Program), Biomedical Engineering, Chi Keung, Biological Sciences
HAX-1 Fragment Improves Cardiomyocyte Survival Upon ER and Oxidative Stresses
24. **Zhang, Cynthia** (Summer Scholars Program), Neuroscience, Chi Keung, Biological Sciences
Designing an Interfering Peptide to Improve Cardiac SERCA Activity By Targeting Hsp90-HAX-1 Interaction
25. **Lyons, Grace** (Summer Scholars Program), Neuroscience, Anna Klintsova, Neuroscience

Single Day Developmental Alcohol Exposure in a Rodent Model of FASD May Reduce Perineuronal Net Density in the Thalamic Reticular Nucleus

26. **Herrera Galvez, Lisandro** (CHARM REU, Biochemistry, California State University Dominguez Hills, April Kloxin, Engineering
Thermoresponsive Resilin-Coiled Coil Fusion Proteins for Programmable Self-Assembly
27. **Marshall, Kalein** (CHARM REU), Biochemistry, University of New Hampshire, April Kloxin, Engineering
Influence of fabrication strategy on PEG microgel size, polydispersity, and release behavior
28. **Nilaj, Katherine** (CHARM REU), Chemistry, Music, University of Central Florida, April Kloxin, Engineering
Synthesis and Purification of Responsive Peptides for Bottlebrush Construction
29. **Harritty, Brian**, Materials Science and Engineering, April Kloxin, Engineering
Peptide Synthesis for Hydrogel Biomaterials
30. **Montagne Simran** (Summer Scholars Program), Materials Science and Engineering, April Kloxin, Engineering
Characterizing Mechanical Changes in Hydrogels Induced by Drying and Rehydration Processes
31. **Moore, Caroline** (Summer Scholars Program), Materials Science and Engineering, Christopher Kloxin, Materials Science
Effect of Substrate Moisture and Polymer Composition on Pull-Off Adhesion Strength
32. **Carson, Sarah** (Center for Plastics Innovation), Applied Mathematics, LaShanda Korley, CBE and MSE
Modeling Chain Scission Mechanisms for Predictive Plastic Degradation
33. **Jones, Jayla** (CHARM REU), Biomedical Engineering, LaShanda Korley, CBE, MSE
Peptide-polyurea hybrids: An emerging strategy for functional materials with tunable architecture
34. **Colan Morillo, Alondra** (INBRE), Biological Sciences, Delaware Tech Comm College, Kelley Kovatis
Breathing Patterns in Infants Before and After Extubation
35. **Pheris, Julianne** (Biology & INBRE), Biological Sciences, Amber Krauchunas, Biology
TBD
36. **Aitken, Grace** (INBRE), Biological Sciences, Amber Krauchunas, Biology
Investigating the Role of Genes Y53F4B.9 and C01G12.9 in C. elegans Fertility Defects
37. **Sekowski, Benjamin** (INBRE), Biology, Amber Krauchunas, Biology
Importance of Copa-1 in reproduction
38. **Davidson-Hawes, Zoe** (INBRE), Psychology, Jennifer Kubota, Psychological & Brain Sciences
Interracial Contact Training Shapes Face Recognition
39. **Phan, Nathan** (Center for Plastics Innovation), Chemical Engineering, Ohio State University, Aditya Kunjapur, CBE
TBD
40. **Buddhikot, Anoushka** (Summer Scholars Program), Chemical Engineering, Aditya Kunjapur, Chemical Engineering
Kinetic Characterization of L-threonine Transaldolases with Enhanced Affinity for L-threonine
41. **Jang, Jae June** (Summer Scholars Program), Chemical Engineering, Aditya Kunjapur, Chemical Engineering
Determining Conserved Residues for OMeY Incorporation in Essential Genes

42. **Rogers, Braden** (Summer Scholars Program), Chemical Engineering, Aditya Kunjapur
Non-Standard Amino Acid Incorporation into Surface-Displayed Bacterial Epitopes
43. **Taylor, William** (Summer Scholars Program), Mathematical Sciences, Deniz Kutluay, Mathematical Sciences
Knot Recognition via Machine Learning
44. **LaSalle, Caroline** (Summer Scholars Program), Biomedical Engineering, Brian Kwee, Biomedical Engineering
Amphiregulin-Releasing Hydrogels for Treating Ischemic Muscle Injuries
45. **Martin, James** (Summer Scholars Program), Medical Diagnostics, Brian Kwee, Biomedical Engineering
Tissue Engineering Strategies for Improved Muscle Regeneration
46. **Akins, Kayla** (UD Envision), Pre-veterinary Medicine, Brian Ladman, Animal and Food Science
Characterization of Contemporary Newcastle Disease Virus Field Isolates
47. **Jefferson, Kira** (McNair Scholars Program), Cognitive Science, Alyssa M. Lanzi, Communication Sciences & Disorders
Assessment of Lexical Markers in Older Black/African American Adults at Risk for Alzheimer's Disease
48. **Marquez-Henriquez, Kel** (Education Human Dev & INBRE), Communications and Women and Gender Studies, Eric Layland, Human Development
A Preliminary Step: Exploring the Intersection of LGBTQ+ and Latinx Identity
49. **Saxon, Shawn** (Summer Scholars Program), Computer Engineering, Nathan Lazarus, Electrical Engineering
Technological Innovation & Entrepreneurship for those with Disabilities
50. **Ng, Angelina** (Health Sciences & INBRE), Health Behavior Science, Daehyoung Lee, Behavior Health & Nutrition
Characteristics of Mobile App Use and Preferences for Mobile Health to Promote Physical Activity Among Autistic Adults: a Conventional Content Analysis
51. **Ondobo, Ian** (INBRE), Pre-Medical, University of Connecticut, Marshala Lee-McCall
Evaluating the Impact of a Medical School Pathway Program: A Three-Part Study of the Harrington MCAT Prep Program
52. **Bernhart, Zachary** (NIIMBL), CHEG, Abraham Lenhoff, CHEG
Retention of Host-Cell Proteins in Monoclonal Antibody Products
53. **Burrus, Nicolas** (American Heart Association), Neuroscience, Shannon Lennon, Kinesiology & Appl Physiology
Vascular Function in Former Repeated Head Impact Athletes and Non-Contact Athletes
54. **Smith, Harmony** (McNair Scholars Program), Psychology, Chrysanthi Leon, Sociology
Constructing Guilt: The Interplay of Psychological, Societal, and Legal Construct in the Prison System
55. **Castro, Janelle** (Summer Fellows), Political Science, Chrysanthi Leon, Criminal Justice
Mental Prison: How Mental Health Struggles Are Exacerbated by the Carceral System
56. **Donahue, Matthew** (Summer Scholars Program), Mathematical Sciences, Shuxing Li, Mathematical Sciences
Near-factorization of finite groups
57. **Tchuente, Deron** (Biology & INBRE), Biology, Joohyun Lim, Biology
TBD

58. **Elton, Cassidy** (CANR Summer Institute), Chemistry, University of Pittsburgh at Bradford, Matt Limmer, Plant and Soil Science
Effect of herbicide safeners on glutathione concentrations in rice
59. **Singh, Pragya** (INBRE), Biological Sciences, Connie Lin
TBD
60. **de Jesús, Sebastian** (Center for Plastics Innovation), Chemical Engineering, University of Puerto Rico Mayaguez Campus, Dongxia Liu, CBE
TBD
61. **Paparella, Dante** (Summer Fellows), Chemical Engineering, Dongia Liu, Chemical Engineering
Zeolite modifications to the cathode catalyst layer to enable stable and selective CO₂ electrolysis towards multi-carbon products
62. **Johnson, Matthew** (Center for Plastics Innovation), Chemical Engineering, San Jose State University, Raul Lobo, CBE
Thermal Degradation of Polystyrene via Radical Initiator Pathways
63. **Lakatta, Annelise** (INBRE), Biological Sciences, Eileen Loftus, Science Writer & Communication
Enhancing Internal and External Impact Through Scientific Communication in Healthcare
64. **McQuiston, Dylan** (Summer Scholars Program), Medical Diagnostics, Lucas Lu, Mechanical Engineering
Comparison of Histologic Assessment Methods in Osteoarthritic Knee Research
65. **Kappen, Chloe** (Summer Scholars Program), Biomedical Engineering, Lucas Lu, Mechanical Engineering
Resveratrol's Effects on Subchondral Bone in Osteoarthritis Rat Model
66. **Perry, Rachel** (Summer Scholars Program), Biomedical Engineering, Lucas Lu, Mechanical Engineering
The Effects of Metformin on Chondrocyte Metabolism
67. **Chandler, Ja'Den** (DSU+UD Summer Engineering Research Experience), Engineering, Delaware State University, Liora Mael
TBD
68. **Vargas, Alexander**, New Jersey Institute of Technology, Mario Junior Mencagli, Electrical and Computer Engineering
Exploring Metamaterials and Metasurfaces for Analog Wave-Based Computing
69. **Hoefler, Ryan** (American Heart Association Edwards), Human Physiology, Chris Martens, Kinesiology & Appl Physiology Association
Between Heart Rate Variability and Whole Brain Stiffness Across the Lifespan
70. **Daga, Kirti** (Summer Scholars Program), Biological Sciences, Christopher Martens, Kinesiology and Applied Physiology
The Effect of Acute Moderate-Intensity Aerobic Exercise on Neuroprotective Biomarkers
71. **Zevan, Declan** (Summer Scholars Program), Electrical Engineering, Richard Martin, Electrical Engineering
Embedded System Design for Parkinson's Disease
72. **Pennisi, G** (Summer Scholars Program), Computer Engineering, Bennett Maruca, Physics and Astronomy
Delaware Atmospheric Plasma Probe Experiment
73. **Gant, Erica**, Environmental Studies, Vaishnavi Tripuraneni, Geography and Spatial Sciences
Rocky Mountain Ecology, Education, and Programming

74. **Abrams, Emma**, Environmental Economics, Leah Palm-Forster
Economic experiments to understand behavior in response to environmental risks exacerbated by climate change.
75. **Hrynashka, Maryia** (ART+CBER), Engineering, Mona Batish, MMSC
Selective Isolation of Cytosolic DNA from Human Cancer Cell Lines
76. **Nehru, AJ**(Summer Undergraduate Biden School Fellows Program), Economics, Mix, Troy, Public Administration
Futures Council, DE: Necessity, Feasibility, and Structure
77. **Herron, William** (INBRE ART), Chemical Engineering, Aditya, Kunjapur, Chemical and Biomolecular Engineering
Investigation of Post-Translational Reduction of Nitrated proteins in E. coli
78. **Bhasin, Riddhima**, Biological Sciences, Rachel Davidson, Civil Construction & Environmental
Engineering Electrochemical Deposition of Nanostructured Cobalt and Copper Oxide Battery Electrodes
79. **Asres, Naod** (IEDH), Human Physiology, Lucas Lu, Mechanical Engineering
Impact of Lidocaine and Bupivacaine on Chondrocyte Activity in Cartilage
80. **Van Auken, Aurora** (IEDH), Biomedical Engineering, Emily Day, Biomedical Engineering
Dual Antibody Conjugated Nanoparticles for Immunotherapy of Mesothelin-Positive Acute Myeloid Leukemia
81. **Miczuga, Elizabeth** (IEDH), Chemical Engineering, University of Illinois, Robert Oakes, Biomedical Engineering
Tuning the Properties of PEG Microgels Fabricated by Extrusion Fragmentation

82. **Kuhn, Susan** (IEDH), Chemical Engineering
Investigating Limiting Factors in Plasmid Design for rAAV Production

POSTER SESSION IV

1:45 - 3:15PM

1. **Gordon, Jacob** (INBRE), Computer Science, Matthew Mauriello, Computer & Info Sciences
Toward integrating Large Language Models with Multi-armed bandit for personalized interventions in digital mental health
2. **Rodriguez-Leon, Axel** (Summer Fellows), Computer Science, Matthew Mauriello, Computer and Information Sciences
Evaluating User Experiences of Co-Creative Artificial Intelligence Integration in Video Game Character Creation
3. **Jenkins, Taylor** (Summer Scholars Program), Computer Science, Matthew Mauriello, Computer and Information Sciences
Learning Gap Diagnostic and Support System: Analyzing Student Performance and Educator Input to Personalize Online Education
4. **Muhammadi, Shukria** (Summer Scholars Program). Computer Science, Matthew Mauriello, Computer and Information Sciences
Enhancing Usability and Data Curation Through Front-End Design and Social Media Integration in the SMIDGen System
5. **Nguyen, Khang and Tran, Duy** (Summer Scholars Program), Computer Science, Matthew Mauriello, Computer and Information Sciences

Designing AI-Assisted Feedback for Prompt Learning: A Framework for Human-AI Collaboration in Classification Tasks

6. **Nikolaeva, Victoria** (Summer Scholars Program), Computer Science, Matthew Mauriello, Computer and Information Sciences
Understanding Users, Supporting Minds: AI-powered Chatbot Development for Adults with ADHD
7. **Pappu, Varun** (Summer Scholars Program), Computer Science, Matthew Mauriello, Computer and Information Sciences
Framing vs. Feeling: Decoding the Dual Forces Behind News Polarization
8. **Stapley, Liam** (Summer Scholars Program), Computer Science, Matthew Mauriello, Computer and Information Sciences
Human Centered Evaluation of CLAP-Based Emotion Annotations for Therapeutic Music Using MTurk
9. **Conti, Toby** (Summer Scholars Program), Wildlife Ecology Conservation, Kyle McCarthy, Entomology and Wildlife Ecology
Animals' Use of Incidental Passageways By Month
10. **Kwon, April** (Summer Scholars Program), Cognitive Science, Stuart McCaughey, Psychology
Music & Sensory Perception/Attention
11. **Haverly, Jillian** (INBRE), Biological Sciences, Daniel McDevit, Assoc in Arts
Prog
TBD
12. **Rother, Colden** (Summer Scholars Program), Electrical Engineering, Rodney McGee, Electrical Engineering
Lin Control Pilot Parser
13. **Twumasi, Naana** (INBRE), Biological Sciences (Pre-Dentistry), Delaware State University, Daniel Meara
14. **Ziegler, Lauren** (INBRE), Human Physiology, Melissa Melough, Behavior Health & Nutrition
Extraction and Characterization of Microplastics in Powdered Infant Formulas
15. **Gotz, Zahra** (DSU+UD Summer Engineering Research Experience), Engineering Physics, Delaware State University, Mario Mencagli
All-Digital Antenna Design and Ridge Gap Waveguide Simulation for 100 GHz Wireless Communication
16. **Lefkowitz, Lars** (UDRF REU), Chemical Engineering, Marco Messina, Department of Chemistry and Biochemistry
Design of 3- and 4-arm Miktoarm Star Polymers for Drug Delivery
17. **Roat, Anna** (NSF, Coastal Critical Zone Network), Environmental Science, American University, Holly Michael, Earth Sciences and Civil & Environmental Engineering
Impact of Tidal Inundation on the Soil Oxygen Dynamics of Two Salt Marsh Plant Species
18. **Williams, Ella** (Cooperative Extension), Biology and Environmental Science, Salisbury University, Jarrod Miller, Cooperative Extension, Plant and Soil Sciences
From Sensors to Solutions: Understanding Coastal Salinity
19. **Ballenger, Luke** (Office of Naval Research), Computer Engineering, Mark Mirotznik, Center for Composite Materials
Additive Manufacturing of Millimeter Wave Absorbers
20. **Thacker, Jai** (Office of Naval Research), High School, Mark Mirotznik, Center for Composite Materials
TBD

21. **Walck, Alexander** (Office of Naval Research), Mechanical Engineering Mark, Mirotznik, Center for Composite Materials
DRONE BASED RADAR SENSING BASED ON LUNEBURG LENS ANTENNA
22. **Quezada, Eric**, The University of Texas at El Paso, Mohsen Badiy, Electrical and Computer Engineering
Data analysis for synthetic seal signals collected during PLUTOS first trials
23. **Piazza, Isabella**, Environmental Science, Pinki Mondal, Department of Geography & Spatial Sciences
The Influence of Environmental Factors on Olive Ridley Nesting Behavior
24. **McPhail, Quinn** (Dickerson Extension Scholar), Environmental Science, Blake Moore, Cooperative Extension
Combining Trails and Technology to Promote Environmental Literacy
25. **Lara-Medina, Naomi** (McNair Scholars Program), Cognitive Science, Giovanna Morini, Communication Sciences & Disorders
The Effect of Accented Speech on Word Recognition During Bilingual Code-Switching
26. **Boettger, Catherine** (Industry Summer Scholar), Landscape Architecture, Catherine Morrissey, Agriculture
Silent Historians: The Evolution of College Campuses in the United States
27. **Romano, Joseph** (Envision) Plant Science, Qi Mu, Plant and Soil Science
*Analyzing infection dynamics between *Pythium* and maize grown in two container types under greenhouse conditions*
28. **Driscoll, Cassidy** (Summer Scholars Program), Biochemistry, Jeffrey Mugridge, Chemistry and Biochemistry
*Determining the biochemical basis of *AlkBH4*'s tRNA modifying activity*
29. **Payne, Rebecca** (Summer Scholars Program), Biological Sciences, Jeffrey Mugridge, Chemistry and Biochemistry
Identifying and Characterizing Interaction Partners of Iron(II)/Alpha-Ketoglutarate-Dependent Dioxygenase FTO
30. **Meadows, Miles** (CHARM REU) Chemical Engineering, Victoria Muir, CBE
Designing Bioprinted Agar-Based Scaffolds for Investigating Bacterial Migration
31. **Duke, Brooke** (UD Envision), Pre-Veterinary Medicine, Shafeekh Muyyarikkandy, Animal and Food Science
*Characterization of Probiotic Properties of a Novel Strain of *Enterococcus Faecium**
32. **Madamopoulos, Christos**, National Technical University of Athens, Nektarios Tsoutsos, Electrical and Computer Engineering
3D Printer Vulnerabilities To Side Channel Attacks
33. **Bogdan, Jessica** (INBRE), Neuroscience, Joshua Neunuebel, Psychological & Brain Sciences
TBD
34. **Fowler, Abby** (Summer Scholars Program), Neuroscience, Joshua Neunuebel, Neuroscience
Determining Timescales for Mouse Social Behavior Segmentation
35. **Pucciarelli, Juliana** (Summer Scholars Program), Neuroscience, Joshua Neunuebel, Neuroscience
*Investigating the Vital Functions of Mice with Skin-Specific *Piezo2* Excision*
36. **Ring, Thomas** (Summer Scholars Program), Neuroscience, Joshua Neunuebel, Neuroscience
Quantification of Main Olfactory Epithelium Thickness in Mice With Impaired Olfactory Function

37. **Patel, Aarushi** (Summer Scholars Program), Biological Sciences Anja Nohe
Biological Sciences
Age-Induced Reprogramming of the Transcriptional, Signaling, and Metabolic Landscapes in Murine Bone Marrow Mesenchymal Stem Cells
38. **Salim, Masoud** (Summer Scholars Program) Biological Sciences, Anja Nohe, Biological Sciences
Determining The Effectiveness of The Peptide CK2.1 In Reverting Osteoarthritis Symptoms In DMM Mice Using Hydrogen Particles
39. **Elioff, Louis** (Summer Scholars Program), Computer Engineering, Andrew Novocin, Electrical Engineering
Destination Steam
40. **Duh, Amy** (Summer Scholars Program), Marine Science, Matthew Oliver, Marine Studies
Multi-Scale Satellite Observations of Lagrangian Coherent Structures in Ocean Flows
41. **Schenkenberger, Marisa** (Summer Undergraduate Biden School Fellows Program), Public Policy, Francis O'Malley, Institute for Public Administration
How Politics Shape Civics Education in America
42. **Vitabile, Ava** (Summer Scholars Program), Fine Arts, Cynthia Ott, Fine Arts
How Can an Artist Impact Climate Change?
43. **Balakhani, Bijan** (Summer Fellows), Physics, Miao-Jung, Yvonne Ou, Mathematical Sciences
TBD
44. **Adjei, Chanelle** (INBRE), Human Physiology/Liberal Studies, Laura Owens, *Longitudinal Assessment of BMD Following Bisphosphonate Administration in Pre- and Postpubertal Children with Cerebral Palsy*
45. **Oliver, Samantha** (CURB), CHEG. Terry Papoutsakis, CHEG
TBD
46. **Boddie, Leif** (Angela Santoro '05 Undergraduate Summer Research Award in MMSC), Medical Diagnostics, Vijay Parashar, Department of Medical & Molecular Sciences
Regulation of Second Messenger Synthesis in Mycobacterium tuberculosis
47. **Agarwal, Raghav** (Summer Scholars Program), Applied Molecular Biology and Biotechnology, Vijay Parashar, Biological Sciences
Decoding DegU Oligomerization in the SwrA-Mediated Control of Bacillus subtilis Swarming Motility
48. **Rogozinski, Isabella** (UD Envision), Pre-veterinary Medicine, Mark Parcels, Animal and Food Science
Cloning, Expression and Purification of Viral Capsid, and Nucleocapsid Proteins for Chicken IgY Generation
49. **Robledo, Kailey** (Janice Seitz Extension Scholar), Meteorology and Climate Science, Twila Parish-Short, Cooperative Extension
The Cross-Disciplinary Learning in 4-H: How STEAM Initiatives Foster Collaboration and Innovation Among (Delaware) Youth
50. **Caputo, John and Manzoni, Thomas** (Biology & INBRE), Biology, Justin Parreno, Biology *Fibronectin Coating of Tissue Culture Polystyrene to Improve Superficial Zone Chondrocyte Expansion*
51. **Arranguetz, Mark** (INBRE), Human Physiology, Justin Parreno, Biology
The Role of Actin-Stabilizing Protein, Tropomyosin 3.1, in Regulating Chondrocyte Homeostasis

52. **Ingerson, Samantha** (Summer Fellows), Biomedical Engineering, Justin Parreno, Biological Sciences
Chemical Targeting of Hypoxic Signaling to Enhance Chondrocyte Repair Potential
53. **Roussaw, Kamron** (DSU+UD Summer Engineering Research Experience), Engineering, Delaware State University, Satwik, Patnaik
TBD
54. **Mackin, Avery**, Rowan University, Satwik Patnaik, Electrical and Computer Engineering
AI-driven secure hardware design approach
55. **West, Nicholas** (Summer Scholars Program), Computer Engineering Satwik Patnaik, Computer Engineering
Standardizing Hardware Security Research: Attacks, Defenses, and Benchmarks
56. **Colón Delgado, Nelson** (CHARM Reu), Chemistry, University of Puerto Rico - Mayagüez, Christian Pester, MSE
Surface-Immobilized Photocatalysts for Wastewater Treatment Under Visible Light
57. **Kinnaird, Hunt** (INBRE), Environmental Science, Jennifer Peterson, Entomology & Wildlife Ecology
Tree Architecture Determines Chagas Vector Presence in Delaware
58. **King, Olivia** (CHARM REU), Biomedical Engineering, Saint Louis University, Darrin Pochan, MSE
The Effect of Peptide Length on Liquid Crystal Formation of Single Charged Bundlers
59. **Garcia, Alicia** (Cooperative Extension & USDA NPDN Pollok Project), Plant Science, Jill Pollok, Cooperative Extension, Plant and Soil Sciences
Evaluating Primer and DNA Polymerase Master Mix Interactions to Detect Candidatus Phytoplasma asteris
60. **Punter, Zaina** (INBRE), Applied Molecular Biology and Biotechnology Shawn Polson, Computer & Info Science
RAD51 Superfamily and RecA-like Superfamily II Helicases as Indicators of Phage Infection Strategy
61. **Shelly, Jacob** (INBRE), Biological Sciences, Delaware Tech Comm College, Shawn Polson, Computer & Info Sciences
TBD
62. **Vasil, Nolan** (Summer Scholars Program), Computer Science, Shawn Polson, Bioinformatics
Automating Viral Replication Module Detection: A Pipeline for Environmental Phage Metagenomics
63. **Akella, Meghana**, Clemson University, Chemistry, Sai Pradeep, Center for Composite Materials
TBD
64. **Barry, Alexander**, Clemson University, Mechanical and Aerospace Engineering, Cornell University, Sai Pradeep, Center for Composite Materials
TBD
65. **Miller, Luke** (Clemson University), Mechanical Engineering, Sai Pradeep, Center for Composite Materials
TBD
66. **Mirotznik, Benjamin**, (Clemson University), Electrical Engineering, Sai Pradeep, Center for Composite Materials
Automated Test Bed for Passive Millimeter Wave Imaging
67. **Stutzman, Rebecca** (Clemson University), Chemical Engineering, Sai Pradeep, Center for Composite Materials
Integration of Algae-Based Biochar Core-Shell Particles in Thermoplastic Composites: Correlating Feedstock, Processing Techniques, and Interfacial Design with Mechanical Performance

68. **Czapor, Kelly** (Summer Scholars Program), Biomedical Engineering, Christopher Price, Biomedical Engineering
Uptake of Elastin-Collagen Nanovesicles By LPS-Activated Macrophages and the Effects of Dexamethasone Delivery on Inflammation
69. **Kachala, Elaine** (Summer Scholars Program), Biomedical Engineering, Christopher Price, Biomedical Engineering
A Tissue Clearing Protocol for Optimal Imaging of Collagen-Targeting Nanovesicles in Osteoarthritic Joints
70. **Richardson, Walique** (DSU+UD Summer Engineering Research Experience), Electrical Engineering, Delaware State University, Roxanne, Radpour
Non-Destructive Spectroscopy of Inks and Pigments Using Terahertz Time domain Spectroscopy and Fiber optic Reflectance Spectroscopy
71. **Watters, Aram** (INBRE), Biology Health Professions, Delaware State University, Asanthi Ratnasekera
TBD
72. **Brook, Megan** (Lomax Extension Scholar), Sustainable Food Systems, Abby Reeves
Fresh to You Farm, Plant and Soil Sciences Silage Tarps as a Weed Management Tool in Organic Vegetable Production
73. **Atchley, Nathaniel** (UD Envision), Agriculture and Natural Resources, Abby Reeves, Plant and Soil Science
Silage Tarps as a Weed Management Tool in Organic Vegetable Production
74. **Gontu, Sanjana** (UD Summer Fellows), Biology, Darcy Reisman, Physical Therapy
Step Activity Monitoring After Stroke
75. **David, Darch**, (CHARM REU), Physics, University of Alabama in Huntsville, Yafei Ren, PHYS
Calculation of the exchange coupling parameters in CrSBr based on density functional theory using
76. **Bellingham, Samantha** (American Heart Association Edwards), Nutrition and Dietetics, Shannon Robson, Health Behavior & Nutrition Sc
Exploring the Association Between Dietary Patterns and Blood Pressure and Endothelial Function in Middle-aged Adults
77. **Bodio, Elizabeth** (Summer Scholars Program), Chemistry, Joel Rosenthal Chemistry and Biochemistry
Synthesis of Extended Isocorroles as a Photosensitizer for Photodynamic Therapy
78. **Umoh, Oviyanna** (McNair Scholars Program), Psychology, Neuroscience, Tania Roth, Psychological and Brain Sciences
Epigenetic Changes in FKBP5 Following a Modified Attachment and Biobehavioral Catch Up Intervention
79. **Owen, Amelia** (Summer Scholars Program), Chemical Engineering, Mark Blenner, Chemical Engineering
Investigating Bacteriophage Influence on Plastic-Degrading Mealworm Microbiomes
80. **Fuentes Bautista, Jadira Aurora** (Angela Santoro '05 Undergraduate Summer Research Award in MMSC), Applied Molecular Biology & Biotechnology Mona Batish, Department of Medical & Molecular Sciences
Direct lncRNA Interactome Mapping: Amplification-Based Proteomics
81. **Rishav Sharma** (Summer Fellow), Chemical Engineering, Eleftherios Papoutsakis, Chemical and Biomolecular Engineering
Effects of Exogenous Butyrate on the Growth of Clostridium acetobutylicum ΔHBD

POSTER SESSION V

3:30 - 5:00PM

1. **Dietrich, Vivienne** (Graduate College), Psychology, Lafayette Colleg, Teomara Rutherford, School of Education
The Dual Drive: Intrinsic and Extrinsic Motivation in Collegiate Football
2. **Hannum, Norah** (Graduate College), Psychology, University of Maryland, Teomara Rutherford, School of Education
Self-Regulation in Education: Examining Parent Reports and Behavioral Observations of Emotional Regulation and Executive Function in School-Aged Children
3. **Ziemba, Sydney** (Industry Summer Scholar), Biochemistry, Jessica Sampson, Chemistry and Biochemistry
Stirring Effects in High Throughput Experimentation
4. **Tran, Ken** (Summer Scholars Program), Biochemistry, Jessica Sampson, Chemistry and Biochemistry
Improving Product Quantification in High-Throughput Experimentation via Petasis Reaction
5. **Leyva-Cortes, Rosnel** (Columbia University), Vishal Saxena, Electrical and Computer Engineering
Silicon Meets Synapse: Automation of Analog Integrated Circuit Layout
6. **Bellino, Nicolina** (CANR Unique Strengths), Pre-veterinary Medicine, Carl Schmidtt
Animal and Food Science Genetic regulation of post hatch liver development in the chicken
7. **Wang, Lindsey** (Mentor & INBRE), Electrical Engineering, Manuel Schottdorf, Psychological & Brain Sciences
Towards a Quantitative Assessment of PMT Performance Over Time
8. **Kouma, Jax** (Summer Fellows), Neuroscience, Jaclyn Schwarz, Neuroscience
Identifying key time points of the onset of anhedonia in a novel rat model of postpartum depression
9. **Maxim, Lucy** (Summer Scholars Program), Biomedical Engineering, Jaclyn Schwarz, Neuroscience
Analyzing the Efficacy of Amphiregulin for Attenuating Immune Activation Associated with Hypoxic-Ischemic Encephalopathy using BV2 Microglia Cell Culture
10. **Stevens, Abigail** (Summer Scholars Program), Biological Sciences, Erica Selva, Biological Sciences
The Role of N-linked Glycosylation in Wnt Signaling
11. **Eimont, Arianna**, (INBRE), Neuroscience, Jennifer Semrau, Kinesiology & Applied Physiology
Examining Proprioceptive Error Across Distances in Individuals With Stroke
12. **Pathak, Neehal** (INBRE), Human Physiology/ KAAP, Fabrizio Sergi, Biomedical Engineering
The Effects of EMG Normalization Methods on Analyzing Task-Dependent Wrist Stretch Reflexes
13. **Spinelli, Connor** (INBRE), Biomedical Engineering, Fabrizio Sergi, Biomedical Engineering
Impact of Pre-Processing Parameters on Stretch Reflex EMG: A Comparative Analysis

14. **Rodriguez, Gabriella** (Summer Scholars Program), Biomedical Engineering, Fabrizio Sergi, Biomedical Engineering
Developing a New Protocol for the Inhibition of Long-Latency Stretch Reflexes Using TMS and a Wrist Robot
15. **Ruzek, Filip** (Summer Scholars Program), Mechanical Engineering, William Shafarman, Materials Science
Enhancing CdTe Solar Cell Efficiency through CSS Heat Treatments
16. **Lovett, Sarah** (Biology & INBRE), Biological Sciences, Lisha Shao, Biology
Investigating the role of Neuropeptide F in social isolation-induced food choice changes in Drosophila melanogaster
17. **Anokye, Roselyn** (DSU+UD Summer Engineering Research Experience), Engineering Physics: Bioengineering, Delaware State University, Bill Sharfarman
Quantifying Pinhole Defects in CdTe Thin Films for Solar Cell Applications
18. **Agrawal, Chinmay** (Summer Scholars Program), Computer Science, Weisong Shi, Computer and Information Sciences
Intelligent Intersection Control: Camera-Based Vehicle Tracking and Adaptive Signaling
19. **Querey, Julia** (INBRE), Biological Sciences, Scott Siegel
Evaluating Delays in the Breast Cancer Care Continuum at Helen F. Graham Cancer Center & Research Institute
20. **Huerta, Samantha** (McNair Scholars Program), Kinesiology, Karin Gravare Silbernagel, Physical Therapy
Pain and Functional Differences Between Runners/Jumpers and Non-Runners/Jumpers with Achilles Tendinopathy: A Cross-sectional Study
21. **Allen-Poku, Henry** (INBRE), Kinesiology, Delaware State University, Sheri Silfies, Physical Therapy
Dynamic Trunk Control Assessment using an IMU-Based Seated Balance Task: A Pilot Study
22. **Patel, Krish** (Summer Scholars Program), Biomedical Engineering, John Slater, Biomedical Engineering
Effect of Cancer Cell Density on Permeability of Microvessels
23. **Grimsley, Jasmine** (ACEE/CHEG), CHEG, Kevin Solomon, CHEG
Controlling protein expression through single stranded DNA triggered riboswitches
24. **Rodney, Meredith** (CURB), CHEG, Kevin Solomon, CHEG
Profiling Yarrowia lipolytica for Growth and Engineering on <C3 Carbon Intermediates
25. **Pecson, Zoe** (INBRE), Chemical Engineering, Kevin Solomon, Biomolecular Engineering
TBD
26. **Futty, Austin** (NSF CAREER), AMBB, Kevin Solomon, CHEG
Development and Optimization of a Prokaryotic Argonaute Base Editing System
27. **Merrill, Tim** (NSF CAREER), Bio , Kevin Solomon, CHEG
Engineering pAgos for Enhanced Gene Editing Activity
28. **Gravuer, Conrad** (Summer Scholars Program), Chemical Engineering , Kevin Solomon, Chemical Engineering
Engineering plant-virus like particles to

control the aspect ratio for nanovaccine design

29. **Gupta, Arya**, Biochemistry, Kevin Solomon, CHEG
TBD
30. **Scanzera, Nicholas** (Summer Scholars Program), Exercise Science, Alvin Su, Biomedical Engineering
Meniscus Displacement following Segmental Meniscus Allograft Transplant
31. **McQuaid, Evelyn** (Biology & INBRE), Chemical Engineering, Molly Sutherland, Biology
Engineering Single Amino Acid Mutations to Analyze Beta-cap of CcsBA System II Cytochrome c Biogenesis Pathway
32. **Spindle, Tyana** (Mentor & INBRE), Animal Science, Molly Sutherland, Biology
Engineering Single Amino Acid Mutations to Analyze Heme Interactions in System I Cytochrome c Biogenesis
33. **Beauchamp, Em** (Summer Scholars Program), Women's Studies, Douglas Tallamy, Entomology and Wildlife Ecology
A Case Against Mosquito Spraying: Mosquito Spraying Effects on Non-target Lepidopteran Larval Fitness
34. **Hagen, Erik** (Summer Scholars Program), Insect Ecology and Conservation , Douglas Tallamy
How Well Do Keystone Lepidoptera Plants Support Other Insect Taxa?
35. **Tang, Brandon** (UD Envision), Mechanical Engineering, Juzhong Tan, Animal and Food Science
Optimizing Extrusion Processing Conditions for the Development of Puffed Snacks Made from Lima Beans, the Cornerstone Crop of the State of Delaware
36. **Melo, Karen** (INBRE), Biology, Jessica Tanis, Biology
How Nicotinamide Riboside affects rate of paralysis in c. elegans
37. **Parekh, Krisha** (Summer Fellows), Biological Sciences, Jessica Tanis, Biological Sciences
TBD
38. **Rauch, Jessica** (Summer Scholars Program), Biological Sciences, Jessica Tanis, Biological Sciences
Impact of the RAB-28 GTPase on the biogenesis and uptake of extracellular vesicles
39. **Snyder, William** (Summer Scholars Program), Biological Sciences, Jessica Tanis, Biological Sciences
Defining a cytoplasmic role for a histone methyltransferase in C. elegans muscle
40. **Rippon, Jacob** (NSF REU Site in Sustainable Resilient Transportation Systems), Civil Engineering, Jovan Tatar, Civil, Construction, and Environmental Engineering
Microstructural Characterization of the Interface between Ultra-high-performance Concrete and Standard Concrete
41. **Christenbury, Elie** (INBRE), Medical Laboratory Technician, Delaware Tech Comm College, Andre Pasqua Tavares, Biology
TBD
42. **Fleming, Marissa** (Summer Scholars Program), Fine Arts, Aaron Terry, Fine Arts
Two Steps Forward: Documenting the Baltimore Hardcore Scene
43. **Obika, Kamila**, Fashion Design and Product Innovation/Fashion Merchandising, Kedron Thomas, Anthropology
The Intention-to-Action Gap: Circular Solutions for Ralph Lauren

44. **Szura, Eva** (Industry Summer Scholar),
Biological Sciences, Shunji Tomatsu,
Biological Sciences
*Non-invasive functional assessment and
pathogenesis of Morquio A through
multiple visit ADL survey analysis*
45. **Smith, Kristin** (UD Envision),
Environmental Science and Policy,
Wilmington University, Tara Trammell,
Plant and Soil Science
*Soil Physiochemical Characteristics in
Forest Gaps Across Multiple Eastern U.S.
Cities*
46. **Morefield, Maya** (Summer Scholars
Program), Marine Science, Arthur
Trembanis, Marine Studies
*Inlet Bedform Dynamics: Bedform
Morphology and Sediment Variation in
Roosevelt Inlet*
47. **Adlani, Yusra** (INBRE), Human
Physiology and Liberal Studies Medical
Scholars, Arianna Trionfo
*The Impact of Immediate Postoperative
Weight-Bearing on Surgical Outcomes for
Femoral and Tibial Derotation
Osteotomies*
48. **Walker, Camryn** (Summer Fellows),
Environmental Science, Vaishnavi
Tripuraneni, Geography
*Green Stormwater Infrastructure Survey in
Wilmington*
49. **Hoober, Cameron** (Graduate College),
Aerospace Engineering, Illinois Institute of
Technology/Wheaton College, Tyler Van
Buren, Mechanical Engineering
*Affordable Flow Visualization: A 3D-
Printed Helium-Filled Soap Bubble (HFSB)
Generator for Aerodynamic Testing*
50. **Munson, Allison** (Graduate College),
Mechanical Engineering, Ohio State
University, Tyler Van Buren, Mechanical
Engineering
*Optimizing FFF printing parameters for
watertightness in 3d printed parts made of
PETG*
51. **Mohammadi, Khadija** (INBRE)
Computer Science, Maryam Vaziri-
Pashkam, Psychological & Brain Sciences
How We Grasp the World – Literally
52. **Murtaugh, Megan** (Cooperative
Extension), Materials Science and
Engineering, Jenn Volk, Cooperative
Extension
*Creating Outreach Materials on
Environmental and Sustainability Topics*
53. **Brownstein, Gavin** (Summer Scholars
Program), Chemical Engineering, Norman
Wagner, Chemical Engineering
*Product Oriented Development of Xanthan
Konjac Agar Solvent Gels for Art
Conservation*
54. **Burchell, Paige** (Summer Scholars
Program), Meteorology and Climatology,
Shuai Wang, Geography
*Observational Analysis of Land Effect on
Tropical Cyclone Wind Profiles Before
Landfall*
55. **Hansen, Gavin** (Summer Scholars
Program), Chemistry, Donald Watson,
Chemistry and Biochemistry
*Enantioselective Synthesis of Six-
Membered Lactams via Intramolecular
Aza-Heck Reactions*
56. **Librizzi, Matt** (Summer Scholars
Program), Exercise Science, Daniel White,
Physical Therapy
*Assessing the Accuracy of Patient Recalled
Diagnoses in an Online Cohort of Adults
with Rheumatic Conditions.*
57. **Dokus, Gabriel** (Summer Scholars
Program), Applied Mathematics, Rajinda
Wickrama, Mathematical Sciences
*Deep Reinforcement Learning for Pairs
Trading: A Comparative Study with
Traditional Threshold-Based Strategies*

58. **Butler, Sydney** (UD Envision), Wildlife Ecology and Conservation, Chris Williams, Entomology and Wildlife Ecology
The Impact of Different Source Translocations on Northern Bobwhite Habitat Use and Movement in Pennsylvania
59. **Maxa, Grant** (American Heart Association Edwards), Human Physiology, Melissa Witman, Kinesiology & Appl Physiology
Central Arterial Wave Reflection in Duchenne Muscular Dystrophy: Role of Ambulation and Corticosteroid Treatment
60. **Lakhani, Raina** (INBRE), Biological Sciences, English, Melissa Witman, Kinesiology & Applied Physiology
TBD
61. **Tevald, Anna** (Summer Scholars Program), Marine Biology, Andrew Wozniak, Marine Studies
The Effect of Organic Matter Lability on Nitrous Oxide Production Dynamics in Coastal Sediments
62. **Gallagher, Lindsay** (INBRE), Biomedical Engineering, Elizabeth Wright-Jin
Immunomodulatory Biomaterials for Treatment of Hypoxic Ischemic Encephalopathy
63. **Telacki, Elliott** (Summer Fellows), Marine Biology, Jennifer Wyffels Bioinformatics
Development and Digestion: Enzymatic Liquefaction of Egg Jelly Layers during Zebra Shark Incubation
64. **Kiernan, Elizabeth** (ACEE/CHEG), CHEG, Yushan Yan, CHEG
Investigation of Current Distribution in HEMCC Devices
65. **McClaine, Ethan** (CURB), CHEG, Yushan Yan, CHEG
Enhancing Mechanical Strength of Carbon-Ionomer Membranes for Hydroxide Exchange Membrane Carbon Capture Devices
66. **Alberding, Carson** (Summer Scholars Program), Computer Science, Chengmo Yang, Computer Engineering
Resilient Driving Intelligence: Fault Recovery in Semantic Segmentation Models
67. **Henderson, Ryan** (Summer Scholars Program), Electrical Engineering, Chengmo Yang, Electrical Engineering
RTL-to-Layout Design and Power Side-Channel Vulnerability Evaluation
68. **Tapel, Daryl** (Summer Scholars Program), Computer Engineering, Chengmo Yang
Computer Engineering
Accelerating AI on Small Devices: Using FPGAs to Run Transformer Kernels
69. **Rustagi, Aditya** (Office of Naval Research), The Charter School of Wilmington, Shridhar Yarlaga, Center for Composite Materials
TBD
70. **Geary, Violet** (UD Envision), Animal Science, Alex Yitbarek, Animal and Food Science
Pathogenicity of C. perfringens Under Different Iron Doses Using a Chicken Embryo Model
71. **Bajoria, Aditya** (Summer Scholars Program), Applied Mathematics, Xu Yuan, Computer and Information Sciences
Transformers for PlanetScope Coastal Analysis
72. **Markland, Michelle** (INBRE), Delaware State University, Xuyi Yue, Radiology
Evaluation of Imaging Agents for Multiple Sclerosis by Targeting VEGFR3
73. **Hernandez, Orlando** (DSU+UD Summer Engineering Research Experience), Electrical Engineering, Delaware State University, Yuping Zeng
TCAD Design and Performance Simulation of FeFETs

74. **Marion, Tessa** (Summer Scholars Program), Biochemistry, Zhihao Zhuang, Chemistry and Biochemistry
The Synthesis of Biotinylated-NAB2 for Biolayer Interferometry Studies with E3 Ligase Nedd4
75. **Moquin, Phillip** (Summer Scholars Program), Biochemistry, Zhihao Zhuang, Chemistry and Biochemistry
Analysis of the Ubiquitin Microenvironment via Photocatalytic Dexter Energy Transfer
76. **DelJones, Gwen** (CHARM REU), Materials Science & Engineering, Rutgers University New Brunswick, Joshua Zide, MSE
Etch Processing of ErAs/III-V Nanocomposite Materials for Terahertz Photoconductive Antennas (PCAs)
77. **Thompson, Xavier** (DSU+UD Summer Engineering Research Experience), Bioengineering, Delaware State University, Ryan Zurakowski
TBD

Oral Session One

8:30 – 9:45am

Caring for Communities: Research on Environmental and Social Interventions (ROOM 202)

Moderator: Anna Wik

Cruz, Shakira and Anderson, Phebe (Industry Summer Scholars), Civil Engineering/Landscape Architecture, Anna Wik, Civil Engineering
Living Lab Community Engagement, Green Infrastructure, and Place Making Research

Langham, Previn (Industry Summer Scholar), Environmental Studies, Lindsay Naylor, Environmental Studies

Social Impacts of Agrivoltaic Systems in Puerto Rico

O'Neal, Isaac (Summer Undergraduate Biden School Fellows Program), Public Policy and Economics, Stephen Metraux, Center for Community Research & Service
Survey Data on Homelessness in Sussex County, Delaware

Adelman, Allison (Summer Undergraduate Biden School Fellows Program), Public Policy, Julia O'Hanlon, Institute for Public Administration
Caring for Delaware Communities

Rosenthal, Maxwell (Summer Undergraduate Biden School Fellows Program), International Relations, Kelly Sherretz, Institute for Public Administration
How States Are Staffing for the Increasing Mental & Behavioral Health Needs in Public Schools

Academic Inquiries into Displacement, Identity, and Collective Action (ROOM 205)

Moderator: Tricia Wachtendorf

Kim, Daeun and Muntz, Sara (Industry Summer Scholars), Sociology/Anthropology, Tricia Wachtendorf, Sociology
Making Research Accessible: Disaster Impacts on Renters and Mitigation Decision-Making

Bais, Vatsala (Summer Undergraduate Biden School Fellows Program), Public Policy, Jennifer Reitz, Institute for Public Administration
From Crisis to Shelter: The Role of Modular Construction in Post-Disaster Recovery

Castillo, Amalia (McNair Scholars Program), Psychology, Eric K. Layland, Education & Human Development
Systematic Review of Family Impact on Racial Minority LGBTQ+ Youth Positive

Development: Identifying Gaps in the Literature

Chrisostam, Nithila (Summer Scholars Program), Psychology, Dael Norwood, Psychology
Student Unionization: An Interdisciplinary, Cross-Cultural Analysis

Tiongson, Amber (Summer Scholars Program), International Relations, Monica Frichtel, International Relations
Reclaiming Black Identity Through Hip Hop Dance in Eurocentric Cultures: The Cultural Glue Between the United States and Argentina

Music, Learning, and the Shaping of Culture (ROOM 302)

Moderator: Noelia Archambeault de Hernández

Canty, Georgia; Ghani, Amenah; Bachi, Emily and Cinaglio, Dario (Summer Fellows), Music Education, Aimee Pearsall-Kramer, Music
Songwriting and Curriculum Writing for a Children's Songbook based in Social Emotional Learning

Irwin, Kelly (Summer Scholars Program), Applied Music – Voice, Noelia Archambeault de Hernández, Applied Music - Voice
Vocal Health Stigma in Music Undergraduate Degree Programs

Kaufman, Jenna (Summer Scholars Program) Art, Aaron Terry, Art
The Times They Are A-Changin': Music and Counterculture in New York

Lisiecki, Haley (Summer Scholars Program), Visual Communication, Katie Leech, Visual Communication
Feel the Music

Dunn, Carson (Summer Scholars Program), Art, Edward Winn, Art
Creating and Exploring Worlds: Researching to be a Technical Artist

Oral Session Two

10:00 – 11:15am

Political Action, Rights, and Government Response (ROOM 202)

Moderator: Katherine Feldkamp

McGregor, Bo (Summer Scholars Program), Political Science, Lindsay Hoffman, Political Science
The Dark Side of Political Participation: Predicting Engagement in Uncivil Participation

Johnson, Seaanna (McNair Scholars Program), Philosophy, Political Science, Kyong-Min Son, Political Science & International Relations
A Whole New World: Rethinking Immigration as a natural right

Sarwari, Frohar (Summer Scholars Program), Public Policy, Richard Hanley, Public Policy
A Comparative Analysis of Abortion Laws and Practices in Afghanistan and the United States

Deutsch, Aaron (Summer Undergraduate Biden School Fellows Program), Public Policy and Political Science, Chase Barnes, Institute for Public Administration
Reimagining Civic Education: Applying the Build-Measure-Learn Model to Government Training

Farley, Alasqa (Industry Summer Scholar), Economics, A.R. Siders, Economics
The Role of Local Government Capacity in Predicting Hazard Mitigation Funding in North Carolina

Exploring Sustainability, Identity, and Technology in Fashion (ROOM 205)

Moderator: Adriana Gorea

Adams, Ellena and Neuvelt, Nicole (Industry Summer Scholar), Apparel Design, Adriana Gorea, Apparel Design
Mapping Functional Apparel User Needs for Theater Costumes: An Interdisciplinary Collaboration with UD Community Music School

Gbason-Krah, Saynani (Summer Scholars Program), Apparel Design, Adriana Gorea, Apparel Design
Knitwear Reimagined: Advancing Sustainable Men's Knitwear With Traditional and Modern Technology

Nieves, Jalyssa (Summer Scholars Program), Apparel Design, Katya Roelse, Apparel Design
Reimagined Royalty

Kulis, Antonina (Industry Summer Scholar), Fashion Merchandising, Sheng Lu, Fashion Merchandising
Exploring Sustainable Fiber Preferences in the U.S. Apparel Industry

DiGiulio, Isabella (Summer Scholars Program), Fashion Merchandising, Nokyeon Kim, Fashion Merchandising
Fashion and Social Engagement in Older Adults: The Influence of Self-Perceived Age Identity on Their Relationship

Material Culture Interdisciplinary Cohort (ROOM 207)

Moderator: Rosalie Rolon Dow

Gupman, Sophia (Industry Summer Scholar), Kelly Cobb
Material Movement: Experimental Plaid and Painted Warp—A Practice-Based Response to Letty Esherick's Vest

Coates Riley (Summer Scholars Program), Anthropology, Kedron Thomas, Anthropology
Infinite Inspiration: Creativity at the Intersection of Material and Digital Culture within the TTRPG Community

Dobbins, Chloé (Summer Scholars Program), Sociology, Kedron Thomas, Sociology
Exploring Maasai Traditional Dress: Tourism, Secondhand Clothing, and Identity

Hearn, Lily (Summer Scholars Program), Art Conservation, Lu, Ann, Art Conservation
Red Earthenware: What Archaeological Evidence Reveals about 18th and 19th Century Women's Untold Labor in the Delaware Valley

Herniter, Chava; Orenstein, Rowan; Rodriguez, Ivonne, and Sanchez, Vivan (Summer Scholars Program), Art Conservation, Dilia López-Gydos, Art Conservation
Securing the Seams: Examination and Preparation of 1920s Garments for Display

Exploring Justice System Practices and Their Impact (ROOM 302)

Moderator: Patricia Sloane-White

Bossi, Morgan (Summer Scholars Program), Women's Studies, Angela Hattery, Women's Studies
Power, Process, and Protection: The Role of Judicial Discretion and Litigant Knowledge in PFA courtrooms

Corey, Ceili (Summer Scholars), English, Angela Hattery, English
Toward a Trauma-Informed Courtroom: Practices for Justice with Compassion

Livingstone, Margaret (Summer Scholars Program), Political Science, Angela Hattery, Political Science
"What am I supposed to be asking her? This is difficult": Challenges and Solutions to Pro Se Litigation of Protection From Abuse (PFA) Petitions

Hussain, Rabia (Summer Scholars Program), Criminal Justice, Chrysanthi Leon, Criminal Justice
Exploring the Reintegration Experiences of Formerly Incarcerated Individuals

Levine, Sophie (Summer Scholars Program),
Criminal Justice, Chrysanthi Leon, Criminal
Justice
Gender Associations of Filicide

The Power of Art in Shaping Visual Narratives (ROOM 305)

Moderator: Brandan Henry

Bradley, Josephine (Summer Scholars
Program), Art, Brandan Henry, Art
*Civil Unrest: Artistic Reflections on Political
Conversations*

Dao, Chelsea (Summer Scholars Program),
Fine Arts, Brandan Henry, Fine Arts
Faith in Chains

Dulaney, Jocelyn (Summer Scholars
Program), Fine Arts, Brandan Henry, Fine Arts
Hearstronaut

Edmonds, Olivia (Summer Scholars
Program), Fine Arts, Brandan Henry, Fine Arts
The Hollow Sun

Centeno, Yasir (Summer Scholars Program),
Visual Communication, Brandan Henry, Visual
Communication
*Illustration In Motion: The Exploration of Film
and Videography Through Illustration*

Oral Session Three 11:30am – 12:45pm

Urban Renewal, Environmental Justice, and Social Narratives (ROOM 202)

Moderator: Kedron Thomas

**Deutsch, Katie; Graham, Tessa and Willmes,
Matthew** (Community Engagement Initiative),
Landscape Architecture, Zachery Hammaker,
Landscape Architecture
Route 9 Revitalization in the CDC

Saeedi, Faizi (Summer Undergraduate Biden
School Fellows Program), Public Policy and
Women & Gender Studies, Erin Nescott,
Center for Community Research & Service
Shelter and Nature

Roth, Elizabeth (Summer Scholars Program),
Kedron Thomas, Anthropology
*Staying in the Green: How Video Games Show
the Interconnected Relationship Between the
Economy, Environment, and Culture*

Scott, Julia (Summer Scholars Program), Art,
Amy Hicks, Art
*Delaware's Marsh Migration: What Is It, and
What Can We Do?*

Advancements in Chemical Engineering, Biochemistry, and Food Sciences (ROOM 205)

Moderator: Mark Blenner

Choudhury, Snehal (Center for Plastics
Innovation), Chemical Engineering,
LaShanda, Korley, CBE and MSE
*Fabrication of Aligned Nanofiber Blends for
Advanced Materials*

Miraji-Khot, Agni (Center for Plastics
Innovation), Chemical and Biomolecular
Engineering, Mark Blenner, Chemical and
Biomolecular Engineering
*Characterization of biofilm formation on
LDPE using bacterial isolates from plastic
degrading mealworm*

Letnaunchyn, Jacob (Summer Scholars
Program), Chemistry, Don Watson,
Chemistry and Biochemistry
*Asymmetric Reductive Cyclizations of Tethered
Aryl Halides*

Kercadó, Darién (Graduate College),
Chemistry, Carsten Milsmann,
Chemistry & Biochemistry
*Development of Photoluminescent Earth-
Abundant Metal Complexes*

Serrano, Shelby (McNair Scholars Program),
Animal Biosciences, Muhammed Shafeekh

Muyyarikkandy, Animal & Food Sciences
Evaluation of live and heat-inactivated probiotics on muscle development in chicken embryos during hyperglycemia

Technology, Gender, and Political Thought (ROOM 207)

Moderator: Dannagal Young

Carrillo Soto, Julio (McNair Scholars Program), Statistics, Sebastian Cioaba, Mathematical Sciences
Disproving conjectures in spectral graph theory with AI

Register, Iyanna (McNair Scholars Program), Communication, Dannagal Young, Communication
Gender Ideology in Women's Online Spaces

Sullins, Amayah (McNair Scholars Program), Criminal Justice, Eric Rise, Sociology & Criminal Justice
Scared Spaces, Secular Places: Muslim Prayer Rights and Public School Accommodations

Munson, Dalton (Summer Scholars Program), History, Michael Frassetto, History
Realpolitik: Metternich, Bismarck, and the Necessity of Pragmatism

Wojciechowski, Elizabeth (UDARI), Communication, Nancy Karibjanian, Media Communication and Women and Gender Studies
A College Journalist's Guide to Reporting on Anti-Racism Protests

Visual Communication in Shaping Identity and Society (ROOM 302)

Moderator: Robyn Phillips

Brown, Joycelyn (Summer Scholars Program), Visual Communication, Robyn Phillips-Pendleton

Visual Communication Diary of a Mad Black Girl with Curls

Porter, Maryanne (Summer Scholars Program), Visual Communication, Katie Leech, Visual Communication
Designing for Freedom: How Book Banning Shapes Education and Society

Protack, Miranda (Summer Scholars Program), Visual Communication, Ashley Pigford, Visual Communication
Whispers of Glory: The Overlooked Greatness of Women in Sports

Sekscinski, Madeline (Summer Scholars Program), Visual Communication, Aaron Terry, Visual Communication
Land and Life in Delaware

Jackson, Aliyah (Summer Scholars Program), Animal Science, Hassan El-Amin, Animal Science
Conveying Black Experiences Through Performance

Hundley, Gavin (Summer Scholars Program), Art, Amy Hicks, Art
The Rainhill Trials

Oral Session Four 2:00pm – 3:15pm

Conservation, Craft, and Cultural Reconstruction (ROOM 202)

Moderator: Dilia López-Gydosh

Hiles, Katrina and Shidle, Laura (Summer Scholars Program), Art Conservation, Joyce Hill, Art Conservation
A Shrimper's Tale: Lining and Adhesive Removal on a 19th-Century Marine Landscape

Terrell, Chloe (McNair Scholars Program), Art Conservation, Melissa A. Tedone, Art Conservation
Victorian Arsenic Dye: The Poison Book Project

Griffin, Madison (Summer Scholars Program), Art Conservation, Joyce Stoner, Art Conservation

Le Sorelle: treatment report and next steps

Krukosky, Loki (Summer Scholars Program), Fine Arts, Greg Shelnut, Fine Arts

Thoughtful Reconstruction- Historical Japanese Clothing In The Modern Era

Castro, Janice (McNair Scholars Program), Fine Arts, Mary Katie Leech, Art & Design

Amplifying Hispanic Voices Through Typography

Studies in Psychology and Brain Sciences (ROOM 205)

Moderator: Regina Wright

Lunn, Simone (McNair Scholars Program), Neuroscience, Psychology, Dayan Knox, Psychological Brain Sciences

Inhibiting The Ventral Hippocampus in Control Animals Can Alter The Effects of Traumatic Stress on Fear Extinction

Miller, Callie (Summer Scholars Program), Anthropology, Jennifer Trivedi, Anthropology

The Impact of COVID-19 On College Student Experience

March, Isabela (Summer Scholars Program), Cognitive Science, Giovanna Morini, Cognitive Science

Playing in English vs. Spanish: Examining the role of bilingual caregivers' gesture use during toy play interactions

Perez Rangel, Melissa (McNair Scholars Program), History, Psychology, Naomi Sadeh Psychological Brain Sciences

The Effects of Time of Trauma on Empathy

Simons, Tori (Summer Scholars Program), Art, William Starkey, Art

Enrolled and Anxious

Technology, Identity, and Social Impact (ROOM 207)

Moderator: Laura Ahlstrom

Osinubi, Catherine (Summer Scholars Program), Management Information Systems, Edward Hartono, MIS

Utilizing MIS to Revitalize Businesses: Phase 5

Ding, Yifan (Summer Scholars Program), Management Information Systems, Hye-Shin Kim, Fashion and Apparel Studies

Fashion's Digital Frontier: How Xiaohongshu Influencers Redesign Chinese Consumer Preferences

Barry, Fanta (Summer Scholars Program), Management Information Systems, Karen McDougal, MIS

Optimizing Financial Literacy and Family Services in Black Communities

Vazquez, Antonia (McNair Scholars Program), Finance, Laura Ahlstrom Lerner School of Business & Economics

Sense of Self-Efficacy and Connectedness in Female Business Students

Nguyen, Anh Van "Summer" (Graduate College), Psychology, University of South Florida, Christina Barbieri, School of Education

Parents' Experience during Negative Life Events: How COVID-19 Stress and Perceived Impacts Predict Parent-Child Informant Discrepancies

Exploring Identity, Memory, and Culture Through Art (ROOM 302)

Moderator: Katherine Feldkamp

Figueroa, Bear (Summer Scholars Program), Art, David Brinley, Art

For Me to Know and You to Find Out: Transgender Identity Through Mixed Media

Sayn, Alyse (Summer Scholars Award), Art & Design, David Brinley, Art & Design

Nostalgia Through Art: An Artistic Exploration of Memory and Identity

Dizon, Angelo (Summer Scholars Program),
Art, David Brinley, Art
Nagtatagumpay: Transgender Experiences in the 21st Century

Binet, Ashley (Summer Scholars Program),
Fine Arts, David Brinley, Fine Arts
Social/Inner Identity: Dual Nature of The Persona

Onu, Favour (Summer Scholars Program),
Fine Arts, David Brinley, Fine Arts
Depict of Cultural Diversity in Benin Kingdom

Oral Session Five 3:30pm – 4:45pm

Narratives of Place, Memory, and Connection (ROOM 202)

Moderator: Katherine Feldkamp

Williams, Leon (Summer Scholars Program),
Art, Jazmyn Crosby, Art
Bloom

Breakie, Aidan (Summer Scholars Program),
Art, Aaron Terry, Art
Project for the preservation of mid-century signage in Delaware

Beardsley, Marcus (Summer Scholars Program),
Ancient Greek and Roman Studies,
Lauren Petersen, Ancient Greek/Roman Studies
Ports, Labor, and Community in the Roman East

Mobius, Jonna (Summer Scholars Program),
Art, Aaron Terry, Art
Paintings Interpreting WW2 Observation Towers

Loock, Kaitlin (Summer Scholars Program),
Art, Katie Leech, Art

Horsemanship is Understanding: Equine Expressions and Ethical Horsemanship

Bridging Cultures: From Ancient Civilizations to Contemporary Poetics and Performance (ROOM 205)

Moderator: Denise Murphy-Rohr

Faircloth, Sheyenne (McNair Scholars Program),
English Education, Jessica Edwards, English
Rhetorical Surveillance of Black Language and Literature Across Genres

Saylor, Riel (Summer Fellows),
English, Christopher Penna, English
Place, Trauma, and Form in Contemporary Poetry

Ballah, Sabrina (Summer Scholars Program),
Chinese Studies, Yuanchong Wang, Chinese Studies
Macau: Where China & Portugal's Culture Blend

Barrett, Patrick (Summer Scholars Program),
Communication, Monica Frichtel, Communication
Designing Drama-Rich Pedagogy for the Elementary/Middle School Classroom: An Introduction to Frances Harper

Jones, Maya (Summer Scholars Program),
English, Monica Frichtel, English
Frances Harper Project

Innovative Approaches in Youth Education and Healthcare (ROOM 207)

Moderator: Nancy Getchell

Villamagna, Amelia and Doyle, Eve (McConnell Health & Well-being Gift),
Nutrition and Dietetics, Michelle Voegelé, Cooperative Extension

Fueling Fun with Nutrition Education at Local Summer Camps

Gibson, Mackenzie (CANR Summer Institute), Prospective Anthropology, Mark Parcels, Animal and Food Science
UD Envision Summer 2025

Hovington, Darrianna (Cooperative Extension), Sports Health, Karen Johnston, Cooperative Extension
Educating Youth on the Effects of Vaping

Shah, Bhavini (Industry Summer Scholar), Medical Diagnostics, Victor Perez, Medical Diagnostics
Challenges Impacting Delaware Dental Professionals' Capacity to Care for Patients with Disabilities

Halfpenny, Keira (Summer Scholars Program), Neuroscience, Philip Gable, Neuroscience
Impulsivity and the Neural Correlates for Frontal Asymmetry

