Undergraduate Research & Service Scholar

10th Annual Celebratory Symposium

Thursday, August 15, 2019
Dear Friends of Undergraduate Research and Engaged Learning:

Welcome to the tenth annual Celebratory Symposium for students in our Summer Scholars program. With some five hundred and fifty presenters, this is our largest event ever, and we are very excited to share their work with you. And we are delighted to be able to do so in the heart of the main campus in the Patrick T. Harker ISE Lab – thanks once again for everyone who has made this possible, especially John Pelesko, Dean of the College of Arts and Sciences.

As the Symposium program demonstrates, these students have worked on an extraordinary range of projects in disciplines all across the university as well as in the community. Over the past ten weeks, they have collaborated with their faculty mentors and, in many cases, with other undergraduates and with graduate students, learning how original research takes place and creating new knowledge themselves. Continuing UD’s nature as an engaged campus, many of them have worked with a wide range of external partners, translating research into action that both benefits community agencies and provides the students themselves with deepened understandings of the ways in which they can contribute and learn from their service. National studies of undergraduate research and experiential learning have shown time and again that these experiences can be the most powerful part of a student’s education, shaping his or her life and career for decades to come.

Both today’s event and the summer program itself would not be possible without the extraordinary support of people and offices across our campus. I particularly want to call out for thanks to the staff of the Undergraduate Research Program as well as the members of the faculty and staff throughout UD who volunteer their time and expertise to mentor students in the opportunities and responsibilities that go with conducting original research and service projects.

On behalf of all these members of the UD community, thank you for joining us at today’s program. We hope you will enjoy seeing and hearing the fruits of the students’ work and take away an even deeper appreciation for the intellectual accomplishments, creative achievements, and service contributions they make to the University of Delaware and its wider community.

Sincerely,

Iain Crawford
Faculty Director, Undergraduate Research Program
August 2019

Dear Colleagues and Friends:

Welcome to the University of Delaware’s tenth Annual Undergraduate Research and Service Scholar Celebratory Symposium, which caps off and celebrates this year’s Summer Scholars and Summer Fellows programs.

This event marks the culmination of 10 weeks of full-time research by more than 500 student researchers who have worked with faculty mentors and community partners. During the program, these students have been engaged in projects representing disciplines across the University, discovering the challenges and excitement of creating new knowledge and applying that knowledge out in the world.

Numerous studies have shown that these types of experiences are among the most important forms of learning. We know that engaging in mentored research can be a life-changing experience. Some of the students will build from this program as they go on to graduate school; others will find the experience they have gained invaluable as they move into professional careers. All of them will look back on these summer months as some of the most intensive and successful parts of their education.

We are very fortunate to be a top-rate research university, enjoying the resources and scholarship that come with that rank. On behalf of the University, I am grateful to everyone who has made this program possible for our students, including the staff of the Undergraduate Research Program, faculty, mentors and community partners. Together, we can do great things!

For UD,

Robin W. Morgan
Provost
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<th>Time</th>
<th>Event Description</th>
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<td>8:00 – 8:25</td>
<td>Poster Session I Set-up</td>
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<td>8:30 – 5:00</td>
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<td>3. Fashion &amp; Apparel Studies</td>
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<td>4. Community Landscapes</td>
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<td>5. Education</td>
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<td>2. Psychology &amp; Anthropology</td>
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<td>3. Public Policy &amp; Administration/Political Communication</td>
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<td>4. Food</td>
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<td>1. Art in the Community</td>
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<td>2. Fox Chase Cancer Center</td>
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<td>3. Wilmington Summer Programs</td>
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<td>4. Communication/Linguistics</td>
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<td>2. Environmental Sustainability &amp; Justice</td>
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<td>3. History</td>
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<td>4. Cultivating Democracy</td>
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POSTER SESSION I
8:30 - 10:00AM

(Christiana Care Health System, Nemours Biomedical Research, Veterans Affairs Medical Center, Medical & Molecular Sciences, Epidemiology, Nursing, Kinesiology & Applied Physiology, Physical Therapy, Behavioral Health & Nutrition, Health Sciences, Communication Science & Disorders)

CHRISTIANA CARE HEALTH SYSTEM

1) Alexis Holland, Biology (INBRE) (Wesley College)
   Shannon Virtue, Behavioral Health Psychology (Christiana Care Health System)
   *Psychosexual Needs and Coping Skills in Comorbid Diabetes and Cancer Patients*

2) Pedro Rosario-Favela, Bioengineering (INBRE) (DSU)
   Daniel Meara, Department of Dentistry/Education Faculty (Christiana Care Health System)
   *TBD*

3) Akram Ahamed, Biomedical Engineering (INBRE)
   Jennifer Goldstein, Department of Medicine (Christiana Care Health System)
   *The Sale of Life Saving Prescription Drugs on Craigslist: A National Survey*

4) Hui-Hsuan Chen, Medical Diagnostics (INBRE)
   Jason Weinberger, Department of Surgery (Christiana Care Health System)
   *TBD*

5) Olivia Tharp, Biological Sciences (INBRE) (DTCC)
   Eric Kmiec, Gene Editing Institute (Christiana Care Health System)
   *Global Analysis of CRISPR-Cas Homology Directed Repair Diversity*

6) Meera Garg, Neuroscience/Political Science (INBRE)
   (University of Pittsburgh)
   Joseph Bennett, General Surgery/ Surgical Oncology (Christiana Care Health System)
   *Characteristics of Gastrointestinal Stromal Tumors Incidentally Discovered During Abdominal Surgery for Other Causes*

7) Shreya Kolipaka, Neuroscience (INBRE)
   Stephanie Guarino, Hematology Transitions Program/Value Institute (Christiana Care Health System)
   *The Association Between Time to Pain Medication and Emergency Department Utilization Among Adolescent/Young Adult Sickle Cell Patients*

8) Amber Conyers, Biological Science (INBRE) (DSU)
   Kimberly Gannon, Neurology (Christiana Care Health System)
   *Assessment of Risk Factors for Atrial Fibrillation*

9) Ayodelemi Ekundayo, Biological Sciences (INBRE) (DSU)
   John Pollard, Neurology (Christiana Care Health System)
   *How Useful are Stat Overnight EEGs in the Neuro Critical Care Unit (NCCU)?*

10) Amy Jackson, Nursing (INBRE)
    Melanie Chichester, Nursing High Risk Unit (Christiana Care Health System)
    *Evaluating Third Stage of Labor in Second Trimester Deliveries*

11) Fidel Romo Martinez, Biological Sciences (INBRE) (DSU)
    Susan Birkhoff, Nursing Research (Christiana Care Health System)
    *TBD*

12) Lidia Palmese, Cognitive Science (INBRE)
    Michael Vest, Pulmonary Intensivist (Christiana Care Health System)
    *TBD*

13) Jessica Martinez, Biology-Health Professions (INBRE) (DSU)
    Mia Papas, Value Institute (Christiana Care Health System)
    *Food Insecurity in General Medicine Outpatients at Christiana Care Health System*

NEMOURS BIOMEDICAL RESEARCH

14) Samuel Freet, Biomedical Engineering (INBRE)
    Rob Akins & Karyn Robinson, Clinical Research (Nemours A.I. duPont Hospital for Children)
    *TBD*

15) Matthew Dina, Biological Chemistry (INBRE) (Wesley College)
    Stephanie Deutsch, General Pediatrics & Pat Harty, Medical Imaging (Nemours A.I. duPont Hospital for Children)
    *TBD*

16) Nicole Rawding, Nursing (INBRE)
    Rochelle Hass, Orthopedics/Rehabilitation Medicine/ Psychology & Margaret Zysk, Concussions (Nemours A.I. duPont Hospital for Children)
    *TBD*
17) Sharon Kung, Medical Diagnostics (INBRE)
Sonali Barwe & Anilkumar Gopalakrishnapillai, Research (Nemours A.I. duPont Hospital for Children)
Role of Tetraspanins in Bone Marrow Microenvironment Mediated Chemoprotection of Leukemia Cells

18) Keerthana Chintalapati, Undeclared (INBRE) (Washington University)
Kyoko Nagao & Shunji Tomatsu, Research (Nemours A.I. duPont Hospital for Children)
TBD

19) Paige Amendum, Biological Sciences (S&E)
Shunji Tomatsu, Research (Nemours A.I. duPont Hospital for Children)
Elevation of Glycosaminoglycans in Human Blood Samples

20) Matthew Piechnik, Medical Diagnostics (CPW Bio)
Shunji Tomatsu, Research (Nemours A.I. duPont Hospital for Children)
Liver-Targeted AAV8 Gene Therapy in Mucopolysaccharidosis IVA Murine Model

VETERANS AFFAIRS MEDICAL CENTER

21) Carissa Walsakosak, Liberal Arts (INBRE)
Kristen Hyland, VA Medical Center (VA Medical Center)
Fructosamine vs. A1c: Provider Knowledge and Retrospective Analysis in Veteran Cohort

MEDICAL & MOLECULAR SCIENCES

22) Luisa Abadia, Biological Sciences (SF)
Mona Batish, Medical & Molecular Sciences
Generation of Stable Cell Lines Expressing Exogenous Circular RNA

23) Gina Roslan, Nutritional Science (SF)
Mona Batish, Medical & Molecular Sciences
The Interaction Between Proteins EWSFLI1 and NKX2.2 in Ewing’s Sarcoma

24) Sydney Shuster, Medical Laboratory Science (INBRE)
Mona Batish, Medical & Molecular Sciences
Single-Molecule Imaging of Structured RNA Decay in Stress Granules

25) Emily Hodgkins, Medical Laboratory Science (INBRE)
Esther Biswas, Medical & Molecular Sciences
Comparative Analysis of Strong and Weak ATPases, DnaB and ABCA4, Using ADP-GloTM Versus Malachite Green Assays

26) Janae Latta, Biological Sciences (INBRE)
Esther Biswas, Medical & Molecular Sciences
Immunohcharacterization of Domain-Specific Antibodies Against the Retina-Specific ABCA Transporter, ABCA4

27) Sarah Barndt, Applied Molecular Biology & Biotechnology (INBRE)
Subhasis Biswas, Medical & Molecular Sciences
DnaB Alpha Structure Analysis: Study of Alpha Domain Using Fluorescence Resonance Energy Transfer (FRET)

28) Afua Owusu-Donkor, Medical Diagnostics (McNair)
Subhasis Biswas, Medical & Molecular Sciences
Anion Exchange Purification of a Bacterial DNA Helicase, DnaB Protein of Escherichia coli

29) Amber Grunow, Biochemistry (SF)
Vijay Parashar, Medical & Molecular Sciences
Biosynthesis and HPLC Purification of c-di-AMP Using Recombinant DisA

30) Reda Zahran, Medical Laboratory Sciences (INBRE)
Vijay Parashar, Medical & Molecular Sciences
Role of Phosphorylation of Response Regulator Vicr in C-Di-AMP-Mediated S. mutans Biofilm Formation

EPIDEMIOLOGY

31) Nkeiruka Ashiedu, Health Behavior Science (McNair)
Jennifer Horney, Epidemiology Program
Fine Particulate Matter and its Effects on Asthma in Delaware

32) Sarah Hooks, Public Health (Unidel) (Texas A&M)
Jennifer Horney, Epidemiology Program
Using CASPER to Determine Health Risks from Incinerators in Environmental Justice Communities

NURSING

33) Yiqi Wang, Nursing (S&E)
Xiaopeng Ji, Nursing
TBD

KINESIOLOGY & APPLIED PHYSIOLOGY

34) Lyla Handoklow, Bioengineering (CBER NSF REU)
(University of Illinois at Chicago)
Elisa Arch, Kinesiology & Applied Physiology
Effect of Load Carriage on Natural Ankle Quasi-Stiffness

35) Ahlad Neti, Biomedical Engineering (INBRE)
Elisa Arch, Kinesiology & Applied Physiology
TBD

36) George Class-Peters, Medical Diagnostics (INBRE)
Thomas Buckley, Kinesiology & Applied Physiology
Concussion Knowledge and Attitudes Do Not Predict Reporting Behaviors Among Physically Active College Students
37) Jillian Driver, Athletic Training (Unidel) (Gustavus Adolphus College)
Thomas Buckley, Kinesiology & Applied Physiology
Predicting Total Mood Disturbance of Collegiate Hockey Players Using Head Impact Data

38) Emma Fink, Neuroscience (S&E)
Thomas Buckley, Kinesiology & Applied Physiology
Concussion Does Not Impair Trails A & B Performance

39) Autumn Gourley, Psychology (INBRE)
Thomas Buckley, Kinesiology & Applied Physiology
Do Baseline Psychological Factors Predict Subsequent Musculoskeletal Injury in the Year After Concussion?

40) Carissa Aekins, Physiology/Neurobiology (Unidel) (University of Connecticut)
Roxana Burciu, Kinesiology & Applied Physiology
Comparison of Lower-Limb and Upper-Limb Force Production in Individuals with Parkinson’s Disease

41) Hason Jafrey, Nursing (INBRE)
Roxana Burciu, Kinesiology & Applied Physiology
Changes in Balance in Individuals with Early Stage Parkinson’s Disease

42) Andrez Jones, Health Behavior Science (McNair) & Austin Schimmel, Exercise Science (S&E)
Nancy Getchell, Kinesiology & Applied Physiology
How Do Fidget Spinners Affect Fine Motor Control and Underlying Prefrontal Cortex Function? An fNIRS Study

43) Alissa Strouse, Exercise Science (INBRE)
Thomas Kaminski, Kinesiology & Applied Physiology
Assessing Balance and Neurocognitive Function After an Acute Bout of Heading in Youth Female Soccer Players

44) Madelyn Guidash, Exercise Science (S&E)
Christopher Knight, Kinesiology & Applied Physiology
Comparison of Isometric and Dynamic Protocols to Test Rapid Muscle Force Production

45) Christina Mesbah, Dietetics (S&E)
Shannon Lennon, Kinesiology & Applied Physiology
Ultra-Processed Foods and Vascular Function

46) Leah Fisher, Biomedical Engineering (CBER NSF REU) (Wichita State University)
Kurt Manal, Kinesiology & Applied Physiology
Musculoskeletal Modeling of Patellofemoral Contact Force While Walking 3 Months After ACL Reconstruction

47) Anna Faunce, Biomedical Engineering (INBRE)
Jennifer Semrau, Kinesiology & Applied Physiology
A Dynamic Robotic Task for Measuring the Modulation of Kinesthesia: A Pilot Study

48) Haley Gill, Exercise Science (Delaware Rehabilitation Institute)
Jennifer Semrau, Kinesiology & Applied Physiology
Does Proprioception Matter in a Dynamic Bimanual Object Hit Task

49) Paris McConnell, Exercise Science (SF)
Megan Wenner, Kinesiology & Applied Physiology
Adrenergic Baroreflex Sensitivity in Young Women with a Family History of Hypertension

**PHYSICAL THERAPY**

50) Ankita Prasad, Neuroscience (S&E)
Anjana Bhat, Physical Therapy
Comparing fNIRS-Based Cortical Activation Between Children with Autism Spectrum Disorder (ASD) and Without ASD During Synchronized Postural Sway and its Relationship to Praxis/Motor Performance

51) Brooke Tripp, Exercise Science (PT)
Anjana Bhat, Physical Therapy
The Effects of Creative Movement Interventions on the Motor and Social Skills of Children with Autism Spectrum Disorder

52) Chanel Smith, Biological Sciences (INBRE)
Hyosub Kim, Physical Therapy
Dissociating Implicit Motor Learning from Variable Sensory Prediction Versus Target Errors

53) Joie Tang, Exercise Science (ADaPT)
Hyosub Kim, Physical Therapy
Characterizing the Effect of Persistent Target Error on Implicit Motor Learning

54) Rachel Gaston, Health & Exercise Science (Unidel) (Bridgewater College)
Michele Lobo, Physical Therapy
Development of Reaching Behaviors Across Time in Infants with Mild, Moderate, or Severe Motor Delays

55) Isiah Hiatt, PVAB (McNair)
Michele Lobo, Physical Therapy
Influence of Parent-Child Interaction on Infant Motor Development

56) Dara Priester, Actuarial Science (INBRE)
Susanne Morton, Physical Therapy
Exploring the Effect of Different Pneumatic Actuators on the Arm’s Abduction Angle

57) Parma Elizabeth Wright, Biological Sciences (Nucleus)
Michele Lobo, Physical Therapy
Influence of Parent-Child Interaction on Infant Motor Development

58) Mykel Jenkins, Forensics Biology (INBRE) (DSU)
Darcy Reisman, Physical Therapy
Stroke and Physical Therapy
59) Arif Peracha, Biomedical Engineering (McNair)
Karin Silbernagel, Physical Therapy
Comparing Achilles Tendon Mechanical Properties and Jump Performance Between Dominant and Non-Dominant Legs in Healthy Individuals

60) Ariona Thornton, Athletic Training (INBRE)
Karin Silbernagel, Physical Therapy
Comparison of Lower Limb Muscle Activity in Dominant Versus Non-Dominant Sides During Walking and Jumping

61) Dominic Veliz, Kinesiology/Exercise Science (CBER NSF REU) (UTEPE)
Karin Silbernagel, Physical Therapy
Comparison of Muscle and Tendon Morphology and Function Between Dominant and Non-Dominant Legs

62) Jessica Palmaccio, Nursing (INBRE)
Megan Sions, Physical Therapy
Applying NIH Task Force on Chronic Low Back Pain Research Standards to Characterize Adults with Trans-Tibial Amputations

63) Gloria Soto, Nutrition & Medical Sciences (McNair)
Lynn Snyder-Mackler, Physical Therapy
The Effect of Split-Belt Treadmill Walking on Lower Extremity Kinetics and Kinematics

BEHAVIORAL HEALTH & NUTRITION

64) Arlett Ramirez, Nutritional Sciences/Dietetics (INBRE)
Sheau Ching Chai, Behavioral Health & Nutrition
Chocolate Chews with Ashwagandha Extract Correlated to Stress and Anxiety Reduction in Women

65) Catherine Davis, Dietetics (S&E)
Carly Pacanowski, Behavioral Health & Nutrition
The Prevalence of Eating Disorders Among Anxiety, Mood, and Personality Disorders

66) Hadja Toure, Health Behavior Science (Pattison Award)
Kelebogile Setiloane, Behavioral Health & Nutrition
African Immigrant Food Behavior

HEALTH SCIENCES

67) Caitlin Berger, Exercise Science (S&E)
Martha Hall, Health Sciences
TBD

68) Elizabeth deBruin, Medical Diagnostics (S&E)
Martha Hall, Health Sciences
Developing Participatory Techniques to Engage Individuals with Cognitive Delays to Assess Clothing-Related Needs

69) Danielle Kempner, Health Sciences-Occupational Therapy (S&E)
Martha Hall, Health Sciences
CueMinder™ Alerting System

70) Heidi Knutsen, Mechanical Engineering (S&E)
Martha Hall, Health Sciences
Motivational Fitness Tracker for Adults with Intellectual Disabilities

71) Kiersten McCormack, Psychology (S&E)
Martha Hall, Health Sciences
TBD

72) Jaeh Yoo, Mechanical Engineering (S&E)
Martha Hall, Health Sciences
Orthopedic Walking Boot

COMMUNICATION SCIENCE & DISORDERS

73) Charlotte Robinson, Allied Health Sciences (Unidel)
(University of Connecticut)
Frances Earle, Communication Science & Disorders
Language Ability Predicts Health Literacy Skills

POSTER SESSION II
10:15 - 11:45AM
(Biological Sciences, Chemistry & Biochemistry)

BIOLOGICAL SCIENCES

1) Jisoo Hong, Biological Sciences (CPW Bio)
Fidelma Boyd, Biological Sciences
Phenotypic Analysis of Quorum Sensing Mutants in Vibrio parahaemolyticus

2) Chun-Kit Shum, Quantitative Biology (CPW Bio)
Fidelma Boyd, Biological Sciences
The Analysis of Phosphodiesterase CpdA in Vibrio parahaemolyticus

3) Yasmin Mann, Biological Sciences (Nucleus)
Carlton Cooper, Biological Sciences
The Role of Oxidative Stress in Prostate Cancer Metastasis to Bone

4) Katie Coscia, Cell Biology & Biochemistry (Unidel)
(Georgia Gwinnett College)
Melinda Duncan, Biological Sciences
Investigating the Mechanisms of Aniridic Cataract
5) Paige Faasuamalie, Neuroscience (Lafayette LEARN) (Lafayette College) 
Melinda Duncan, Biological Sciences 
Impact of a Pax6 Mutation on Inflammation and Fibrosis in the Cornea

6) Ananya Garg, Biological Sciences (Nucleus) 
Melinda Duncan, Biological Sciences 
The Activation of Inflammatory and Fibrotic EGR1 Targets in Lens Cells After Cataract Surgery

7) Nicole Rossi, Biological Sciences (CPW Bio) 
Melinda Duncan, Biological Sciences 
The Role of Lactase-Like in Adult Lens Homeostasis

8) Declan Bado, Biological Sciences (INBRE) 
Velia Fowler, Biological Sciences 
Definitive Erythropoiesis of MELDS19 Cells: Functional Analyses of Tropomodulin 1 and 3

9) Amy Lin, Biological Sciences (INBRE) 
Deni Galileo, Biological Sciences 
Identification of Microglial Cells During Chick Embryo Brain Development Using Different Markers

10) Alena Brown, Biology (EPSCoR) (Wesley College) 
Thomas Hanson, Biological Sciences 
Do Toxic Cyanobacteria Lurk in Delaware’s Ponds?

11) Miranda Marini, Marine Science (EPSCoR) 
Thomas Hanson, Biological Sciences 
Is the Delaware River Harboring Novel Chemolithoautotrophic Microbes?

12) Alekya Bheemreddy, Biological Sciences (CPW Bio) 
Aimee Jaramillo-Lambert, Biological Sciences 
Investigating the Knockdown of Tdpt-1 in Top-2 Variants During Meiosis in C. elegans

13) Darline Murat, Biological Sciences (McNair) 
Aimee Jaramillo-Lambert, Biological Sciences 
The Effects of Reducing Condensin in the Mutant Topoisomerase Allele, Top-2(It7), During C. elegans Meiosis

14) Francisco Hernández, Applied Molecular Biology & Biotechnology (Nucleus) 
Salil Lachke, Biological Sciences 
TBD

15) Sabrina Luther, Biological Sciences (Jeremy Axe Award) 
Salil Lachke, Biological Sciences 
The Cataract-Associated RNA-Binding Protein Celf1 Regulates Hspb8, a Key Molecular Chaperone, in Lens Development

16) Juan Ruiz, Biological Sciences 
Salil Lachke, Biological Sciences 
Investigation of New Biomarkers for Mammalian Eye Development

17) Campbell Tosing, Biological Sciences (CPW Bio) 
Salil Lachke, Biological Sciences 
TBD

18) Julie Sosa, Biological Sciences (McNair) 
Gary Laverty, Biological Sciences 
Structural Influences of Chemical Attractants on Chemosensing in Tetrahymena thermophila

19) Michelle Favichia, Biochemistry (INBRE) 
Ramona Neunuebel, Biological Sciences 
Determining the Effect of SidE Family Effector Proteins of Legionella pneumophila on Host Vesicular Trafficking

20) Semaj Kelly, Biological Sciences (INBRE) 
Anja Nohe, Biological Sciences 
TBD

21) Mahmoud Sabra, Biological Sciences (CPW Bio) 
Anja Nohe, Biological Sciences 
TBD

22) Ryan Wood, Biological Sciences (INBRE) 
Anja Nohe, Biological Sciences 
TBD

23) Kalekidan Abera, Biology (INBRE) (Towson University) 
Justin Parreno & Velia Fowler, Biological Sciences 
Ocular Response to Lens Compression on Guinea Pigs and Rats

24) Alice Wu, Biological Sciences (Nucleus) 
Shawn Polson, Biological Sciences 
Enriching for Giant Viruses in Environmental Samples to Improve Metagenomic Virus Surveys

25) Priyanka Bheemreddy, Biological Sciences (CPW Bio) 
Karl Schmitz, Biological Sciences 
Expression, Purification, and Characterization of N-End Rule mEos3.2 Protein

26) Jennifer Vorn, Medical Diagnostics (INBRE) 
Karl Schmitz, Biological Sciences 
Purification and Biophysical Characterization of Unusual ClpS Proteolytic Adapters

27) Nicholas Finelli, Biological Sciences (Governors Biotec Award) 
Erica Selva, Biological Sciences 
In Culture Functional Analysis of Wls Oligomeric State

28) Anthony Baker, Biology (EPSCoR) (Wesley College) 
Kevin Shuman, Microbiology (Wesley College) 
Environmental and Physiological Characterization of Two Bacterial Isolates from the St. Jones River

29) Kassandra Dieter, Biology (INBRE) (Wesley College) 
Kevin Shuman, Microbiology (Wesley College) 
Effects of Artificial Sweeteners on the Growth of Bacteria

30) Gloria Jimenez-Martinez, Biology (EPSCoR) (Wesley College) 
Kevin Shuman, Microbiology (Wesley College) 
Environmental and Physiological Characterization of Two Isolated Strains of Comamonas terrigena
31) Maryssa Roberts, Biology (INBRE) (Wesley College)  
   Kevin Shuman, Microbiology (Wesley College)  
   Identification of Mutations in Two Strains of Serratia marcescens

32) Jacob Duggan, Biological Sciences (CPW Bio)  
   Jia Song, Biological Sciences  
   PKC Regulates Cell Motility and Skeletogenesis

33) Charlotte Leslie, Biological Sciences (Nucleus)  
   Jessica Tanis, Biological Sciences  
   Validation of Differentially Expressed Genes in Amyloid Beta-Expressing C. elegans Fed Different Diets

34) Jaclyn Littmann, Biological Sciences (Stetson Award)  
   Jessica Tanis, Biological Sciences  
   Investigation of CIL-7 and its Role in Extracellular Vesicle Release

35) Erin Smith, Biological Sciences (CPW Bio)  
   Jessica Tanis, Biological Sciences  
   A Cytoplasmic Role for a Histone Methyltransferase in C. elegans Muscle Development

36) Madeline McGhee, Biological Sciences (INBRE)  
   Kenneth van Golen, Biological Sciences  
   TBD

37) Pallavi Kulkarni, Neuroscience (S&E)  
   Shuo Wei, Biological Sciences  
   The Role of ADAM9 in Colorectal Cancer

38) Amanda Toreki, Biological Sciences (SF)  
   Eric Wommack, Biological Sciences  
   Prophage Gene Expression in Soybean Root Nodules

CHEMISTRY & BIOCHEMISTRY

39) Khadijah Bland, Biological Chemistry & Omasan Uyebi, Biology (INBRE) (Wesley College)  
   Malcolm D’Souza, Biological Chemistry (Wesley College)  
   Multiplex Immunohistochemical Urine Cytology Based Analysis as a Screening Tool for Detecting Early Urothelial Malignancies

40) Victoir Cahoon, Biological Chemistry (NASA DESGC/INBRE) (Wesley College)  
   Malcolm D’Souza, Biological Chemistry (Wesley College)  
   Effect of Length of Carbon Chain on Reaction Rates of Chloroformate Esters

41) Anas Mahmoud, Biological Chemistry (INBRE) (Wesley College)  
   Malcolm D’Souza, Biological Chemistry (Wesley College)  
   Analysis of the Solvolytic Rates of Synthetically Useful Lauryl and Hexadecyl Chloroformates

42) Ja’Ki Miles, Biological Chemistry (INBRE/EPSCoR) (Wesley College)  
   Malcolm D’Souza, Biological Chemistry (Wesley College)  
   Wesley College STEM-Program Outreach and Service

43) Madeline Tallman, Biomedical Engineering (NSF) (Tulane University)  
   Megan Killian, Biomedical Engineering  
   Lablal Microstructure: Dorsal vs. Ventral Morphology

44) Genell Addison, Chemistry (EPSCoR) (DSU)  
   Kimberly Milligan, Chemistry (DSU)  
   TBD

45) Douglas Austin, Chemistry (EPSCoR) (DSU)  
   Kimberly Milligan, Chemistry (DSU)  
   TBD

46) Aysiah Stamper, Chemistry (EPSCoR) (DSU)  
   Kimberly Milligan, Chemistry (DSU)  
   TBD

47) Winnie Wong, Chemistry (Nucleus)  
   William Chain, Chemistry & Biochemistry  
   Efforts Towards a Total Synthesis of Calbistrin A

48) Jeffrey Cragin, Chemistry (Hofmann)  
   Joseph Fox, Chemistry & Biochemistry  
   Mechanistic Studies of Photocatalytic Bioorthogonal Chemistry

49) Jorden Berry, Biochemistry (Gore Chemistry Award)  
   Catherine Grimes, Chemistry & Biochemistry  
   Large Scale Preparation of Muramic Acid

50) Jevin Frazer-Wrobeh, Biochemistry (S&KE)  
   Catherine Grimes, Chemistry & Biochemistry  
   Synthesis and Characterization of Gallium Oxide Nanowires

51) Elise Garner, Biochemistry (Plastino)  
   Catherine Grimes, Chemistry & Biochemistry  
   Synthesis of Muranyl Tripeptide Derivatives from the Peptidoglycan of Borrelia burgdorferi for Microarray Analysis

52) Jared Ramsey, Biochemistry (Plastino)  
   Catherine Grimes, Chemistry & Biochemistry  
   Synthesis of 3,3 and 3,4 Crosslinked MDP Dimers

53) Pruthvi Banginwar, Engineering Physics (Unidel) (Cornell University)  
   Lars Gundlach, Chemistry & Biochemistry  
   Synthesis and Characterization of Gallium Oxide Nanowires

54) Savannah Talledo, Chemistry (NSF) (Wofford College)  
   Murray Johnston, Chemistry & Biochemistry  
   Molecular Composition of SOA via the Ozonolysis of Alpha-Pinene

55) Vennesa Valentine, Biochemistry (Unidel) (Alcorn State University)  
   Sharon Neal, Chemistry & Biochemistry  
   The Effect of Analyte Binding on the Detection of PAH Photosynthesized Oxygen in Biorelevant Solvents
56) Sara Goldstein, Biotechnology (INBRE) (DTCC)
Juan Perilla, Chemistry & Biochemistry
*Insights on the Molecular Mechanisms During the Life Cycle of HIV*

57) Christian Lantz, Biochemistry (NSF) (Lebanon Valley College)
Juan Perilla, Chemistry & Biochemistry
*HIV-1 Image Recognition Using a Neural Network*

58) Tanya Nesterova, Chemistry (Heitzer Award)
Juan Perilla, Chemistry & Biochemistry
*Parallelized Modeling of Incomplete HIV Capsid Through Computational Geometric Methods*

59) Ashrith Keshireddy, Charter School of Wilmington
Tatyana Polenova, Chemistry & Biochemistry
*Assessing Computational Procedures for Protein Structure Determination by Magic Angle Spinning NMR Spectroscopy*

60) Molly Warndorf, Chemistry (Plastino)
Joel Rosenthal, Chemistry & Biochemistry
*Synthesis of Palladium Tetrapyrrrole Macrocycles Through Cross-Coupling Reactions for Use in Photodynamic Light Therapy*

61) Juliana Serrano, Biochemistry (S&E)
Sharon Rozovsky, Chemistry & Biochemistry
*Developing a Method for the Co-Expression of Multiple Proteins in Pichia pastoris*

62) Olivia Shaw, Biochemistry (NSF)
Sharon Rozovsky, Chemistry & Biochemistry
*Characterizing the Effects of Point Mutations on GB1 Structure and Stability by All-Atom Molecular Dynamics Simulation*

63) Kelsi Walker, Quantitative Biology (McNair)
Sharon Rozovsky, Chemistry & Biochemistry
*Mapping the Dimer Interface in a Key Regulator of Protein Quality Control*

64) Dominick Guida, Chemical Engineering (Plastino)
Klaus Theopold, Chemistry & Biochemistry
*Tuning the Optical Properties of Two-Dimensional Lead Halide Perovskites*

65) Jackson Burns, Chemical Engineering (Stakem Award)
Donald Watson, Chemistry & Biochemistry
*Applying Computer Science to the Development of Chemical Reactions: Applications in Heck-Type Cross-Coupling Reactions*

66) Mitchell Daneker, Chemistry (Bigelow Award)
Mary Watson, Chemistry & Biochemistry
*Reenvisioning Amines to Open New Doors to Pharmaceuticals*

67) Kudakwashe Murinda, Biochemistry (Unidel) (Alcorn State University)
Donald Watson, Chemistry & Biochemistry
*Ruthenium Catalyzed Synthesis of Chiral Amines from Asymmetric Hydrogenation of Nitroalkanes*

68) Stephanie Tsang, Chemistry (Unidel) (Grinnell College)
Mary Watson, Chemistry & Biochemistry
*Repurposing Amino Acids: Using Lysine in Organic Synthesis*

69) Jean Filo, Biological Sciences (Plastino)
Zhihao Zhuang, Chemistry & Biochemistry
*Probing the Role of Ubiquitin in the Regulation of Gene Expression*

70) Cole Lazarus, Biochemistry (Plastino)
Zhihao Zhuang, Chemistry & Biochemistry
*Assembly of Multi-Protein Probes Using Semisynthetic Approaches*

71) Ryann Perez, Chemistry (Harrison Chemistry Award)
Neal Zondlo, Chemistry & Biochemistry
*TBD*

72) Siyuan Xiang, Chemistry (Plastino)
Neal Zondlo, Chemistry & Biochemistry
*TBD*

73) Juliana Follmar, Biochemistry (Nucleus)
Catherine Grimes, Chemistry & Biochemistry
*Metabolic Labeling of Bacterial Cell Walls Using Fluorine-Containing N-Acetyl-Muramic Acid (NAM) Derivatives for Mapping Molecules in the Microbiome-Brain Connection*

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**POSTER SESSION III**

**12:00 - 1:30PM**


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**AGRICULTURE & NATURAL RESOURCES**

1) Natalie Wong, Wildlife Conservation (SF)
Keith Hopper, Agriculture & Natural Resources
*Reproductive Compatibility of Male and Female Phellinus rhamni Cured of Wolbachia*
2) Kishaun Bethea, Biological Sciences (EPSCoR) (DSU)
    Venugopal Kalavacharla, Agriculture & Natural Resources (DSU)
    TBD
3) Daniela Rivera, Pre-Veterinarian (EPSCoR) (DSU)
    Venugopal Kalavacharla, Agriculture & Natural Resources (DSU)
    TBD
4) Fedrica Williams, Nursing (EPSCoR) (DSU)
    Venugopal Kalavacharla, Agriculture & Natural Resources (DSU)
    Epigenomic and Transcriptomic Study of Marshgrass (Spartina alterniflora) to Better Understand its Salt Tolerance Ability: Project Overview
5) Raymond Andrews, Natural Resources (EPSCoR) (DSU)
    Gulnihal Ozbay, Agriculture & Natural Resources (DSU)
    TBD
6) Mirey Kurkuoglu, Pre-Veterinarian (EPSCoR) (DSU)
    Gulnihal Ozbay, Agriculture & Natural Resources (DSU)
    TBD
7) Colton Williamson, Biology (EPSCoR) (Salisbury University)
    Gulnihal Ozbay, Agriculture & Natural Resources (DSU)
    TBD

ANIMAL & FOOD SCIENCES

8) Connor Pitman, Biological Sciences (S&E)
    Behnam Abasht, Animal & Food Sciences
    The Evidence and Role of Dosage Compensation in Red Junglefowl
9) Brianna Ames, Animal & Food Sciences (Envision Scholar)
    Robert Alphin, Animal & Food Sciences
    Evaluation of Newcastle Disease Virus Reduction in Open Source Affordable and Portable Vehicle Undercarriage Decontamination System with Foam Applied Disinfectants
10) Emma Redman, Animal & Food Sciences (Envision Scholar)
    Eric Benson, Animal & Food Sciences
    Evaluation of Foam Applied Disinfectants Used to Increase the Efficiency of an Open Source Affordable and Portable Vehicle Undercarriage Decontamination System
11) Kara Anderson, Animal & Food Sciences (Envision Scholar)
    Amy Biddle, Animal & Food Sciences
    Equine Microbiome Project: Outreach Design for Making Science Accessible to Clients and the Community
12) Brian Arisman, Agricultural & Medical Biotechnology (Unidel) (University of Kentucky)
    Amy Biddle, Animal & Food Sciences
    Quantifying the Shorten Reemergence Period of Cyathostomin Populations in Horses Following Anthelmintic Treatment
13) Jordan Cogswell, PVAB (S&E)
    Amy Biddle, Animal & Food Sciences
    Optimizing a Method for the Processing of Colonocytes from Equine Fecal Samples as a Noninvasive Host Sampling Method
14) Amy Demeter, Animal & Food Sciences (CANR Summer Institute)
    Amy Biddle, Animal & Food Sciences
    Optimizing a Method for Processing Colonocytes from Equine Fecal Samples as a Noninvasive Host Sampling Method
15) Ariel Strouse, Agriculture & Natural Resources (SF)
    Amy Biddle, Animal & Food Sciences
    Management and Nutritional Factors Associated with Body Condition in Horses
16) Lillian Goldman-Muller, Animal & Food Sciences (Envision Scholar)
    Aditya Dutta, Animal & Food Sciences
    Metabolic Role of Homeodomain-Containing Transcription Factors in Reproductive Organs
17) Ayo Agbaje, Animal & Food Sciences (Envision Scholar) (DSU)
    Tanya Gressley, Animal & Food Sciences
    TBD
18) Carly Flink, PVAB (S&E)
    Tanya Gressley, Animal & Food Sciences
    TBD
19) Joshua Taylor, Animal & Food Sciences (S&E)
    Rolf Joerger, Animal & Food Sciences
    Enzyme Based Hydrolysis of Mollusk Processing Waste
20) Marlena Cugliari, PVAB (S&E)
    Calvin Keeler, Animal & Food Sciences
    Broiler Chicken Responses to Infectious Laryngotracheitis Virus
21) Carlos Blanco, Animal & Food Sciences (Envision Scholar) (DSU)
    Kali Kniel, Animal & Food Sciences
    TBD
22) Paige Brooks, Animal & Food Sciences (Envision Scholar) (Lincoln University)
    Brian Ladman, Animal & Food Sciences
    TBD
23) Tara Brookins, Animal & Food Sciences (Envision Scholar) (Lincoln University)
    Hong Li, Animal & Food Sciences
    Assessment of Thermal Comfort of Broilers During Transportation
24) Aliyah Parsons, PVAB (Allen Scholar)
    Hong Li, Animal & Food Sciences
    Evaluating Ammonia Levels with Litter Amendments: Aluminum Sulfate and PLT
25) Jordyn Stevens, Animal & Food Sciences (Envision Scholar)
Yihang Li, Animal & Food Sciences
Intestinal Epithelial Cell Lineage Allocation in Response of Nutrition and Productional Stress in Growing Chickens

26) Erin Gollhardt, Health Science (Allen Scholar)
Mark Parcells, Animal & Food Sciences
Analysis of the Effects of Exosomes from Chicken Serum on Macrophage Signaling

27) Brittany O’Connell, Animal & Food Sciences (Envision Scholar) (UMES)
Mark Parcells, Animal & Food Sciences
Interaction of Marek's Disease Virus (MDV) with Innate Immune Sensors and Signaling

28) Kristen Wooten, Animal & Food Sciences (Envision Scholar) (UMES)
Mark Parcells, Animal & Food Sciences
Analysis of Metabolic Manipulation by Marek's Disease Virus (MDV)

29) Justine Tarsillo, PVAB (Murphy Scholar)
Carl Schmidt, Animal & Food Sciences
TBD

30) Julia Kesselring, Food Science (Willis Scholar)
Changqing Wu, Animal & Food Sciences
The Antimicrobial Activities of Potato Peel Waste

ENTOMOLOGY & WILDLIFE ECOLOGY

31) Paige Cummins, Insect Ecology & Conservation/Agriculture & Natural Resources (Allen Scholar)
Charles Bartlett, Entomology & Wildlife Ecology
Variation and Diagnostics of Anotia Planthoppers (Hemiptera: Derbidae)

32) Mia Montgomery, Wildlife Conservation & Ecology/Agriculture & Natural Resources (Allen Scholar)
Jeffery Buler, Entomology & Wildlife Ecology
Modeling Recent Trends in Pinniped Movement Across the Mid-Atlantic and New England Regions of the United States

33) David Brown, Entomology & Wildlife Ecology (Envision Scholar) (Lincoln University)
Deborah Delaney, Entomology & Wildlife Ecology
What is the Bees Diversity at Longwood Gardens?

34) Ben Sammarco, Insect Ecology & Conservation (S&E)
Deborah Delaney, Entomology & Wildlife Ecology
Effects of Simulated Honey Bee Hyperpolyandry on Colony Health

35) Gabriella Castillo, Entomology & Wildlife Ecology (Envision Scholar)
Ivan Hiltpold, Entomology & Wildlife Ecology
Automated Flight Mills: Putting a Spin on Insect Flight

Kyle McCarthy, Entomology & Wildlife Ecology
Assessing Attitudes and Perceptions of Human-Small Cat Conflict in the Mamoni Valley of Panama

37) Patrick Carney, Entomology & Wildlife Ecology (CANR Summer Institute)
Douglas Tallamy, Entomology & Wildlife Ecology
Quantifying the Impact of Reforestation Strategies on Biodiversity

38) Garrison Piel, Insect Ecology & Conservation (S&E)
Doug Tallamy, Entomology & Wildlife Ecology
Birds Forage Where the Food Is

39) Jared Ryan, Wildlife Ecology & Conservation (Willis Scholar)
Christopher Williams, Entomology & Wildlife Ecology
The Effect of Predator Guards and Box Age on Wood Duck Nest Box Use and Success

ENVIRONMENTAL SCIENCE

40) Gyllian O’Neill, Business Administration (Sea Grant) (Wesley College)
Matthew Grabowski, Division of Water (DNREC)
TBD

41) Sarah Fryer, Business Administration (Sea Grant) (Wesley College)
Jessica Quinn, Division of Climate, Coastal & Energy (DNREC)
Making Renewable Energy Affordable to All Delawearians

42) Sydney Hall, Environmental Science (EPSCoR) (Wesley College)
Stephanie Stotts, Environmental Science (Wesley College)
Wastewater Treatment and Microplastics: Murderkill River Compared to the St. Jones River

43) Teric Henry, Environmental Science (EPSCoR) (Wesley College)
Stephanie Stotts, Environmental Science (Wesley College)
TBD

44) Joseph Howard, Environmental Science (EPSCoR) (Wesley College)
Stephanie Stotts, Environmental Science (Wesley College)
Analyzing Radial Growth of Eastern Red Cedar (Juniperus virginiana) to Determine Severity of Displacement at St. Jones Reserve

45) Savanah Love, Environmental Science (EPSCoR) (Wesley College)
Stephanie Stotts, Environmental Science (Wesley College)
Investigating Eastern Red Cedars Killed by Salt at the St. Jones National Estuarine Research Reserve in Dover, De
COOPERATIVE EXTENSION

46) Shannon Murray, Mathematics Education (Cooperative Extension/Janice Seitz Scholar)
    Betsy Morris, Cooperative Extension
    4-H Day Camp

47) Davis Baylor, Entrepreneurship & Technology Innovation (Cooperative Extension/Chick Allen Scholar)
    Mike Popovich, Plant & Soil Sciences
    Hop Feasibility in Delaware

48) Kathryn Russel, Human Nutrition (Cooperative Extension/Chick Allen Scholar)
    Kathleen Splane, Cooperative Extension
    Vegetable Intake of Children Participating in Hands-On Nutrition Education

APPLIED ECONOMICS & STATISTICS

49) Katherine McCarroll, Environmental Science (EPSCoR)
    Kelly Davidson, Applied Economics & Statistics
    The Influence of Social Dynamics on Oyster Consumption

50) Zizhuo Xu, Applied Economics & Statistics (Allen Scholar)
    Shanshan Ding, Applied Economics & Statistics
    Machine Learning Methods for Water Security and Human Behavioral Response Studies

51) Nathan Castaneda, Energy Management (EPSCoR) (DTCC)
    Kent Messer, Applied Economics & Statistics
    Enhancing Farmers’ Adoption of Decision Support Tools to Improve Irrigation Management in Delaware

52) Katina Thongvong, Computer Science (EPSCoR) (DTCC)
    Kent Messer, Applied Economics & Statistics
    Testing and Deploying a Mobile Field Experiment

53) Rachel King, Environmental & Natural Resource Economics (EPSCoR)
    Leah Palm-Foster, Applied Economics & Statistics
    Manure Happens! Distribution of Delmarva’s Poultry Litter

54) Liam Vita, Environmental & Natural Resource Economics/Natural Resource Management (EPSCoR)
    Leah Palm-Foster, Applied Economics & Statistics
    Motorists’ Behavioral Responses to Data Visualization During Flood Events: Evidence from a Framed Field Experiment

PLANT & SOIL SCIENCES

55) Cierra McNeil, Mechanical Engineering (EPSCoR)
    Jules Bruck, Plant & Soil Sciences; Julia Maresca & Paul Imhoff, Civil & Environmental Engineering
    TBD

56) Matthew Rigor, Biomedical Engineering (INBRE)
    Jeff Caplan, Plant & Soil Sciences
    TBD

57) Thomas Moran, Plant Science (CENFOODS)
    Nicole Donofrio, Plant & Soil Sciences
    The Effects of Red Light on Sporulation of Lima Bean Pathogens

58) Kona Haramoto, Environmental Science (CENFOODS)
    Jeff Fuhrmann, Plant & Soil Sciences
    Sustainable Enhancement of Soybean Productivity - Using Lytic Viruses to Promote Root Nodule Occupancy by Superior Bradyrhizobia

59) Anna DiBattista, Biological Sciences (Nucleus)
    Pamela Green, Plant & Soil Sciences
    Generation of Mutants to Study the Role of Endoribonucleases in Plants

60) Justine Berina, Geology (CANR Summer Institute) (The College of Wooster)
    Shreeram Inamdar, Plant & Soil Sciences
    Mapping Historical Milldams and Legacy Sediment Accumulation in Streams: A Spatial Analysis

61) Nickolas Insley, Plant & Soil Sciences (SF)
    Jung-Youn Lee, Plant & Soil Sciences
    Phenotypic Characterization of Arabidopsis Plasmodesmata Mutants

62) Kirstie Niessen, Plant Science (SF)
    Jung-Youn Lee, Plant & Soil Sciences
    Evaluation of Expression Patterns of Putative Plasmodesmal Regulators

63) Sheridan Bryan, Biological Sciences (S& E)
    Angelia Seyfferth, Plant & Soil Sciences
    The Expression of Genes Related to Stress Response, Metal Toxicity, and as Toxicity in Rice

64) Florence Fields, Biology (CANR Summer Institute) (Saint Augustine’s University)
    Angelia Seyfferth, Plant & Soil Sciences
    Impacts of Si on Chlorophyll Content of Rice Tissues

65) Kendall McCoach, Plant & Soil Sciences/Geology (Allen Scholar)
    Angelia Seyfferth, Plant & Soil Sciences
    Impacts of Pyrolysis Temperature on Si Release from Rice Husk Biochar Incorporated into Paddy Soil

66) Monica Elavarthi, Chemical & Biomolecular Engineering (EPSCoR)
    Donald Sparks, Plant & Soil Sciences
    Legacy Phosphorus Desorption and uXANES Speciation from US Mid-Atlantic Agricultural Soils
67) Anna Evers, Chemistry (S&E)  
Donald Sparks, Plant & Soil Sciences  
*Effect of Silicate During Green Rust Carbonate Coprecipitation on Chromium (VI) Reduction Efficiency and Secondary Minerals*

68) Jenna Simons, Environmental Studies (CENFOODS)  
Anna Wik, Plant & Soil Sciences  
*UD Early Learning Center Outdoor Learning Environment Design Development*

69) Ra'Shantai Miller, Biology (CANR Summer Institute)  
(Rose Augustine’s University)  
Randy Wisser, Plant & Soil Sciences  
*Morphological, Developmental and Physiological Features Associated with Short-Term Evolution of Flowering Time Adaptation in Maize*

70) Thanvi Dola, (VEIL Lab) (Charter School of Wilmington)  
Eric Wommack, Plant & Soil Sciences  
*Viral Enrichment and Detection Methods for Enhancing the Giant Virus Survey*

71) Joshua Simpson, Biological Sciences/Chemistry (Unidel)  
(DTCC)  
Eric Wommack, Plant & Soil Sciences  
*Phenotypic Consequences of Mutating DNA Polymerase A Residue 762 in T7 Bacteriophage*

### MARINE STUDIES

72) Sydney Messick, Marine Science (S&E)  
Jennifer Biddle, Marine Studies  
*Searching for Lokiarchaeota Within Delaware Marshes*

73) Nicole Steplewski, Environmental Science (S&E)  
Aaron Carlisle, Marine Studies  
*TBD*

74) Rachel Roday, Marine Biology (S&E)  
Jonathan Cohen, Marine Studies  
*TBD*

75) Gretchen Johnson, Marine Biology (S&E)  
Kathryn Coyne, Marine Studies  
*La Vie en Rose: Optimization of a Colorimetric Nitrate Reductase Assay for the Harmful Alga Chattonella subsalsa*

### GEOLOGICAL SCIENCES

76) Raphael Affinito, Geological Sciences (SF)  
Jessica Warren, Geological Sciences  
*TBD*

### GEOGRAPHY

77) Jessica Clark, Environmental Science (CENFOODS)  
Pinki Mondal, Geography  
*When Producers are Consumers: Dietary Diversity and Food Insecurity Among Indian Smallholder Farmers*

### EDUCATION

78) Alexandra Raiche, Elementary Teacher Education (SF)  
Joshua Wilson, School of Education  
*Automated Writing Evaluation is an AWEsome Tool to Predict Students’ State Test Scores*

### HUMAN DEVELOPMENT & FAMILY SCIENCES

79) Nicole Kennedy, Public Policy (Hofmann)  
Allison Karpyn, Human Development & Family Sciences  
*What are the Impacts of Wilmington’s Policy Regarding the Beverages Offered with Children’s Meals?*

### MUSIC

80) Sarah Wójcik, Music Education (SF)  
Duane Cottrell, Music  
*Potential Benefits of Natural Movement in the Choral Rehearsal: The Why and How of Implementation*

81) Jamie Wechsler, Music (SF)  
Aimee Pearsall, Music  
*The Reasons for High School Students’ Non-Participation in Choral Programs*

### HISTORY

82) Troiana Hicks, English (Unidel) (DSU)  
Rebecca Davis, History  
*Woman of the Hour: Alice Dunbar-Nelson and the Black Suffrage Movement*

83) Dalia Handelman, Health Behavior Science (PAC Scholar)  
Roger Horowitz, History/Jewish Studies  
*Oral History Collaboration with the Jewish Historical Society of Delaware*

### PUBLIC POLICY

84) Madison Matera, Public Policy (AHSS)  
Leann Moore, Biden School of Public Policy & Administration/IPA  
*Racial Disparities Within School Discipline, and The School-to-Prison Pipeline in Delaware*
COMMUNICATION

85) Jenna Landesman, Communication (CEI Summer Fellow)
Nancy Karibjian, Center for Political Communication
Blue Hen Social Media Summer Fellowship

86) Kevin Johnson, Communication (SF)
Dannagal Young, Communication
Media in the Motherland: A Qualitative Study of Modern Russian Media Use and Public Opinion

LANGUAGES, LITERATURES & CULTURES

87) Kevin Brown, International Relations (SF)
Victoria Finney, Languages, Literatures & Cultures
Public Political Opinion Survey Between Russian and American Citizens

POSTER SESSION IV
1:45 - 3:15PM
(Engineering: Biomedical, Chemical & Biomolecular, Civil & Environmental, Mechanical)

BIOMEDICAL ENGINEERING

1) Jefferson Steltz, Biomedical Engineering (S&E)
Elise Corbin, Biomedical Engineering
Changing Roughness of Varying Viscoelastic Substrates

2) Carolina Gomez, Biomedical Engineering (S&E)
Emily Day, Biomedical Engineering
Photoreactive miR-34a Nanoshells for Triple Negative Breast Cancer

3) James Mullin, Chemical Engineering (Unidel) (UVA)
Emily Day, Biomedical Engineering
Intracellular Delivery of miR-34a and ABT-737 via PLGA Nanoparticles to Treat Triple Negative Breast Cancer

4) Emily Powsner, Biomedical Engineering (S&E)
Emily Day, Biomedical Engineering
Biomimetic Membrane-Wrapped Nanoparticles for Targeted Delivery of Sirna to CHRF Cells

5) Violet Ullman, Biomedical Engineering (S&E)
Emily Day, Biomedical Engineering
Enabling Triple-Negative Breast Cancer Treatment Through Nanoparticle-Mediated miR-34a and Doxorubicin Delivery

6) Emily Eichenlaub, Biomedical Engineering (INBRE)
Dawn Elliott & Megan Killian, Biomedical Engineering
Modeling the Mechanical Changes in Tendinopathy Using Chemical Digestion

7) Isabel Carulli, Biomedical Engineering (McNair)
Jason Gleghorn, Biomedical Engineering
Pattern Formation Based on Morphogen Gradients in a Bacterial Sender-Receiver Network

8) Nicolette Chahalis, Biomedical Engineering (S&E)
Jason Gleghorn, Biomedical Engineering
Quantifying Gene Expression in the Embryonic Lung Airway Using Fluorescent in situ Hybridization

9) Brea Chernokal, Biomedical Engineering (S&E)
Jason Gleghorn, Biomedical Engineering
Directed Self-Assembly of Vascular Networks in a 3D Collagen Gel

10) Brianna Dagostino, Mechanical Engineering (CBER NSF REU) (UTEP)
Jason Gleghorn, Biomedical Engineering
3D Spatial Photopatterning in Extracellular Matrix Mimicking Hydrogel

11) Sarah Geissler, Biomedical Engineering (S&E)
Jason Gleghorn, Biomedical Engineering
Incorporation of Tailorable Extracellular Matrices into Microfluidic Microphysiological Systems

12) Sienna Pyle, Biomedical Engineering (McNair)
Jason Gleghorn, Biomedical Engineering
TBD

13) Diana Renteria, Biological Engineering (Unidel) (MIT)
Jason Gleghorn, Biomedical Engineering
Directed Self-Assembly of Tissues Using Hydrogel Interfaces

14) McKenna Grega, Biochemistry (Unidel) (Mansfield University)
Curtis Johnson, Biomedical Engineering
Determining Mechanical Properties in Viscoelastic Phantoms by MR Elastography

15) Ariel Hannum, Biomedical Engineering (Delaware Rehabilitation Institute)
Curtis Johnson, Biomedical Engineering
Sources of Signal Noise in Magnetic Resonance Elastography

16) Shaneaka Anderson, Biology (Unidel) (Edward Waters College)
Megan Killian, Biomedical Engineering
Observing Gene Expression in Tendon-Bone Attachment of Normal and Fgf9 Mutant

17) Joseph Korn, Biomedical Engineering (SF)
Megan Killian, Biomedical Engineering
Percentage of Actively Transcribing Scx+ Cells in Tendon Compared to in Vital Organs
18) Julianna Wayne, Biomedical Engineering (S&E)
Megan Killian, Biomedical Engineering
Strain Rate-Dependent Damage Detected by Fluorescent
Collagen Mimetic Peptides Following Achilles Tendon Rupture

19) Rachel Klink, Engineering (CBER NSF REU) (Taylor University)
Megan Killian, Biomedical Engineering
Mechanics of Small and Large Partial-Width Defects of the
Rotator Cuff Tendon-to-Bone Attachment

20) Neil Godbole, Biomedical Engineering (SF)
Christopher Price, Biomedical Engineering
Intra-Articular Drug Delivery Using Elastin-Like Protein and
Collagen-Like Protein Nanoparticles

21) Ahmed Gure, Biomedical Engineering (CBER NSF REU)
(UT-Arlington)
Christopher Price, Biomedical Engineering
Species-Specific Assessment of Tribological Rehydration

22) Maria Lilley, Biomedical Engineering (Delaware Rehabilitation Institute)
Fabrizio Sergi, Biomedical Engineering
Bel Velocità o Accelerazione? Identification of Key Parameters in Training Propulsion During Walking

23) Jordan Rampolla, Biomedical Engineering (S&E)
Fabrizio Sergi, Biomedical Engineering
Characterization of Adaptation to Lateral Force Fields During Wrist Movement

24) Jacob Weinman, Biomedical Engineering (INBRE)
Fabrizio Sergi, Biomedical Engineering
Effect of Task Instructions on the Amplitude of Long Latency Responses in Wrist Flexors and Extensors

25) Emily Davis, Biomedical Engineering (S&E) & Rachael Passantino, Biomedical Engineering (INBRE)
John Slater, Biomedical Engineering
Microwevel-On-A-Chip for Modeling & Studying Blood Vessels In Vitro

26) Julia Janeczko, Biology (Unidel) (UT-Austin)
John Slater, Biomedical Engineering
Investigating Hydrogel Elasticity Effects on Focal Adhesion Kinase Phosphorylation

27) Bryan Jimenez, Biotechnology (CBER NSF REU) (UAGM) & Helen Wilson, Biomedical Engineering (SF)
John Slater, Biomedical Engineering
Understanding the Influence of Extracellular Vesicles (EV’s) on Cancer Cells Dormancy

28) Eric Wolfsberg, Chemical Engineering (S&E)
Maciek Antoniewicz, Chemical & Biomolecular Engineering
Elucidating Metabolism Of E. coli Double-Knockout Strains

29) Alex Attard, Chemical Engineering (NECA)
Douglas Buttrey, Chemical & Biomolecular Engineering
Exploring Synthetic Conditions for Slurry Preparation of Complex Molybdenum Vanadium Bronzes

30) Xijing Gong, Chemical Engineering (S&E)
Douglas Buttrey, Chemical & Biomolecular Engineering
Synthesis of Novel Tungsten-Molybdenum-Vanadium Pentagonal Ring Oxide Bronzes

31) Meghana Inabathini, Chemical Engineering
Douglas Buttrey, Chemical & Biomolecular Engineering
Preparation of Novel Niobium-Molybdenum-Vanadium Pentagonal Ring Oxide Bronzes

32) Joshua Watson, Chemical Engineering (NSF-REU Interfacing Sustainable Energy & Materials)
Thomas Epps, Chemical & Biomolecular Engineering
Introducing Additives to Lithium Triflate-Doped Poly(Ethylene Oxide) to Modulate Lithium-Ion Transport

33) Lucas Attia, Chemical Engineering (S&E)
Catherine Fromen, Chemical & Biomolecular Engineering
Fluid and Aerodynamic Properties of UiO-66 Nanoparticles with Varying Defectiveness and Cargo-Loading

34) Ellie Papoutsakis, Biomedical Engineering (S&E)
Cathy Fromen, Chemical & Biomolecular Engineering
Incorporation of Epithelial Cell Monolayers onto 3D Printed Materials to Accurately Mimic Respiratory Environment

35) Emma Peterman, Chemical Engineering (S&E)
Catherine Fromen, Chemical & Biomolecular Engineering
Lobe-Specific Deposition of Inhaled Nanoparticles in an Intubated Lung Model

36) Nisha Raman, Chemical Engineering (McNair)
Catherine Fromen, Chemical & Biomolecular Engineering
Modulation of Adjuvant Loading and Degradation Profiles from Biocompatible Polymeric Nanoparticles for Immune Stimulation

37) Chandler Amato, Chemical Engineering (S&E)
Arthi Jayaraman, Chemical & Biomolecular Engineering
Molecular Dynamics Simulations of Silica Nanorods with Different Aspect Ratios in Spherical Confinement

38) Wilson Chen, Chemical Engineering (Delaware Energy Institute)
Feng Jiao, Chemical & Biomolecular Engineering
Screening of Multimetallic Oxide Electrocatalysts for Oxygen Evolution
39) Alpha Gassama, Chemical Engineering (NSF-REU Sustainable Materials, IDeA NIH, NIGMS, COBRE Biomat/Drug Disc, Pew Scholars) (UMCP)
April Kloxin, Chemical & Biomolecular Engineering
Innovative Techniques for Probing and Modulating the Mechanical Properties of Hydrogels

40) Kathryn Christensen, Chemical Engineering (S&E)
Christopher Kloxin, Chemical & Biomolecular Engineering
Design of Peptide Bundle Macro-Initiators for Atom Transfer Radical Polymerization (ATRP) Reactions

41) Ryan Buchser, Chemical Engineering (S&E)
Aditya Kunjapur, Chemical & Biomolecular Engineering
Application of a Bacterial Adenylate Cyclase Two-Hybrid System for the Characterization of N-Degron/N-Recognin Binding

42) Natalie Fuhr, Chemical Engineering (S&E)
Aditya Kunjapur, Chemical & Biomolecular Engineering
Biosensor Optimization for the Detection of Aldehydes

43) Minwei Lin, Chemical Engineering (S&E)
Aditya Kunjapur, Chemical & Biomolecular Engineering
Biosynthesis and Ribosomal Incorporation of 4-Nitro-L-Phenylaniline

44) Sydney Clasen, Chemical Engineering (NSF)
Kelvin Lee, Chemical & Biomolecular Engineering
Monitoring the Effects of Transgenic DNA-Repair Genes on the Production Stability of High-Producing CHO Cell Lines

45) Kerri Mendola, Chemical Engineering (S&E)
Abraham Lenhoff, Chemical & Biomolecular Engineering
Expressing Hitchhiking Protein Impurities to Study Their Interactions with Therapeutic Monoclonal Antibodies

46) Schuyler Reed, Chemical Engineering (S&E)
Abraham Lenhoff, Chemical & Biomolecular Engineering
Neural Network Correlation of Protein Retention in Chromatographic Separations

47) Metehan Cebeci, Biological Sciences (DOE-Catalysis Center for Energy Innovation)
Raul Lobo, Chemical & Biomolecular Engineering
Investigating Scandium Triflate for Acetylation of Phenols

48) Michael Dillon, Chemical Engineering (Nucleus)
Eleftherios Papoutsakis, Chemical & Biomolecular Engineering
Engineering Escherichia coli for Methanol-Dependent Growth and Production

49) Logan Kim, Chemical Engineering (S&E)
Eleftherios Papoutsakis, Chemical & Biomolecular Engineering
Protein Engineering of a Methanol Dehydrogenase

50) Ioannis Zerefos, Biological Sciences (S&E)
Eleftherios Papoutsakis, Chemical & Biomolecular Engineering
Improving Methanol Tolerance of Escherichia coli Improves Methanol Utilization

51) Tohn Borjigin, Chemical Engineering (S&E)
Millicent Sullivan, Chemical & Biomolecular Engineering
Activation of M1, M2a Macrophages for PEI-Polyplex Gene Delivery

52) Qirun Li, Chemical Engineering (S&E)
Millicent Sullivan, Chemical & Biomolecular Engineering
Histone Mimetic Peptide Mediated Delivery of Suicide Enzyme for Breast Cancer Treatment

53) Keira Culley, Chemistry (NSF-REU Interfacing Sustainable Energy & Materials) (George Washington University)
Dion Vlachos, Chemical & Biomolecular Engineering
Combining Thermodynamic Modeling and Reaction Kinetics to Understand the Effect of Metal Salts in Biomass Upgrading

54) Andrew Danielson, Chemical Engineering (DOE-Catalysis Center for Energy Innovation)
Dion Vlachos, Chemical & Biomolecular Engineering
Catalytic Synthesis of High Performance Lubricant Base Oils with Biomass Derived Platform Molecules

55) Jake Kalscheur, Chemical Engineering (DOE-Catalysis Center for Energy Innovation)
Dion Vlachos, Chemical & Biomolecular Engineering
Kinetic Monte Carlo Simulations of Supported Pd Single Atom Diffusion and Nanocluster Formation on Ceria

56) Alexander Kuczykowski, Chemical Engineering (DOE-Catalysis Center for Energy Innovation)
Dion Vlachos, Chemical & Biomolecular Engineering
TBD

57) Matthew Marino, Chemical Engineering (Delaware Energy Institute/RAPID)
Dion Vlachos, Chemical & Biomolecular Engineering
Study of Solid-Liquid-Liquid Slurry Flow in Micro/Milli-Reactors for Heterogeneous Catalyst Integration for Biomass Conversion

58) Jai Pakhale, Chemical Engineering (DOE-Catalysis Center for Energy Innovation)
Dion Vlachos, Chemical & Biomolecular Engineering
The Effect of High Noble Metal Loading on the Performance of Metal Oxide Catalysts for Hydrodeoxygenation Reactions

59) Daniel Robinson, Chemical Engineering (DOE-Catalysis Center for Energy Innovation)
Dion Vlachos, Chemical & Biomolecular Engineering
TBD
60) Nicholas Samulewicz, Chemical Engineering (DOE-Catalysis Center for Energy Innovation)
Dion Vlachos, Chemical & Biomolecular Engineering
Optimizing Nitrogen-Doped Carbon Catalyst Production from Food Waste Through Machine Learning

61) Jackson Schade, Chemical Engineering (DOE-Catalysis Center for Energy Innovation)
Dion Vlachos, Chemical & Biomolecular Engineering
The Effect of High Noble Metal Loading on the Performance of Metal Oxide Catalysts for Hydrodeoxygenation Reactions

62) Christopher Tiso, Chemical Engineering (DOE-Catalysis Center for Energy Innovation)
Dion Vlachos, Chemical & Biomolecular Engineering

63) Sai Mahit Vaddadi, Chemical Engineering (S&E)
Dion Vlachos, Chemical & Biomolecular Engineering
Atomistic and Spectroscopic Modeling of Nanoparticles Using Genetic Algorithm

64) Tianyi Bai, Chemical Engineering (The Chemours Company)
Norm Wagner, Chemical & Biomolecular Engineering
Controlling Microscope Friction and Macroscope Flow Properties of Model Silica System

65) Jacob Hewes, Chemical Engineering (NASA EPSCOR MARS)
Norman Wagner, Chemical & Biomolecular Engineering
Investigate Potential of Lunar and Martian Regolith Based Geopolymer Cement

66) Rong Song, Particle Technology (The Chemours Company)
Norm Wagner, Chemical & Biomolecular Engineering
Investigating Particle Network Adhesion via Macrorheology

CIVIL & ENVIRONMENTAL ENGINEERING

67) Aidan Meese, Environmental Engineering (S&E)
Daniel Cha, Civil & Environmental Engineering
TBD

68) Robyn O’Halloran, Environmental Engineering (S&E)
Yu-Ping Chin, Civil & Environmental Engineering
Attenuation of Tylosin by Iron Oxides

69) Alexia Stock, Civil Engineering (CEECF)
Rachel Davidson, Civil & Environmental Engineering
Influence of Prior Experience on Homeowner Retrofit Decision-Making

70) Katelyn Anderson, Environmental Engineering (CEECF)
Dominic DiToro, Civil & Environmental Engineering
Predicting the Rates of Reduction for Nitroaromatic Compounds

71) James Holyoke, Civil Engineering (CEECF)
Tianjian Hsu, Civil & Environmental Engineering
Laboratory Investigation of Oil-Mineral Aggregation in Salt Water

72) Eric Noe, Environmental Engineering (S&E)
Paul Imhoff, Civil & Environmental Engineering
Predicting the Effect of Biochar on the Saturated Hydraulic Conductivity of Roadway Soils

73) Reid Williams, Environmental Engineering (CEECF)
Paul Imhoff, Civil & Environmental Engineering
The Effect of Biochar Addition on Soil Aggregation and Infiltration Rate

74) Jordan Heydt, Marine Science (S&E)
Julie Maresca, Civil & Environmental Engineering
Light Activated DNA Repair and Gene Cloning of the Actinobacteria Rhodoluna laicola

75) Hannah Tompkins, Applied Physics (Unidel) (Whitworth University)
Julia Maresca, Civil & Environmental Engineering
Concrete Biorepair: Ability of Bacteria Isolated from Concrete to Induce Carbonate Precipitation

MECHANICAL ENGINEERING

76) Patrick Bredbenner, Mechanical Engineering (SF)
Suresh Advani, Mechanical Engineering
Tension Testing of Fibers

77) Tristan Hoppe, Computer Science (Delaware Rehabilitation Institute) (Wheaton College)
Thomas Buchanan, Mechanical Engineering
Development of Hexahedral Meshes of Knee Cartilage for Finite Element Modeling

78) Christopher Evans, Mechanical Engineering (SF)
David Burris, Mechanical Engineering
Cantilever Calibration for Frictional Measurements

79) Taylor Kenda, Mechanical Engineering (CBER NSF REU) (Tarrant County College)
David Burris, Mechanical Engineering
Materials Tribology

80) Alexis Anderson, Biomedical Engineering (S&E)
M. Zubaer Hossain, Mechanical Engineering
TBD

81) Millicent Ayako, Physics (S&E)
M. Zubaer Hossain, Mechanical Engineering
Electronic Confinement of an Array of SiGe Alloyed Quantum Dots

82) Shane Brown, Physics (Delaware Energy Institute)
M. Zubaer Hossain, Mechanical Engineering
Electronic Confinement in MoS₂ Graphene Quantum Dots
POSTER SESSION V
3:30 - 5:00PM


PSYCHOLOGICAL & BRAIN SCIENCES

1) Tyler Alexa Adams, Psychology (McNair)
Kathleen Brewer-Smyth, School of Nursing
Childhood Abuse, Hypothalamic-Pituitary-Adrenal Axis and Alcohol-Related Female Violence

2) Allyson Copeland, Psychological Sciences/Philosophy (Summer Workshop in Cognitive & Brain Sciences) (Western Kentucky)
Jasmin Cloutier, Psychological & Brain Sciences
Exploring Neural Mechanisms Underlying Status Differentiation

3) Betty Akalu, Neuroscience (INBRE)
Mary Dozier, Psychological & Brain Sciences
Cortisol Regulation in Middle Childhood

4) Jessica Pigeon, Psychology (INBRE)
Roberta Golinkoff, Psychological & Brain Sciences
Parents' Emotions During Shared Reading of Print Books Versus eBooks

5) Courtney Aul, Psychology/Neuroscience (Plasket Award)
James Hoffman, Psychological & Brain Sciences
Is Semantic Information Processed Without Awareness in the Attentional Blink?

6) Zarek Fasoranti, Neuroscience (McNair)
James Hoffman, Psychological & Brain Sciences
The Absence of a Spatial Component in Emotion Induced Blindness

7) Alison Lobo, Neuroscience/Spanish Studies (INBRE)
James Hoffman, Psychological & Brain Sciences
Can Emotional Stimuli Overcome the Attentional Blink Without Physical Salience?
8) Casey Redding, Neuroscience (Nucleus)  
James Hoffman, Psychological & Brain Sciences  
*Semantic Priming Depends on Awareness During the Attentional Blink*

9) Julian Urbina, Psychology (McNair)  
James Hoffman, Psychological & Brain Sciences  
*TBD*

10) Joseph Osicky, Psychology (S&E)  
Julie Hubbard, Psychological & Brain Sciences  
*TBD*

11) Rubi Guadarrama, Psychology/Social Work (INBRE) (DSU)  
Lisa Jaremka, Psychological & Brain Sciences  
*The Impact of Mindfulness on Depressive Symptoms and Overall Well-Being*

12) Nicole Simpson, Psychology (INBRE)  
Lisa Jaremka, Psychological & Brain Sciences  
*The Effect of Mindfulness Intervention on Heart Rate Variability and Emotional Regulation in Adults with PTSD*

13) Eric Brengel, Neuroscience (SF)  
Anna Klintsova, Psychological & Brain Sciences  
*Effects of Neonatal Alcohol Exposures on Midline Thalamic Nuclei in Rodent Model*

14) Mary Callahan, Biological Sciences (SF)  
Anna Klintsova, Psychological & Brain Sciences  
*Nucleus Reuniens Activity in Rats using Spatial Memory*

15) Gillian LeBlanc, Neuroscience (SF)  
Anna Klintsova, Psychological & Brain Sciences  
*Effect of Third Trimester Equivalent Alcohol Exposure in Nucleus Reuniens*

16) Bailey Collins, Neuroscience (S&E)  
Dayan Knox, Psychological & Brain Sciences  
*Using Near Infrared Imaging to Examine the Effect of Anisomycin Drug on Fear Memory - Induced Changes in AMPA/NMDA Receptor Ratios in the Fear Circuit*

17) Abigail Farkash, Neuroscience (S&E)  
Dayan Knox, Psychological & Brain Sciences  
*Using Near Infrared Imaging to Examine the Effect of Anisomycin on Fear Memory - Induced Changes in AMPA/NMDA Receptor Ratios in the Fear Circuit*

18) Amy Morris, Psychology (Unidel) (John Carroll University) & Alex Viana, Biology (Summer Workshop in Cognitive & Brain Sciences) (University of Massachusetts-Lowell)  
Jared Medina, Psychological & Brain Sciences  
*Exploring Somatosensory Changes in Lower Limb Amputees*

19) Marina Smolens, Electrical Engineering (S&E)  
Joshua Neunuebel, Psychological & Brain Sciences  
*TBD*

20) Tara Cohen, Neuroscience (S&E)  
Robert Rafal, Psychological & Brain Sciences  
*Effects of Cerebellar Stimulation on Identity Priming*

21) Katey Hunt, Biology (Unidel) (Clarkson University)  
Tania Roth, Psychological & Brain Sciences  
*Comparison of Brain and Blood Methylation Values Associated with Early-Life Adversity*

22) Catherine Zimmerman, Neuroscience (S&E)  
Tania Roth, Psychological & Brain Sciences  
*Preventative Effects of Valproic Acid on Maltreatment-Induced DNA Methylation Within the Infant Prefrontal Cortex*

23) Elizabeth McAuley, Neuroscience (S&E)  
Jaclyn Schwarz, Psychological & Brain Sciences  
*Examining the Impact of Neuroimmune Dysregulation on Play Behavior in Male and Female Juvenile Rats*

24) Megan Muench, Neuroscience (S&E)  
Jaclyn Schwarz, Psychological & Brain Sciences  
*Impact of Neuroimmune Dysregulation on Social Interaction and Social Memory on Male and Female Juvenile Rats*

25) Stella Zhao, Neuroscience (S&E)  
Jaclyn Schwarz, Psychological & Brain Sciences  
*Prenatal Zika Virus Infection Alters Later Life Immune Function in Adult Rats*

26) Colin Horgan, Neuroscience (S&E)  
Mark Stanton, Psychological & Brain Sciences  
*Contribution of Hippocampal Development to the Rapid Acquisition of a Context Representation*

27) Miranda Partie, Psychology (SF)  
Mark Stanton, Psychological & Brain Sciences  
*Effects of Systemic Scopolamine Injections on Standard Contextual Fear Conditioning*

28) Claudia Pinizzotto, Neuroscience (SF)  
Mark Stanton, Psychological & Brain Sciences  
*TBD*

29) Samuel Dzik, Biological Sciences (INBRE)  
Timothy Vickery, Psychological & Brain Sciences  
*Intentional vs Unintentional Visual Statistical Learning*

30) Joel Lobban, Biochemistry (INBRE)  
Timothy Vickery, Psychological & Brain Sciences  
*Visual Statistical Learning and Category Learning*

31) Anna McCarter, Neuroscience (SF)  
Timothy Vickery, Psychological & Brain Sciences  
*Effects of Motor Confounds on Tracking Value of Location-Based Features*

**LINGUISTICS & COGNITIVE SCIENCE**

32) Hannah Martin, Neuroscience (S&E)  
Sayako Earle, Linguistics & Cognitive Science  
*Relation of Sub-Cortical Structure Segmentation and Social Integration*
33) Emily Virok, Psychology (S&E)  
Sayako Earle, Linguistics & Cognitive Science  
The Role of Exposure to Accented English on Novel Speech Sound Acquisition

34) Laura Matista, Cognitive Science (SF)  
Kathryn Franich, Linguistics & Cognitive Science  
Acoustics of Vowels in Medumba

35) Lena Herman, Cognitive Science (SF)  
Arild Hestvik, Linguistics & Cognitive Science  
Ad Hoc Phonetic Representations

36) Justus Matteson, Computer Engineering (SF)  
Kaja Jasinka, Linguistics & Cognitive Science  
TBD

37) Krystal Mendez, Cognitive Science (INBRE)  
Zhenghan Qi, Linguistics & Cognitive Science  
Examining EEG Data Retention Differences Between Neural Typical Children and Children with Autism Spectrum Disorder

38) Diana Rios, Neuroscience (S&E)  
Zhenghan Qi, Linguistics & Cognitive Science  
Individual Differences in Adult Multi-Modal Statistical Learning

39) Hannah Stetson, Cognitive Science (INBRE)  
Zhenghan Qi, Linguistics & Cognitive Science  
Clarifying the Neural Underpinnings Supporting Processing of Speech Distributional Information

MATERI AL S SCIENCE & ENGINEERING

40) Andrew Aumen, Chemistry (NSF-REU Interfacing Sustainable Energy & Materials) (Shippensburg University)  
Matthew Doty, Materials Science & Engineering  
Synthesis of Quantum Dot Nanostructures for Applications in Photon Upconversion

41) Sofia Alfieri, Biological Engineering (Purdue University)  
LaShanda Korley, Materials Science & Engineering  
3D Printing of Spatially Controlled Thermoresponsive Hydrogels

42) Mya Soukaseum, Chemical Engineering  
LaShanda Korley, Materials Science & Engineering  
Pathway-Dependent Mechanics and Morphology in Polymer-Reinforced Gels

43) Roshaun Titus, Engineering Science/General Mathematics (Unidel) (Lincoln University)  
Stephanic Law, Materials Science & Engineering  
Characterization of Semiconductor Material Permittivity and Permeability with Fourier Transform Infrared Spectroscopy and Drude-Lorentz Formalism

44) Timothy Wentzien, Computer Engineering (EPSCoR)  
John Rabolt, Materials Science & Engineering  
Creating a Low-Cost Ion-Sensitive FET Based Sensor Network

45) Ryan Boman, Materials Science & Engineering (Drexel University) (CA TX INC.)  
Anne Shehab, CATX, INC.  
Model for Autocatalytic Polymerization-Like Growth of Colon Tumors

46) Zachary LaDuca, Chemical Engineering (S&E)  
Joshua Zide, Materials Science & Engineering  
TBD

ELECTRICAL & COMPUTER ENGINEERING

47) Oliver Gambrell, Electrical Engineering (S&E)  
Gonzalo Arce, Electrical & Computer Engineering  
Neural Networks for Computerized Tomography

48) Ahmed Masood, Electrical Engineering (ECE)  
Leonard Cimini, Electrical & Computer Engineering  
TBD

49) Ryan Petery, Computer Engineering (ECE)  
Leonard Cimini, Electrical & Computer Engineering  
TBD

50) Ryan Kabrick, Computer Engineering (ECE)  
Guang Gao, Electrical & Computer Engineering  
FPGA Application for Parallel Execution Model Simulation

51) Lorry Chang, Electrical Engineering (S&E)  
Tingyi Gu, Electrical & Computer Engineering  
TBD

52) Alec Scallo, Mechanical Engineering (S&E)  
Tingyi Gu, Electrical & Computer Engineering  
Material Transfer: 2D Printing Process

53) Daniel May, Computer Engineering (Paradigm Scholar)  
Fouad Kiamilev, Electrical & Computer Engineering  
Container-Based Deployment of Hardware-Dependent Software

54) Andrew Sayanlar, Jaclyn Singh, Computer Engineering & Matthew Sayanlar, Electrical Engineering (ECE)  
Fouad Kiamilev, Electrical & Computer Engineering  
Hardware Development for Infrared Systems

55) Paul Zaloga, (ECE) (Appoquinimink High School)  
Richard Martin, Electrical & Computer Engineering  
TBD

56) Evan Battaglia, Electrical Engineering (ECE)  
Mark Mirotznik, Electrical & Computer Engineering  
3D Printed Modular Chemical Sensing Platform via Automated Drone
57) Joel Huffman, Electrical Engineering (ECE)  
Mark Mirotznik, Electrical & Computer Engineering  
TBD
58) Daniel Lee, (ECE) (Cab Calloway School of the Arts)  
Mark Mirotznik, Electrical & Computer Engineering  
Force Sensor Fabrication Using CNT-Silicone Composite
59) Bright Lu, Electrical Engineering (ECE)  
Mark Mirotznik, Electrical & Computer Engineering  
Characterization of Copper Parts 3D Printed via Cold Spray with Applications for Transmission Lines
60) Trey Martin, (ECE) (Newark Charter School)  
Mark Mirotznik, Electrical & Computer Engineering  
TBD
61) Christian Newman-Sanders, Electrical Engineering (ECE)  
Mark Mirotznik, Electrical & Computer Engineering  
TBD
62) Jake Robinson, (ECE) (VMI)  
Mark Mirotznik, Electrical & Computer Engineering  
Characterization of Copper Parts 3D Printed via Cold Spray with Applications for Transmission Lines
63) Sabrina Rosenthal, Electrical Engineering (ECE)  
Mark Mirotznik, Electrical & Computer Engineering  
Designing a Functional 3D Printed RC Submarine
64) Landon Jones, Computer Science (ECE)  
Andrew Novocin, Electrical & Computer Engineering  
TBD
65) James Sergent, Computer Engineering (S&E)  
Andy Novocin, Electrical & Computer Engineering  
TBD
66) Jared Pineiro, Electrical Engineering (McNair)  
Dan Weile, Electrical & Computer Engineering  
Solution Methods for Time Domain Integral Equations
67) Adam Caulfield, Computer Engineering (ECE)  
Chengmo Yang, Electrical & Computer Engineering  
Implementation and Testing of an Energy and Spatial Efficient Clustering Method for Ad-Hoc Sensor Networks
68) Ntseesang Ndingwan, Computer Science (S&E)  
Chengmo Yang, Electrical & Computer Engineering  
Simulating Pedestrian Movement for Open Space Event Protection
69) Nicholas Zahabiun, Computer Engineering (S&E)  
Chengmo Yang, Electrical & Computer Engineering  
TBD

COMPUTER & INFORMATION SCIENCES

70) Toby Boyd, Computer Science (S&E)  
Leila Barmaki, Computer & Information Sciences  
TBD
71) Darren Butler, Computer Science (Unidel) (Midwestern State University)  
Austin Bart, Computer & Information Sciences  
Beyond Right or Wrong: Designing User-Friendly Autograders from Instructors’ Models of Feedback
72) Matthew Stack, Computer Science (S&E)  
Sunita Chandrasekaran, Computer & Information Sciences  
TBD
73) Wei Zhang, Computer Science (S&E)  
Keith Decker, Computer & Information Sciences  
Exploring Stable Structures for Tissue Organization by Agent-Based Modeling
74) Minji Kong, Computer & Information Sciences (SF)  
Lori Pollock, Computer & Information Sciences  
Increasing Understanding of Students' Programming Process Through Scratch Programming Event Data Analysis
75) Brandon Simeone, Medical Diagnostics (VEIL Lab)  
Shawn Polson, Computer & Information Sciences  
Improving Viral Metagenome Integrity by Minimizing Background Environmental DNA

MATHEMATICAL SCIENCES

76) Brandon Gilbert, Mathematical Sciences (S&E)  
Sebastian Cioaba, Mathematical Sciences  
Analyzing Networks Through Their Eigenvalues
77) Sabin Gaire, Mathematics/Computer Science (Unidel) (Howard University)  
Michelle Cirillo, Mathematical Sciences  
Student Achievement in Proof in Secondary School Geometry
78) Jatzia Gilzean-Colon & Alexis Kimpton, Mathematics Education & Yuxuan Wu, Mathematical Sciences (S&E)  
Michelle Cirillo, Mathematical Sciences  
The Decomposition of Proof in Secondary Geometry
79) Jake Sitison, Applied Mathematics (S&E)  
David Edwards, Mathematical Sciences  
Application of the Heat Balance Integral Method in 3-D Printing Extrusion Rate Maximization
80) Matthew Benvenuto, Computer Science/Applied Mathematics (S&E)  
Pak-Wing Fok, Mathematical Sciences  
Effect of Media Sclerosis on Blood Flow Pulsatility
81) Kaitlin Canalicchio, Quantitative Biology (S&E)  
Chad Giusti, Mathematical Sciences  
Topological Features for Classification of Tear Film Dynamics
82) Ziyu Zhao, Mathematical Sciences/Economics (S&E)  
Christopher Raymond, Mathematical Sciences  
Bifurcation Analysis of Models for Tissue Organization with Feedback Control
83) Matthew Gargano, Mathematics/Computer Science (INBRE)
Gilberto Schleiniger, Mathematical Sciences
Modeling Tissue Organization with Age Structured Populations

84) Joshua Windsor, Mathematics (NASA DESGC/EPSCoR) (Wesley College)
Derald Wentzien, Mathematics (Wesley College)
Using Data Science to Optimize the Age of a NASA Astronaut on a Trip to Mars

85) Alena Gusakov, Mathematical Sciences (S&E)
Qing Xiang, Mathematical Sciences
Optimal Swaps for Maximizing Distinct Partial Sums in a Cyclic Group

86) Fred Wang, Mathematical Sciences (S&E)
Qing Xiang, Mathematical Sciences
TBD

ACCOUNTING & MANAGEMENT INFORMATION SYSTEMS

87) Vishva Patel, Management Information Systems (McNair)
Gang Wang, Accounting & Management Information Systems
A Study on Student Procrastination via Canvas Clickstream Data

PHYSICS & ASTRONOMY

88) Ahmed Jalal Tamimi, Computer Engineering (S&E)
Bennet Maruca, Physics & Astronomy
TBD

89) Jeffrey Neumman, Mechanical Engineering (S&E)
Bennett Maruca, Physics & Astronomy
TBD

Oral Session One
8:30 – 9:45AM

ART & DESIGN I (ROOM 110)
Moderator: Lance Winn, Art & Design
Jack Glicker, Art (AHSS)
Abigail Donovan, Art & Design
Cyph: A Vision for the Future of Live Events
Madison Horton, Art (Nucleus)
Abigail Donovan, Art & Design
Moods: Dealing with Stress and Anxiety

Nathan Robison, Art (AHSS)
Abigail Donovan, Art & Design
Design as Medicine: Studying How Aesthetic Affects a Prosthetic User’s Perception of their Device
Kerline Aures, Art (Pattison)
Lance Winn, Art & Design
Cric?: A Study of Haitian Folklore Through a Series of Animations
Veronica Parcells, Art (AHSS)
Lance Winn, Art & Design
Special Effects as an Artistic Medium

SCIENCE (ROOM 215)

Moderator: Mark Parcells, Animal & Food Sciences
Abigail Weisler, Athletic Training (Unidel) (Methodist University)
Thomas Kaminiski, Kinesiology & Applied Physiology
Investigation of Ankle Sprain Rehabilitation Contrasting RICE Versus Micro-Mobile Compression
Grace Coleman, Exercise Science (PT)
Daniel White, Physical Therapy
Does a Physical Therapist-Administered Physical Activity Intervention Reduce Sedentary Time After Total Knee Replacement?
Hannah Brown, PVAB (Cooperative Extension)
Mark Parcells, Animal & Food Sciences
The Envision Program
Rebecca Ralston, Wildlife Ecology & Conservation (AHSS)
McKay Jenkins, English
Environmental Education Through Digital Media

FASHION & APPAREL STUDIES (ROOM 222)

Moderator: Huantian Cao, Fashion & Apparel Studies
Afia Asamoah, Fashion Merchandising (AHSS)
Huantian Cao, Fashion & Apparel Studies
The ZDHC Strategies to Zero Discharge of Hazardous Chemicals
Felicia Bello, Apparel Design (AHSS)
Kelly Cobb, Fashion & Apparel Studies
Encouraging Well-Being Through Intelligent Clothing: An Exploratory Study
Lora Merryman, Fashion Merchandising (AHSS)
Sheng Lu, Fashion & Apparel Studies
Data-Analytics Curriculum: The New Path for Fashion Programs
Megan Wolfe, Fashion Merchandising (AHSS)
Huantian Cao, Fashion Merchandising
TBD
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<tr>
<th>COMMUNITY LANDSCAPES (ROOM 322)</th>
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<tr>
<td>Moderator: Jules Bruck, Plant &amp; Soil Sciences</td>
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<tr>
<td>Christopher Bonura, Alexandra Hubler, Jessica Toy, Landscape Architecture (CEI Summer Scholar) &amp; Erin Fogarty, Plant Sciences (CENFOODS)</td>
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<tr>
<td>Jules Bruck, Plant &amp; Soil Sciences</td>
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<tr>
<td>Living Laboratory - Pop-up Projects for Local Plan Development and Evaluation</td>
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<td>Elisabeth Davis, Plant Sciences /Agriculture &amp; Natural Resources &amp; Shirley Duffy, Landscape Architecture (CENFOODS)</td>
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<td>Anna Wik, Plant &amp; Soil Sciences</td>
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<td>UD Children’s Campus Edible Forest Garden Landscape</td>
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<td>Anna Wik, Plant &amp; Soil Sciences</td>
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<td>UD Children’s Campus Educational Resource Guide Development</td>
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<th>EDUCATION (ROOM 417)</th>
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<tr>
<td>Moderator: David Coker, Education</td>
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<tr>
<td>Esther Larios, Public Policy (Biden School/IPA)</td>
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<tr>
<td>Kelly Sherretz &amp; Lisa Moreland Allred, Institute for Public Administration</td>
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<td>Social Media Plan for College Application Month</td>
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<td>Lindsey Perez-Perez, Education (McNair)</td>
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<td>April Veness, Geography</td>
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<td>Lessons Learned in School and Life: A Storytelling Project with the Latino Community in Sussex County, DE</td>
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<td>Lindsey Cohen, Marketing (AHSS)</td>
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<td>Suresh Sundaram, Business Administration</td>
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<td>Factors Influencing Job Offer Decisions</td>
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<td>Meghan Quigley, Elementary Teacher Education (AHSS)</td>
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<td>David Coker, Education</td>
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<td>Code Switching in an ESL Context</td>
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<th>Oral Session Two</th>
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<td>10:00 – 11:15am</td>
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<tr>
<th>ART &amp; DESIGN II (ROOM 110)</th>
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<tr>
<td>Moderator: Amy Hicks, Art &amp; Design</td>
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<tr>
<td>Sierra Bacon, Art (AHSS)</td>
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<td>Amy Hicks, Art &amp; Design</td>
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<td>Audio, Art, and Society: Using the Moving Image to Be Heard</td>
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<td>Thomas Bond, Fine Arts (AHSS)</td>
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<td>Amy Hicks, Art &amp; Design</td>
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<td>Diaspora</td>
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<td>Anna Sefil, Art (AHSS)</td>
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<td>Amy Hicks, Art &amp; Design</td>
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<td>What is Going on Inside Their Head?: A Look Behind the Human Expressions</td>
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<td>Colleen Anderson, Art (AHSS)</td>
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<td>Aaron Terry, Art &amp; Design</td>
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<tr>
<th>PSYCHOLOGY &amp; ANTHROPOLOGY (ROOM 215)</th>
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<tr>
<td>Moderator: Mary Dozier, Psychological &amp; Brain Sciences</td>
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<tr>
<td>Gabrielle Jack, Emily Murphy &amp; Rachel Northrup, Psychology (CEI Summer Scholar)</td>
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<td>Mary Dozier, Psychological &amp; Brain Sciences</td>
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<td>Psychobiological Development Among Children in Middle Childhood</td>
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<td>Sydney Hirsch, Health Behavior Science &amp; Amy Hom, Biological Sciences (CEI Summer Scholar)</td>
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<td>Mary Dozier, Psychological &amp; Brain Sciences</td>
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<td>Dissemination of Evidence-Based Intervention</td>
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<td>Rachel Bruinsma, Psychology (Unidel) (Wayne State University)</td>
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<td>Jean-Philippe Laurenceau, Psychological &amp; Brain Sciences</td>
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<td>Diabetes is Stressing Us Out! Diabetes Distress as a Unique Predictor of Diabetes Outcomes in Couples Facing Type 2 Diabetes</td>
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<td>Sierra Enea, Biological Sciences (McNair)</td>
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<td>Georgina Ramsay, Anthropology</td>
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<th>PUBLIC POLICY &amp; ADMINISTRATION/ POLITICAL COMMUNICATION (ROOM 222)</th>
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<tr>
<td>Moderator: Marcia Scott, Institute for Public Administration</td>
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<tr>
<td>Michaela Dougherty, Energy &amp; Environmental Policy (Biden School/IPA)</td>
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<td>William Decoursey &amp; Sarah Pragg, Institute for Public Administration</td>
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<td>How DelDOT Engages Followers on Social Media</td>
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<tr>
<td>Sarah Mazzarella, Public Policy/Music (Biden School/IPA)</td>
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<tr>
<td>Julia O’Hanlon &amp; Marcia Scott, Institute for Public Administration</td>
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<td>Mobility in Motion</td>
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</table>
Alexandra Guterbock, Public Policy/International Relations (Biden School/CCRS)
Stephen Metraux, Biden School of Public Policy & Administration
Evictions and Housing Insecurity in Wilmington, DE

Daniel Paulsen, Political Science (Unidel) (University of Oregon)
Andrea Sarzynski, Biden School of Public Policy & Administration
Environmental Literacy in PreK-12: Analyzing Leading States Environmental Education Policies

Jake Savage, Medical Diagnostics (CEI Summer Fellow)
Nancy Karibjianian, Center for Political Communication
Summer Fellowship Project in Journalism with WITN

FOOD (ROOM 322)

Moderator: Lindsay Naylor, Geography

Emma Groman, Psychology/Sociology (CEI Summer Scholar)
Yasser Payne, Sociology & Criminal Justice
Cultivating Minds: The Impacts of the Young Farmers Program at Bright Spot Farm

Brandi Wesley, Health Promotion (Cooperative Extension/Dickerson Scholar)
Kathleen Splane, Cooperative Extension
Bright Spot Farms-Assessing Dietary changes

Eric Albiez, Food & Agribusiness Marketing & Management (Cooperative Extension/Chick Allen Scholar)
Emmalea Ernest, Cooperative Extension
Quality Evaluation for Specialty Melons and Sweet Corn

Julie Hartung, Anthropology (Unidel) (ETSU)
Lindsay Naylor, Geography
Urban Food Forestry: Impacting Individuals and Communities

GENDER (ROOM 417)

Moderator: Chrysanthi Leon, Sociology & Criminal Justice

Ellie Fleming, Latin American & Iberian Studies (Pattison)
Eve Buckley, Latin American Studies
Gender Policy in Argentina

Natalie Walton, Sociology (AHSS)
Chrysanthi Leon, Sociology & Criminal Justice
Myths, Messaging, and the Media: The Media’s Role in Perpetuating Sexual Harassment Stereotypes

Julian Harbaugh, Political Science (AHSS)
Rebecca Davis, History
Seeing Sex: Negotiating Disability and Sexuality in Sex Education

Amy Ciminnisi, Anthropology (Nucleus)
Patricia Sloane-White, Women & Gender Studies
Being Queer in Muslim Malaysia

Nathan Fulham, Philosophy (AHSS)
Hsin-Wen Lee, Philosophy
Making Sense of the Abortion Debate

Oral Session Three
11:30am – 12:45pm

ART IN THE COMMUNITY (ROOM 110)

Moderator: Jon Cox, Art & Design

Dajah White-Dumpson, Neuroscience (McNair)
Tiffany Barber, Africana Studies
Black Women in Art in the 21st Century

Briana Henry, Art & Design (CEI Summer Scholar)
Jonathan Cox, Art & Design
Arrivals: What’s Left Behind, What Lies Ahead

Olivia Quinci, English (AHSS)
Emily Davis, English
Strategies of Postcolonial Voices: A Review of Four Works

Morgan Hurlock, Applied Music (AHSS)
Todd Groves, Music
Jazz in Croatia: Analyzing Improvisatory Techniques from Student to Master

FOX CHASE CANCER CENTER (ROOM 215)

Moderator: Amanda Purdy, Fox Chase Cancer Center

Jonte Desire, Biological Sciences (FCCC/UD)
Eti Cukierman, (Fox Chase Cancer Center)
Welcome to the Neighborhood: Optimizing the in Vitro Production of Pancreatic Cancer’s Microenvironment

TraMi Nguyen, Biological Sciences (FCCC/UD)
Neil Johnson, (Fox Chase Cancer Center)
Examining BRCA1 Expression in PARP Inhibitor Sensitive and Resistant Cancers

Houston Ward, Biological Sciences (FCCC/UD)
Lori Rink, (Fox Chase Cancer Center)
Functional Evaluation of New Targets in PDGFRα-Mutant Gastrointestinal Stromal Tumors

Jessica Mauricette, Biological Sciences (FCCC/UD)
Sanjeevani Arora, (Fox Chase Cancer Center)
DNA Fiber Analysis: Visually Tracking DNA Replication Defects due to Genetic Variants in DNA Polymerase Genes
WILMINGTON SUMMER PROGRAMS (ROOM 222)

Moderator: Jocelyn Alcántara-Garcia, Art Conservation

Jane Allen, Art History/Ancient Greek & Roman Studies & Kimberly Ortega, Art History/Art Conservation (CEI Summer Scholar)

Jocelyn Alcántara-Garcia, Art Conservation

Art and Science Outreach at Winterthur Museum and Salvation Army Matthew Doe, Sociology (PAC Scholar)

Abigail Donovan, Art & Design Creative Vision Factory

Janelly Abreu, International Relations; Samantha Gibbs, Biology; Zachery Love, Political Science; Taimira Ramseur, Public Policy & Kayla Williams, Communication (CEI Wilmington Summer Fellow)

David Teague, Associate in Arts Wilmington Summer Fellows; Investigation of Play

COMMUNICATION/LINGUISTICS (ROOM 322)

Moderator: Lindsay Hoffman, Communication

Grayson Ziegler, Linguistics (AHSS)

Tyson Sukava, Languages, Literatures & Cultures

The Effect of Danish Colonialism on Icelandic and Faroese Phonology

Andrew Luu, Psychology (Unidel) (CSU-DH)

Zhenghan Qi, Linguistics & Cognitive Science

Examination of Language Related Brain Structures in Children with Autism Spectrum Disorder

Sean Hinton, Communication (AHSS)

John Courtright, Communication

The Consequences of Violating Cell Phone Etiquette

Joshua O’Donnell, Communication (AHSS)

Lindsay Hoffman, Communication

Impact of Engaging in Political Podcasts

Isabel Jean-Louis, Communication (AHSS)

Stephen Mortenson, Communication

Attachment Theory and Child Development

SUMMER ENRICHMENT (ROOM 417)

Moderator: Lynnette Overby, Theatre

Reiley Bond, Kaitlyn Downer, Marigrace Ferrill, Sean Magee & Hannah Wiswell, Mechanical Engineering; Pooja Gouru, Neuroscience

Amy Trauth, Professional Development Center for Educators Summer STEM Education in Local Delaware Communities

Gabriella Dagher, Neuroscience; Chloe Hundley, PVAB; River Shannon, Biochemistry/Chemistry; Cassie Traina, Biology & Ashley Wrookomski, Chemistry (CEI STEM Teaching Fellow)

Amy Trauth, Professional Development Center for Educators Closing the Gap: Using STEM to Limit Summer Learning Loss with SummerCollab

April Singleton, Entrepreneurship & Technology Innovation; Kennedy Medley, Neuroscience; Ikira Peace, Interpersonal Communication/Organizational & Community Leadership; Amber Rance, Health Behavior Science & Christian Wills, English (CEI SummerCollab Fellow)

Lynnette Overby, Theatre

The Value of the SummerCollab - How Making Summer Smarter Helps our Students Thrive Socially

Oral Session Four

2:00pm – 3:15pm

ART/ART CONSERVATION/ART HISTORY/ENGLISH (ROOM 110)

Moderator: Monica Dominguez Torres, Art History

Carolyn Chen, Chemistry/Chinese (Unidel) (UNC-Chapel Hill) & Olivia Jaeger, Art Conservation

Jocelyn Alcántara-Garcia, Art Conservation

TBD

Tatiana Alfaro, Art History (Unidel) (Bard College)

Monica Dominguez Torres, Art History

Plazas and Photography as Recovery, the Indigenous People of Cusco

Madison Breske, English (AHSS)

George Miller, English

Women & Sexuality in the Dramatic Works of Tennessee Williams

Briana Richardson, Africana Studies (AHSS)

Gabrielle Foreman, Africana Studies

Colored Conventions Project

ENVIRONMENTAL SUSTAINABILITY & JUSTICE (ROOM 215)

Moderator: Victor Perez, Sociology & Criminal Justice

Benjamin Aghajanian, Environmental Engineering (CEI Summer Scholar)

Michael Chajes, Civil & Environmental Engineering

Improving Society Through Cultivating Leaders in Sustainability
Kohei Akiba, Public Policy & Administration (Biden School/IPA)
Philip Barnes, Institute for Public Administration
Coastal Federal Consistency Policy: A Gap Analysis
Bianca Mers, International Relations (McNair)
Benjamin Bagozzi, Political Science & International Relations
Sustainable Urban Development in Buenos Aires
Alyssa Schiff, Environmental Studies (McNair)
Victor Perez, Sociology & Criminal Justice
Content Analysis of News Media Characterization of Environmental Justice in Delaware

ANTHROPOLOGY & SOCIOL ogy (ROOM 222)
Moderator: Ronet Bachman, Sociology & Criminal Justice
Molly Fulton, Anthropology (AHSS)
Carla Guerrón-Montero, Anthropology
Infant Mortality in Delaware: The Significance of Approach
Daniele Richards, Criminal Justice (Hofmann)
Ronet Bachman, Sociology & Criminal Justice
Women and Desistance from Prescription Drug Misuse
Christen Asiedu, Criminal Justice (McNair)
Ellen Donnelly, Sociology & Criminal Justice
The Roles of Neighborhood Conditions on Racial Disparities in Incarceration Sentencing

ART & DESIGN III (ROOM 322)
Moderator: Ian Sampson, Art & Design
Jeffrey Churchman, Art (AHSS)
Jon Cox, Art & Design
Invisible Photography
Stephanie Boateng, Organizational & Community Leadership (AHSS)
Abigail Donovan, Art & Design
ART-Natomy: The Science Behind Figurative Sculpture
Nathaniel Hissong, Art (AHSS)
Ian Sampson, Art & Design
My Rot: Comic Creation and Mental Wellness

Oral Session Five
3:30pm – 4:45pm

ARTS EDUCATION (ROOM 110)
Moderator: Aimee Pearsall, Music Education
Jake Brancati, Choral Music Education (CEI Summer Scholar)
Suzanne Burton, Music
Early Childhood Music Immersion
Emma Engel, Music Education (AHSS)
Aimee Pearsall, Music Education
The Effects of Musical Cueing in Music Therapy Sessions: A Case Study of a Child with Autism
Séance Scanlon, Music Theory (AHSS)
Aimee Pearsall, Music Education
The Effect of Narrative on Musical Composition
Kamal Alkhatib, Nursing (ArtsBridge)
Jame McCray, College of Earth Ocean & Environment
Climate Change Movement: Teaching Climate Change Through Dance
Alexandra Curnyn, Communication (ArtsBridge)
Jame McCray, College of Earth Ocean & Environment
Arts Integrated Science Lessons: Learning About Climate Change Through Dance

COMMUNITY WELLNESS (ROOM 215)
Moderator: Gregory Dobler, Biden School of Public Policy & Administration
Analise Kaminski, Health Behavior Science & Michaela Meyer, Applied Nutrition (CEI Summer Scholar)
Iva Obrusnikova, Behavioral Health & Nutrition
Using Innovative Strategies to Assess Food and Physical Activity Among Adults with ID
Brianna Wolfe, Health Behavior Science (CEI Summer Scholar)
Elizabeth Orsega-Smith, Behavioral Health & Nutrition
Early Memory Loss
Colleen Mueller, Human Services (Biden School/CCRS)
Gregory Dobler & Frederica Bianco, Biden School of Public Policy & Administration
Measuring Tobacco Advertisement Exposure in the Streets of Wilmington
Alyssa Saienni, Health Promotion (Cooperative Extension)
Breanna Banks, Cooperative Extension
4-H Healthy Living: Instructional Videos of Strength & Flexibility Postures from the GEM Curriculum
HISTORY (ROOM 222)

Moderator: Jennifer Van Horn, History

Daniel Zang, History (AHSS)
Michael Frassetto, History

*Concepts of Tribes, States, and Islam in the 7th Century Middle East*

Jack Ausmus, History (AHSS)
Jennifer Van Horn, History

*Impacts of the Institution of Slavery on the University of Delaware*

Dahlia LaBan, History Education (AHSS)
Bruce Bendler, History

*Written by the Victors: An Examination of Textbooks and the Struggle for the Public Memory of Reconstruction*

Patrick Graves, History (Pattison)
Polly Zavadivker, History

*SS-Totenkopfverbände: Morality in the Midst of Genocide*

Brianna Martinez, International Relations (McNair)
Polly Zavadivker, History/Jewish Studies & William Meyer, Political Science & International Relations

*Reflections on Genocide Prevention*

CULTIVATING DEMOCRACY (ROOM 322)

Moderator: William Decoursey, Institute for Public Administration

Zoe Federman, Anthropology/Women & Gender Studies & Grace Pennington, Organizational & Community Leadership (Biden School/CCRS)

Signe Bell, Biden School of Public Policy & Administration

*Building Capacity in Community and Faith-Based Organizations*

Allison Michalowski, Liberal Studies (AHSS)
Marcia Scott, Institute for Public Administration

*Complete Communities Toolbox: Developing Multimedia Online Tools to Help Local Governments with Policy Making*

Jordan Spencer, History Education (McNair)
Kassra Oskooii, Political Science & International Relations

*Political Involvement in Black Communities*

Caleb Owens, Philosophy (AHSS)
Richard Hanley, Philosophy

*E Democracy*
DONORS AND CONTRIBUTORS

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Other Contributors

Allen Scholar Award
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Vince Baro Scholarship Fund
Bigelow Chemistry Award
CANR Summer Institute
Chemistry Alumni Fellowships
The Chemours Company
Christiana Care Health Systems
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Delaware Governor’s Biotechnology Fellowship
Delaware Community Foundation
Delaware Rehabilitation Institute
Department of Energy Catalyst Center for Energy Innovation
E.I. DuPont de Nemours & Co
Ethel and Donald Hofmann Scholars Endowment
Envision Scholars Program
Harrison Chemistry Award
David M. Heitzer Award
IDeA Networks of Biomedical Research Excellence Program (INBRE)
Ronald E. McNair Post-Baccalaureate Scholars Program
Murphy Scholar Award
Burnaby Munson
National Science Foundation Chemistry Research Experience for Undergraduates Program
National Science Foundation's Established Program to Stimulate Competitive Research (EPSCoR)
National Institute of General Medical Sciences
Northeastern Chemical Association (NECA)
NUCLEUS
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Milton H. Stetson Memorial Fellowship
The UNIDEL Foundation
The WAY Foundation
Charles Peter White Fellowship
Willis Scholar Award
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Delaware Department of Education
Delaware Department of Transportation
Delaware General Assembly
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Delaware Public Media
Delaware Transit Corporation
Early Learning Center (UD)
Easter Seals
Eisenberg Summer Feeding Site
Elwyn
Glasgow Park Farmer’s Market
Gravity Festival (FourYouth Organization)
Hilltop Lutheran Church
Hispanic Student, Parents and Mentors Association, Sussex County
Howard Weston Senior Center
In Trust Center for Theological Schools
Infant Caregiver Project
Jewish Historical Society of Delaware
KAY’s Camp
KIDS COUNT in Delaware
Power of Two
The Salvation Army Summer Camp
Shue Medill Middle School
Small Wonders
Southbridge Neighborhood House
SummerCollab
Sustainable World Strategies
West End Neighborhood House
Westside Family Healthcare
Westside Farmers Market
Westside Grows
Winterthur Museum, Garden and Library
WITN (City of Wilmington)
YMCA of Delaware

ACKNOWLEDGEMENTS

Convener: Iain Crawford, Faculty Director, Undergraduate Research Program
Mc Cherri Abedi-Anim, Program Coordinator, McNair Scholars Program
Lauren Barsky, Associate Director, Undergraduate Research Program
Sujata Bhatia, Faculty Director, McNair Scholars Program
T aurence Chisholm, Program Assistant, McNair Scholars Program
Stephanie Espie, Program Assistant, Undergraduate Research Program
Adam Grimes, Program Assistant, Undergraduate Research Program
Mary Ann Null, Program Coordinator, Undergraduate Research Program
Kelsey Obringer, Program Assistant, Undergraduate Research Program
Rebekah Phillips, Program Assistant, McNair Scholars Program
Susan Serra, Assistant Director of Service Learning, Community Engagement Initiative
Judi Smith, Administrative Assistant, Undergraduate Research Program
The Alliance of Summer Scholars

Publicity

Crystal Felty, Composer, University Printing
Rebecca Ramos, Composer, University Printing
Jo Ellen Rathbun, Assistant Manager, University Printing
Michael Czerepak, Manager, University Printing

Finally, we would like to thank all of the mentors at the University of Delaware, outside universities and institutions and community partners who have been working with and guiding undergraduate students this summer.
Alliance of Summer Scholar Programs