



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

Jair Crawford



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,

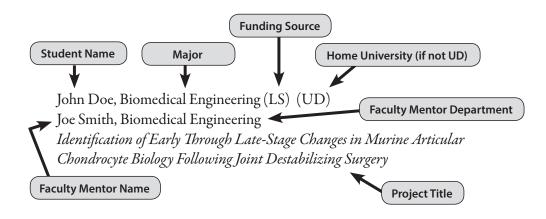
Robin W. Morgan

Provost

Undergraduate Research and Service Scholar Celebratory Symposium Harker Lab • Thursday, August 15, 2019 • 8:30 a.m. - 5:00 p.m.

	7- 8	1	
8:00 - 8:25	Poster Session I Set-up	Commons	
8:30 - 5:00	Art Exhibit	Room 309	
8:30 – 10:00	Poster Session I 8:30 – 9:15 (ODD-numbered posters present) 9:15 – 10:00 (EVEN-numbered posters present)	Commons	
8:30 – 9:45	Oral Session 1 1. Art & Design I 2. Science 3. Fashion & Apparel Studies 4. Community Landscapes 5. Education	Room 110 Room 215 Room 222 Room 322 Room 417	pg. 26 pg. 26 pg. 26 pg. 27 pg. 27
10:00 - 10:15	Switch Posters for Session II	Commons	
10:00 – 11:15	 Oral Session 2 1. Art & Design II 2. Psychology & Anthropology 3. Public Policy & Administration/Political Communication 4. Food 5. Gender 	Room 110 Room 215 Room 222 Room 322 Room 417	pg. 27 pg. 27 pg. 27 pg. 27 pg. 28 pg. 28
10:15 – 11:45	Poster Session II 10:15 – 11:00 (ODD-numbered posters present) 11:00 – 11:45 (EVEN-numbered posters present)	Commons	
11:30 – 12:45	 Oral Session 3 1. Art in the Community 2. Fox Chase Cancer Center 3. Wilmington Summer Programs 4. Communication/Linguistics 5. Summer Enrichment 	Room 110 Room 215 Room 222 Room 322 Room 417	pg. 28 pg. 28 pg. 29 pg. 29 pg. 29
11:45 - 12:00	Switch posters for Session III	Commons	
12:00 – 1:30	Poster Session III 12:00 – 12:45 (ODD-numbered posters present) 12:45 – 1:30 (EVEN-numbered posters present)	Commons	
12:00 - 2:30	LUNCH	Perkins Student Center	
1:30 - 1:45	Switch posters for Session IV	Commons	
1:45 – 3:15	Poster Session IV 1:45 – 2:30 (ODD-numbered posters present) 2:30 – 3:15 (EVEN-numbered posters present)	Commons	
2:00 – 3:15	Oral Session 41. Art/Art Conservation/Art History/English2. Environmental Sustainability & Justice3. Anthropology & Sociology3. Art & Design III	Room 110 Room 215 Room 222 Room 322	pg. 29 pg. 29 pg. 30 pg. 30
3:15 - 3:30	Switch Posters for Session V	Commons	
3:30 – 4:45	Oral Session 5 1. Arts Education 2. Community Wellness 3. History 4. Cultivating Democracy	Room 110 Room 215 Room 222 Room 322	pg. 30 pg. 30 pg. 31 pg. 31
3:15-3:30	Switch Posters for Session V	Commons	
3:30 - 5:00	Poster Session V 3:30-4:15 (ODD-numbered posters present) 4:15-5:00 (EVEN-numbered posters present)	Commons	
4:30 - 5:30	UD Creamery Ice Cream, courtesy of the College of Agriculture & Natural Resources	Next to the stairs on Academy Street (ticke	et needed)

Explanation of Program Entries



Key to Abbreviations

ADaPT	Advancing Diversity in Physical Therapy	NECA	Northeastern Chemical Association
AHSS	Arts, Humanities, & Social Sciences	NIGMS	National Institute of General Medical Sciences
ARPA-E	Advanced Research Projects Agency-Energy	NIH	National Institute of Health
Biden School	Joseph R. Biden, Jr. School of Public Policy	NIIMBL	National Institute for Innovation in
	& Administration's Summer Undergraduate		Manufacturing Biopharmaceuticals
	Public Policy Fellows Program	NSF	National Science Foundation
CANR	College of Agriculture & Natural Resources	NSF EPSCoR	National Science Foundation Established
	Summer Institute		Program to Stimulate Competitive Research
Cal State-DH	California State University-Dominguez Hills	NSF-MCB	National Science Foundation-Molecular &
CBER	Center for Biomedical Engineering Research		Cellular Biosciences
CCRS	Center for Community Research & Service	NSF REU	National Science Foundation -Research
CEECF	Department of Civil & Environmental		Experiences for Undergraduates
	Engineering Chairs Fellowship	PAC	Partnership for Arts & Culture
CEI	Community Engagement Initiative	Pattison	Hellen Pattison Scholar Award
CPWBIO	Charles Peter White Biology Scholars	Plastino	David A. Plastino Scholar Award
DOE	Department of Energy	PVAB	Pre-veterinary Medicine & Animal Biosciences
DNREC	Delaware Department of Natural Resources &	S&E	Science & Engineering Scholars
	Environmental Control	SF	Summer Fellowship
DSU	Delaware State University	Stetson	Milton H. Stetson Memorial Fellowship
DTCC	Delaware Technical Community College	UAGM	Universidad Ana G Mendez
ECE	Department of Electrical & Computer	UC-Boulder	University of Colorado-Boulder
	Engineering	UMCP	University of Maryland- College Park
ETSU	East Tennessee State University	UMES	University of Maryland- Eastern Shore
FCCC	Fox Chase Cancer Center	UNC-Chapel Hill	University of North Carolina-Chapel Hill
Heitzer	David M. Heitzer Award	UT-Arlington	University of Texas-Arlington
Hofmann	Ethel & Donald Hofmann Scholars	UT-Austin	University of Texas-Austin
INBRE	IDeA Network of Biomedical Research	UTEP	University of Texas-El Paso
	Excellence	UVA	University of Virginia
IPA	Institute for Public Administration	VEIL	Viral Ecology & Informatic Laboratory
McNair	McNair Scholars Program	VMI	Virginia Military Institute
MIT	Massachusetts Institute of Technology		
NASA EPSCoR MARS	National Aeronautics and Space		

Administration Established Program to Stimulate Competitive Research MARS

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

- Alexis Holland, Biology (INBRE) (Wesley College)
 Shannon Virtue, Behavioral Health Psychology (Christiana Care Health System)

 Psychosocial Needs and Coping Skills in Comorbid Diabetes
 and Cancer Patients
- 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
- 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
- Yessica 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 Freer, 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 Walkosak, 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 Immunocharacterization of Domain-Specific Antibodies Against the Retina-Specific ABCA Transporter, ABCA4
- 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
 Exploring the Effect of Different Pneumatic Actuators on the
 Arm's Abduction Angle
- 56) Parma Elizabeth Wright, Biological Sciences (Nucleus) Michele Lobo, Physical Therapy Influence of Parent-Child Interaction on Infant Motor Development
- 57) Dara Priester, Actuarial Science (INBRE) Susanne Morton, Physical Therapy Relationships Between Pain and Cognition in Adults with Chronic Low Back Pain
- 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) (UTEP)
 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

- 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) Jaeah 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

- Jisoo Hong, Biological Sciences (CPW Bio)
 Fidelma Boyd, Biological Sciences
 Phenotypic Analysis of Quorum Sensing Mutants in Vibrio parahaemolyticus
- 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
- Katie Coscia, Cell Biology & Biochemistry (Unidel)
 (Georgia Gwinnett College)
 Melinda Duncan, Biological Sciences
 Investigating the Mechanisms of Aniridic Cataract

- 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
- 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 MEL DS19 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
 Chemolithoheterotrophic 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 Toensing, 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
- 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 BetaExpressing 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
- 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
- Ja'Ki Miles, Biological Chemistry (INBRE/EPSCoR)
 (Wesley College)
 Malcolm D'Souza, Biological Chemistry (Wesley College)

 Wesley College STEM-Program Outreach and Service

- Madeline Tallman, Biomedical Engineering (NSF) (Tulane University)
 Megan Killian, Biomedical Engineering
 Labral 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&E)
 Catherine Grimes, Chemistry & Biochemistry
 Cyr1 LRR Purification and Characterization: Probing for
 Binding to Bacterial Cell Wall Fragments with Downstream
 Applications in Protein Crosslinking to MTP Benzophenone
- 51) Elise Garner, Biochemistry (Plastino)
 Catherine Grimes, Chemistry & Biochemistry
 Synthesis of Muramyl 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 Tetrapyrrole 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) Juilanna Follmar, Biochemistry (Nucleus)
 Catherine Grimes, Chemistry & Biochemistry
 Metabolic Labeling of Bacterial Cell Walls Using FluorineContaining N-Acetyl-Muramic Acid (NAM) Derivatives for
 Mapping Molecules in the Microbiome-Brain Connection

POSTER SESSION III 12:00 - 1:30PM

(Agriculture & Natural Resources,
Animal & Food Sciences, Entomology &
Wildlife Ecology, Environmental Science,
Cooperative Extension, Applied Economics
& Statistics, Plant & Soil Sciences, Marine
Studies, Geological Sciences, Geography,
Education, Human Development &
Family Sciences, Music, History, Public
Policy, Communication, Languages,
Literatures & Cultures)

AGRICULTURE & NATURAL RESOURCES

Natalie Wong, Wildlife Conservation (SF)
 Keith Hopper, Agriculture & Natural Resources
 Reproductive Compatibility of Male and Female Phellinus
 rhamni Cured of Wolbachia

- Kishaun Bethea, Biological Sciences (EPSCoR) (DSU)
 Venugopal Kalavacharla, Agriculture & Natural Resources (DSU)
 TBD
- 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 Kurkcuoglu, Pre-Veterinarian (EPSCoR) (DSU) Gulnihal Ozbay, Agriculture & Natural Resources (DSU) TBD
- 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
- Lillian Goldman-Muller, Animal & Food Sciences (Envision Scholar)
 Aditya Dutta, Animal & Food Sciences
 Metabolic Role of Homeodomain-Containing Transcription
 Factors in Reproductive Organs
- 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
- Carlos Blanco, Animal & Food Sciences (Envision Scholar)
 (DSU)
 Kali Kniel, Animal & Food Sciences
 TBD
- Paige Brooks, Animal & Food Sciences (Envision Scholar)
 (Lincoln University)
 Brian Ladman, Animal & Food Sciences
 TBD
- 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
- 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

- 36) Samantha McGonigle, Wildlife Ecology & Conservation (Allen Scholar) 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

- 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 Delawareans
- 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
- 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

- 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
- 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
- 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
- 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)
 (Saint 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) Alexandria 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 Wojcik, 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 Schoolto-Prison Pipeline in Delaware

COMMUNICATION

- 85) Jenna Landesman, Communication (CEI Summer Fellow) Nancy Karibjanian, 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

- 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
- 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
- McKenna Grega, Biochemistry (Unidel) (Mansfield University)
 Curtis Johnson, Biomedical Engineering
 Determining Mechanical Properties in Viscoelastic Phantoms by MR Elastography
- Ariel Hannum, Biomedical Engineering (Delaware Rehabilitation Institute)
 Curtis Johnson, Biomedical Engineering Sources of Signal Noise in Magnetic Resonance Elastography
- 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 Rat 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
- 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 Belt Velocity or Acceleration? 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 Microvessel-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

CHEMICAL & BIOMOLECULAR ENGINEERING

- 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-LPhenylaniline
- 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
- Metehan Cebeci, Biological Sciences (DOE-Catalysis Center for Energy Innovation)
 Raul Lobo, Chemical & Biomolecular Engineering Investigating Scandium Triflate for Acetylating 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
 Electric Field Effects on the Stability of Single Atom Catalysis:
 A Case Study of Pd/TiO2
- 63) Sai Mahit Vaddadi, Chemical Engineering (S&E)
 Dion Vlachos, Chemical & Biomolecular Engineering
 Atomistic and Spectroscopic Modeling of Nanoparticles Using
 Genetic Algorithm
- 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 DecisionMaking
- 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 lacicola
- 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
- 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
- Shane Brown, Physics (Delaware Energy Institute)
 M. Zubaer Hossain, Mechanical Engineering
 Electronic Confinement in MoS₂ Graphene Quantum Dots

- 83) Dylan Frasher, Mechanical Engineering (SF)M. Zubaer Hossain, Mechanical Engineering TBD
- 84) Benjamin Halleran, Mechanical Engineering (SF)
 M. Zubaer Hossain, Mechanical Engineering
 Pseudolattice Formations in Graphene Moire Patterns
- Timothy Hoff, Mechanical Engineering (SF)
 M. Zubaer Hossain, Mechanical Engineering
 Predicting Toughness and Strength Anisotropy in Phosphorene
- 86) Adrian Piel, Mechanical Engineering (S&E)
 M. Zubaer Hossain, Mechanical Engineering
 Enabling the Measurement of Toughness of Heterogeneous
 Materials
- Michelle Reckner, Mechanical Engineering (SF)
 M. Zubaer Hossain, Mechanical Engineering
 The Solid Mechanics of Perovskite
- 88) Josiah Beck, Mechanical Engineering (S&E) Joseph Kuehl, Mechanical Engineering TBD
- 89) Evan Gotchel, Mechanical Engineering (S&E) Joseph Kuehl, Mechanical Engineering TBD
- 90) Brendan Jones, Mechanical Engineering (S&E) Joseph Kuehl, Mechanical Engineering TBD
- 91) Emily King, Biomedical Engineering (CBER NSF REU)
 (RPI)
 X. Lucas Lu, Mechanical Engineering
 Effects of Statin on the Synthesis Rate of Chondrocytes
- 92) Elizabeth Santoso, Mechanical Engineering (Unidel) (UC-Boulder)
 Andreas Malikopoulos, Mechanical Engineering
 Connected and Automated Vehicles Development
- 93) Raymond Zayas, Mechanical Engineering (S&E) Andreas Malikopoulos, Mechanical Engineering TBD
- 94) Alex Beyer, Mechanical Engineering (S&E)
 Ioannis Poulakakis, Mechanical Engineering
 Control Design for A Priori Weight Estimation of Dynamically
 Walking Humanoids
- 95) Rob Samuelson, Mechanical Engineering (S&E)
 Ioannis Poulakakis, Mechanical Engineering
 Gripper Design for A Priori Weight Estimation for an
 Autonomous Quadrotor Drone
- 96) Stephanie Ross, Mechanical Engineering (SF)
 Ajay Prasad, Mechanical Engineering
 Utilizing Composite Hydrophilic Membranes to Mitigate
 Flooding in PEMFCs

POSTER SESSION V 3:30 - 5:00PM

(Psychological & Brain Sciences, Linguistics & Cognitive Science, Materials Science & Engineering, Electrical & Computer Engineering, Computer & Information Sciences, Mathematical Sciences, Accounting & Management Information Systems, Physics & Astronomy)

PSYCHOLOGICAL & BRAIN SCIENCES

- 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
- 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 Klinstova, Psychological & Brain Sciences
 Effect of Third Trimester Equivalent Alcohol Exposure in
 Nucleus Reunions
- 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 LocationBased 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

MATERIALS 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 PolymerReinforced Gels
- 43) Roshaun Titus, Engineering Science/General Mathematics (Unidel) (Lincoln University)
 Stephanie 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) (CATX 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 AgentBased 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
- Matthew Benvenuto, Computer Science/Applied Mathematics (S&E)
 Pak-Wing Fok, Mathematical Sciences
 Effect of Media Sclerosis on Blood Flow Pulsatility
- 81) Kaitlin Canalichio, 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) Bennett Maruca, Physics & Astronomy TBD

89) Jeffrey Neumann, 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

COMMUNITY LANDSCAPES

(ROOM 322)

Moderator: Jules Bruck, Plant & Soil Sciences

Christopher Bonura, Alexandra Hubler, Jessica Toy, Landscape Architecture (CEI Summer Scholar) & Erin Fogarty, Plant Sciences (CENFOODS)

Jules Bruck, Plant & Soil Sciences

Living Laboratory - Pop-up Projects for Local Plan Development and Evaluation

Elisabeth Davis, Plant Sciences / Agriculture & Natural Resources & Shirley Duffy, Landscape Architecture (CENFOODS)

Anna Wik, Plant & Soil Sciences

UD Children's Campus Edible Forest Garden Landscape Management

Taylor Garbowski, Environmental & Resource Economics & Charlye Stewart, Wildlife Ecology & Conservation (CENFOODS) Anna Wik, Plant & Soil Sciences

UD Children's Campus Educational Resource Guide Development

EDUCATION

(ROOM 417)

Moderator: David Coker, Education

Esther Larios, Public Policy (Biden School/IPA) Kelly Sherretz & Lisa Moreland Allred, Institute for Public Administration

Social Media Plan for College Application Month

Lindsey Perez-Perez, Education (McNair)

April Veness, Geography

Lessons Learned in School and Life: A Storytelling Project with the Latino Community in Sussex County, DE

Lindsey Cohen, Marketing (AHSS) Suresh Sundaram, Business Administration Factors Influencing Job Offer Decisions

Meghan Quigley, Elementary Teacher Education (AHSS)

David Coker, Education

Code Switching in an ESL Context

ORAL SESSION TWO 10:00 – 11:15AM

ART & DESIGN II (ROOM 110)

Moderator: Amy Hicks, Art & Design

Sierra Bacon, Art (AHSS)

Amy Hicks, Art & Design

Audio, Art, and Society: Using the Moving Image to Be Heard

Thomas Bond, Fine Arts (AHSS) Amy Hicks, Art & Design *Diaspora*

Anna Sefil, Art (AHSS)

Amy Hicks, Art & Design

What is Going on Inside Their Head?: A Look Behind the Human Expressions

Colleen Anderson, Art (AHSS)

Aaron Terry, Art & Design

TBD

PSYCHOLOGY & ANTHROPOLOGY (ROOM 215)

Moderator: Mary Dozier, Psychological & Brain Sciences

Gabrielle Jack, Emily Murphy & Rachel Northrup, Psychology (CEI Summer Scholar)

Mary Dozier, Psychological & Brain Sciences

Psychobiological Development Among Children in Middle Childhood

Sydney Hirsch, Health Behavior Science & Amy Hom, Biological Sciences (CEI Summer Scholar)

Mary Dozier, Psychological & Brain Sciences

Dissemination of Evidence-Based Intervention

Rachel Bruinsma, Psychology (Unidel) (Wayne State University) Jean-Philippe Laurenceau, Psychological & Brain Sciences Diabetes is Stressing Us Out! Diabetes Distress as a Unique Predictor of Diabetes Outcomes in Couples Facing Type 2 Diabetes

Sierra Enea, Biological Sciences (McNair) Georgina Ramsay, Anthropology *TBD*

PUBLIC POLICY & ADMINISTRATION/POLITICAL COMMUNICATION (ROOM 222)

Moderator: Marcia Scott, Institute for Public Administration

Michaela Dougherty, Energy & Environmental Policy (Biden School/IPA)

William Decoursey & Sarah Pragg, Institute for Public Administration

How DelDOT Engages Followers on Social Media

Sarah Mazzarella, Public Policy/Music (Biden School/IPA) Julia O'Hanlon & Marcia Scott, Institute for Public Administration *Mobility in Motion* 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 Karibjanian, 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 PDGFRA-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 Warokomski, Chemistry (CEI STEM Teaching Fellow) Amy Trauth, Professional Development Center for Educators Closing the Gap: Using STEM to Limit Summer Learning Loss with Summer Collab

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 Summer Collab - 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

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 & IUSTICE

(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 & SOCIOLOGY

(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 Wolfle, 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

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Easter Seals

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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

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Power of Two

The Salvation Army Summer Camp

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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

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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

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