



Dear Friends of Undergraduate Research and Engaged Learning:

Welcome to the eighth annual Celebratory Symposium for students in our Summer Scholars program. With close to five hundred 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 – our special thanks go to Dr. John Jungck, Director of the ISE Lab, for kindly hosting us in this wonderful facility.

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 Office of Undergraduate Research and Experiential Learning 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,

A handwritten signature in black ink that reads 'Iain Crawford'.

Iain Crawford
Faculty Director, Undergraduate Research and Experiential Learning



Domenico Grasso
Provost

August 2017

Dear Colleagues and Friends:

Welcome to the University of Delaware's eighth Annual Undergraduate Research and Service Scholar Celebratory Symposium that brings this year's Summer Scholars program to a conclusion. This event marks the culmination of 10 weeks of full-time research by more than 450 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 in collaboration with faculty and other researchers.

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.

On behalf of the University, I thank everyone who has made this program possible, including the staff of the Office of Undergraduate Research and Experiential Learning, faculty, mentors and community partners. Being part of a top-flight research university such as Delaware means that every student must possess courage, enthusiasm, and the willingness to push the boundaries of understanding and knowledge. I want to challenge every student to dare to be great. This is what makes Delaware shine.

Go Hens,

A handwritten signature in black ink, appearing to read 'Domenico Grasso', with a long horizontal flourish extending to the right.

Domenico Grasso

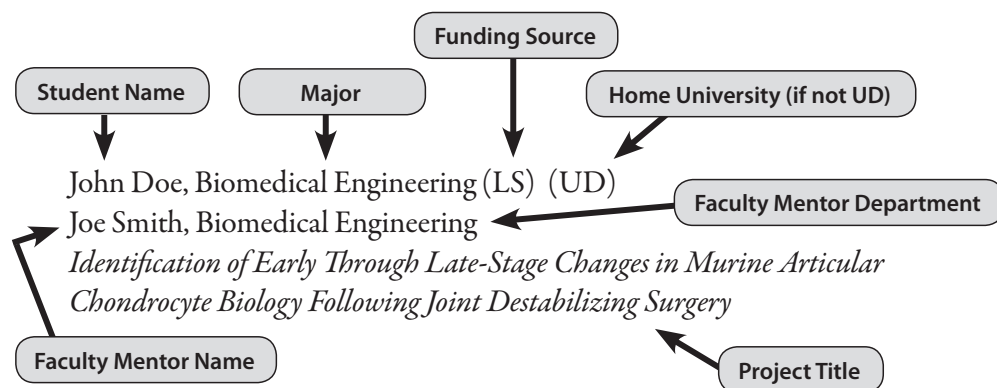
Undergraduate Research and Service Celebratory Symposium

Harker Lab

Thursday, August 10, 2017 • 9:00 a.m. - 5:00 p.m.

8:30 – 8:55	Poster Session I Set-up	Lobby	
9:00 – 4:00	<i>Art Exhibit</i>	Room 309	
9:00 – 10:30	<i>Poster Session I</i> 9:00 – 9:45 (ODD-numbered posters present) 9:45 – 10:30 (EVEN numbered posters present)	Lobby	
9:00 – 10:00	<i>Oral Session 1</i> 1. Education/Youth Development 2. Public Policy Research & Data 3. History & Culture 4. Art Conservation	Room 110 Room 222 Room 322 Room 417	pg. 26 pg. 26 pg. 26 pg. 26
10:10 – 11:10	<i>Oral Session 2</i> 1. Revitalization & Community Education 2. Policy 3. Black American Studies/Health/History 4. Longwood Gardens Legacy Project	Room 110 Room 222 Room 322 Room 417	pg. 27 pg. 27 pg. 27 pg. 27
10:30 – 10:45	Switch Posters for Session II	Lobby	
10:45 – 12:15	<i>Poster Session II</i> 10:45 – 11:30 (ODD-numbered posters present) 11:30 – 12:15 (EVEN numbered posters present)	Lobby	
11:20 – 12:20	<i>Oral Session 3</i> 1. Supporting Families 2. Human Development 3. Fox Chase Cancer Center 4. Art & Visual Communications	Room 110 Room 222 Room 322 Room 417	pg. 27 pg. 28 pg. 28 pg. 28
12:00– 1:30	LUNCH	Perkins Student Center	
12:15 – 1:15	Switch posters for Session III		
1:15 – 2:45	<i>Poster Session III</i> 1:15 – 2:00 (ODD-numbered posters present) 2:00 – 2:45 (EVEN numbered posters present)	Lobby	
1:30 – 2:30	<i>Oral Session 4</i> 1. STEM/STEAM! 2. Psychology & Education 3. Biochemistry, Engineering & Design 4. Music	Room 110 Room 222 Room 322 Room 417	pg. 28 pg. 29 pg. 29 pg. 29
2:40 – 3:55	<i>Oral Session 5</i> 1. Health & Social Sciences 2. Women's Studies 3. Fashion Studies 4. Women of Consequence (oral presentations & dance performances)	Room 110 Room 215 Room 322 Room 417	pg. 29 pg. 29 pg. 30 pg. 30
2:45 – 3:00	Switch Posters for Session IV	Lobby	
3:00 – 4:30	<i>Poster Session IV</i> 3:00 – 3:45 (ODD-numbered posters present) 3:45 – 4:30 (EVEN numbered posters present)	Lobby	
4:00 – 5:00	UD Creamery Ice Cream, courtesy of the College of Agriculture and Natural Resources	Harker Lab Walkway	

Explanation of Program Entries



Key to Abbreviations

ACCEL	Accelerating Clinical Science Partnerships and Translational Research	MEEG	Department of Mechanical Engineering
ADaPT	Advancing Diversity in Physical Therapy	MUST	Missouri University of Science & Technology
AHSS	Arts, Humanities, & Social Sciences	NAU	Northern Arizona University
ANFS	Animal & Food Sciences	NCSU	North Carolina State University
ArtsBridge	ArtsBridge America	NECA	Northeastern Chemical Association
ASU	Arizona State University	NIH	National Institute of Health
BHF	Blue Hen Fellow	NSF	National Science Foundation
BMEG	Department of Biomedical Engineering	NSF-DMR	National Science Foundation-Division of Materials Research
CANR	College of Agriculture & Natural Resources Summer Institute	NSF-MCB	National Science Foundation- Molecular & Cellular Biosciences
Carmean	Blair & Cheryl Carmean Summer Scholar Award	NSF-REU	National Science Foundation -Research Experiences for Undergraduates
CBER	Center for Biomedical Engineering Research	NSF-CBET	National Science Foundation Chemical- Bioengineering, Environmental, and Transport Systems
CCEI	Catalysis Center for Energy y Innovation	Nemours COBRE	Nemours Center of Biomedical Research Excellence
CCNY	City College of New York	NIFA-URE	National Institute of Food & Agriculture-Undergraduate Research Experience
CCRS	Center for Community Research & Service	NYU	New York University
CCRS-PPF	Center for Community Research & Service-Public Policy Fellow	NSURP	Nemours Summer Undergraduate Research Program
CMCS	Center for Material Culture Studies	OHEI-HESSP	Office of Health Equities & Inclusion- Health Equities Summer Scholar Program
CMU	Central Michigan University	OSCAR	Optical Science Center for Applied Research
CPC	Center for Political Communications	Pattison	Hellen Pattison Scholar Award
CPW	Charles Peter White Scholars	Plastino	David A. Plastino Scholar Award
CPWBIO	Charles Peter White Biology Scholars	PPF	Public Policy Fellow
CRESP	Center for Research in Education & Social Policy	PSU	Pennsylvania State University
CSD	Center for the Study of Diversity	RCWF	Research & Creative Works Fund
DDOE-MSP	Delaware Department of Education Mathematics Science Partnership	REACT	Research Experiences to Advance Chemists in Training
DOE-BES	Department of Energy-Basic Energy Sciences	RPI	Rensselaer Polytechnic Institute
DNERR	Delaware National Estuary Research Reserve	SE	Science & Engineering Scholars
DNREC	Delaware Department of Natural Resources & Environmental Control	SF	Summer Fellowship
DRI	Delaware Rehabilitation Institute	SL	Service Learning Scholars
DRC	Disaster Research Center	Stetson	Milton H. Stetson Memorial Fellowship
DRC-PPF	Disaster Research Center-Public Policy Fellow	TJU	Thomas Jefferson University
DSU	Delaware State University	TSU	Truman State University
DTCC	Delaware Technical Community College	UDRF	University of Delaware Research Foundation
ECE	Department of Electrical & Computer Engineering	UF	University of Florida
EPSCoR	Experimental Program to Stimulate Competitive Research	UMBC	University of Maryland- Baltimore County
FCCC	Fox Chase Cancer Center	UMCP	University of Maryland- College Park
FSC	Florida Southern College	UNC-W	University of North Carolina - Wilmington
GIT	Georgia Institute of Technology	UPR	University of Puerto Rico - Mayaguez
Heitzer	David M. Heitzer Award	USC	University of South Carolina
Hofmann Scholar	Ethel & Donald Hofmann Scholars	UTEP	University of Texas - El Paso
INBRE	IDeA Network of Biomedical Research Excellence	UVA	University of Virginia
IPA	Institute for Public Administration	VSU	Virginia State University
IPA-PPF	Institute for Public Administration-Public Policy Fellow	WVU	West Virginia University
IWSTEM	Inspiring Women in Science, Technology, Engineering & Mathematics		
LSU	Louisiana State University		
McNair	McNair Scholars Program		

POSTER SESSION I

9:00 - 10:30AM

(Christiana Care Health System, Nemours Biomedical Research, Medical Laboratory Sciences, Nursing, Psychological & Brain Sciences, Linguistics & Cognitive Science, Kinesiology & Applied Physiology, Physical Therapy, Behavioral Health & Nutrition)

CHRISTIANA CARE HEALTH SYSTEM

- 1) Caroline Hu, Nursing (INBRE)
Lynn Bayne, Nursing - Maternal Fetal Medicine Research (Christiana Care)
Transcutaneous Electrical Nerve Stimulation (TENS): The Efficacy of Pain Management and Control in Early Labor
- 2) Lucie Sainte, Biology (INBRE) (Wesley)
Lynn Bayne, Nursing - Maternal Fetal Medicine Research (Christiana Care)
The Golden Hour: Implication for Newborns with Extremely Low Birthweight
- 3) Benjamin Emery, Biological Science (INBRE)
Kevin Bradley, Surgical Critical Care/Trauma Research (Christiana Care)
The Effects of Pre-Hospital Mode of Transport on Patient Outcomes within an Inclusive Trauma System
- 4) Chase Rapine, Bioengineering (INBRE) (UPenn)
Luis Cardenas, Surgical Critical Care/Trauma Research (Christiana Care)
The Effect of Dressing Type on Split Thickness Skin Graft Donor Site Post-Operative Wound Care Therapy
- 5) Erika Gabrielle Mendoza, Forensic Biological Sciences (INBRE) (DSU)
Andrew Doorey, Cardiology and Radiology/Interventional Radiology Research (Christiana Care)
Effectiveness of Intra-team Communications in the Cardiac Cath Lab; How We Are Doing
- 6) Merwah Shinwari, Biological Sciences (INBRE)
Jennifer Goldstein, Internal Medicine Research (Christiana Care)
The Impact of Place-Based Social Determinants on Hospital Readmissions for Medicaid Patients
- 7) David Ribaya, Medical Laboratory Science (INBRE)
Raymond Green, Surgical Critical Care/Trauma Research (Christiana Care)
A Continual Analysis of the Application of Capnography to Reduce Respiratory Compromise in Rib Fracture Patients
- 8) Kanisha Blake, Biology (INBRE) (Wesley)
Ina Li, Family and Community Medicine Research (Christiana Care)
The Effectiveness of a Transition of Care Model in a Home Visit Program
- 9) Raven Sterling, Biological Science (INBRE) (DSU)
Debra Marco, Emergency Medicine Research (Christiana Care)
An Exploratory Analysis of Quality of Life Post-Acute Pulmonary Embolism
- 10) Umma Fatema, Biological Sciences/Neuroscience (INBRE)
Daniel Meara & Bert Cameron Wendling, Oral Maxillofacial Surgery & Hospital Dentistry (Christiana Care)
The Financial Burden of Odontogenic Infections at Christiana Care Health System and Prevention Strategies: A Retrospective Study
- 11) Ryan Kowash (Dickinson) & Gabe Masters (Hamilton)
Biochemistry/Molecular Biology (INBRE)
Shirin Modarai, Center for Translational Cancer Research (Christiana Care's Helen F. Graham Cancer Center & Research Institute)
Expression of ALDH Isoforms in Colon Tumorigenesis
- 12) Malia Green, Neuroscience/Biological Sciences (INBRE) (DSU)
John Pollard, Neurology & Emergency Medicine Research (Christiana Care)
Implementation of a Pathway to Transition Uncomplicated Seizure Patients Seen in the Emergency Department to Outpatient Care
- 13) Brittney Clymer, Biological Chemistry (INBRE) (DSU)
Jennifer Sims-Mourtado, Center for Translational Cancer Research (Christiana Care's Helen F. Graham Cancer Center & Research Institute)
Comorbidities Associated With Breast Cancer Patients
- 14) Shrayus Sortur, Biology of Global Health/Economics (INBRE) (Georgetown)
Sherry Sixta, Surgical Critical Care/Trauma Research (Christiana Care)
Accuracy of Thromboelastographic Variables in Predicting Partial Blood Transfusions
- 15) Mahesh Gouru, Neuroscience/Biological Sciences (INBRE)
Kenneth Trzepkowski, Supportive & Palliative Care/Medicine (Christiana Care's Helen F. Graham Cancer Center & Research Institute)
The Characterization of Emergency Department Visits for Oncology Patients Receiving Active Treatment

- 16) Jordan Brockwell, Biological Chemistry (INBRE) (Wesley)
Yukiko Washio, OB/GYN Research (Christiana Care)
*Improving Understanding and Clinical Care of Prenatal
Substance Use*

NEMOURS BIOMEDICAL RESEARCH

- 17) Simran Kripalani, Biology/Humanities (Nemours)
(Villanova)
Melissa Alderfer, Research (Nemours)
*The Family Experience of Siblings of Children with Cancer:
A Comparison of Sibling and Parent Reports*
- 18) Alexander Mink, Biology (Clinician Funded) (UVA)
Magdy Attia, Emergency Services (Nemours)
*Classification of Patients Returning to the Emergency
Department after Hospital Discharges*
- 19) Danielle Ayer, Biology-Pre-Medicine (ACCEL) (Cabrini)
AnneMarie Brescia, Rheumatology (Nemours)
*The Effects of Bone Morphogenetic Protein 4 on SMAD
Signaling in Fibroblast-like Synoviocytes from Samples from
Both Control and Juvenile Idiopathic Arthritis*
- 20) Kyle Hinkle, Biological Sciences (INBRE)
Matthew Butchbach, Research (Nemours)
Regulation of SMN2 Expression by Novel Small Molecules
- 21) Sarah Benyo, Biology (Nemours) (Hobart & William Smith)
Stephanie Anne Deutsch, General Pediatrics (Nemours)
*Utilizing Quality Improvement to Enhance ED-Based Care of
Pediatric Sexual Assault Victims*
- 22) Emily Horwitz, Neuroscience (Nemours) (Amherst)
Paul Fawcett & Michael Bober, Research/Genetics
(Nemours)
Inflammatory Markers in Skeletal Dysplasia
- 23) Theresa Christensen, English (Nemours) (UPenn)
Grace Guo, Patricia Hartly & Sharon Gould, Radiology
(Nemours)
Postmortem Imaging: An Adjunct to Traditional Autopsy
- 24) Tyler Blake, Biobehavioral Health (Nemours) (PSU)
Laurens Holmes, Office of Health Equity & Inclusion
(Nemours)
*Social Determinants in Childhood Brain/CNS Cancer
Incidence and Mortality: Analysis using SEER Data*
- 25) Austin Luna, Biology (INBRE) (Wesley)
Laurens Holmes, Office of Health Equity & Inclusion
(Nemours)
*Socio-Demographics and Temporal Trends in Second Primary
Malignancies in Children: Large Cohort Evidence Using SEER
Dataset*
- 26) Vanessa Monsalve, Public Policy (Nemours)
Laurens Holmes, Office of Health Equity & Inclusion
(Nemours)
*Racial Differences in Cerebral Palsy and Co-morbidities in
Children: Evidence from National Survey of Children's Health*
- 27) Kristen Neal, Health Behavior Science (Nemours)
Laurens Holmes, Office of Health Equity & Inclusion
(Nemours)
*Childhood Asthma Severity: Quantitative Evidence Synthesis
and Scientific Statement (QES)*
- 28) Nkechi Okwu-Lawrence, Biological Sciences (Nemours)
Laurens Holmes, Office of Health Equity & Inclusion
(Nemours)
*Pediatric Cancer Incidence and Temporal Trends in the United
States by Health Disparities Indicators*
- 29) Casey Lu Simon-Plumb, Neuroscience (Nemours)
(Swarthmore)
Laurens Holmes, Office of Health Equity & Inclusion
(Nemours)
*Pediatric Second Primary Thyroid Cancer: Translational (TO-
T4) Characterization & Radiation Implication*
- 30) Mark Tanchanco, Biology/Psychology (Nemours) (Loyola-
Maryland)
Laurens Holmes, Office of Health Equity & Inclusion
(Nemours)
*Predisposing Effect of Inflammatory Mediators and Coagulation
Cascade in Childhood Obesity: Systematic Review and
Quantitative Evidence Synthesis (QES)*
- 31) Carter Thompson, Exercise Physiology (Nemours) (WVU)
Laurens Holmes, Office of Health Equity & Inclusion
(Nemours)
*Health Disparities Markers in the Association between Food
Insecurity and Chronic Disease among Children: A Cyclic
Phenomenon from NHANES Dataset, 2013-2014*
- 32) Bernardus Willems, Neuroscience/Biological Sciences
(Nemours)
Laurens Holmes, Office of Health Equity & Inclusion
(Nemours)
*Childhood Behavioral and Mental Dysfunction: Implication of
Race/Ethnicity and Environmental/Social Factors*
- 33) Yasmin Mann, Biological Sciences (Nemours)
Zhengyu Ma, Research (Nemours)
*Tuning Binding Affinity of Engineered Receptors to Improve
Tumor Targeting by Therapeutic T Cells*
- 34) Jenna Supinski, Speech, Language Pathology & Audiology
(Nemours) (Ithaca)
Kyoko Nagao, Research (Nemours)
*Evaluating the Validity and Efficiency of Tablet-Based Hearing
Tests in School-Age Children*

- 35) Zafir Ahmed, Neurobiology & Physiology (Nemours) (UMCP)
Reid Nichols, Orthopaedics (Nemours)
Effectiveness of Serial Casting in Children with Arthrogyposis
- 36) Kristen DeRosa, Biotechnology (Nemours) (Elizabethtown)
Katherine Robbins, Research (Nemours)
TRPV4 RNA Splice Variants in Patients with Metatropic Dysplasia
- 37) Kirsten Woolpert, Biology (INBRE) (UNC-W)
Monica Rochman, Trauma Center (Nemours)
Retrospective Review of Playground Injuries at a Level I Pediatric Trauma Center
- 38) Allison Brown, Biomedical Engineering (Cornell)
Julianne Sees, Orthopaedics (Nemours)
The Etiology of Knee Hyperextension in Gait in Children with Cerebral Palsy
- 39) John Kee, Neuroscience & Behavior (Nemours) (Vassar)
Jennifer Ty & Nancy Lennon, Orthopaedics (Nemours)
Can the Shriners Hospital Upper Extremity Evaluation Detect Change in Hand Position and Function in Children with Cerebral Palsy?
- 40) Paige Koetter, Biochemistry/Molecular Biology (Nemours) (FSC)
Shirley Viteri, Critical Care (Nemours)
Evaluation of an Electronic Screening Tool for Identification of Children at Risk for Sepsis

MEDICAL LABORATORY SCIENCES

- 41) Afoma Mbanefo, Medical Laboratory Science (INBRE)
Esther Biswas, Medical Laboratory Sciences
Fluorescence Resonance Energy Transfer (FRET) as a Tool for Assessing Disease Associated Mutations in the Retina Specific ABC Transporter, ABCA4
- 42) Nyle Smith, Medical Laboratory Science (NUCLEUS -SF)
Esther Biswas, Medical Laboratory Sciences
*Efficiency of Chitin Column Chromatography in the Purification of ECD2 Subdomain- $\alpha\beta 6$ Expressed in the NiCo21 (DE3) Strain of *E. Coli**

NURSING

- 43) Kayla Martin, Liberal Studies (McNair)
Regina Wright, Nursing
The Influence of Sleep Quality on Cognitive Function among Older Adults

PSYCHOLOGICAL & BRAIN SCIENCES

- 44) Jordan Franklin, Neuroscience (McNair)
Mary Dozier, Psychological & Brain Sciences
A Developmental Analysis of Error Monitoring and its Association with Behavior Problems in Middle Childhood
- 45) Olivia Stibolt, Neuroscience (SE)
James Hoffman, Psychological & Brain Sciences
Emotion-Induced Blindness and N400 Component
- 46) Sarah Bencivenga, Psychology (SE/INBRE)
Lisa Jaremka, Psychological & Brain Sciences
Analysis of Interpersonal Relationships and Disordered Eating Behaviors in Married Couples
- 47) Jesse McCann, Psychology (SE)
Lisa Jaremka, Psychological & Brain Sciences
The Interaction of Rejection and Depressive Symptoms Predicting Salivary Cortisol
- 48) Julia Johansson, Neuroscience (NUCLEUS/SE)
Anna Klintsova, Psychological & Brain Sciences
Microglial Activation in the Developing Rodent Cerebellum Following Single-Day Binge-Alcohol Exposure
- 49) Emma Spillman, Neuroscience (SE)
Anna Klintsova, Psychological & Brain Sciences
Early Postnatal Single-Day Alcohol Exposure Increases Cell Death in Prefrontal Cortex and Nucleus Reuniens that Persists into Rat Adulthood
- 50) Brianna Kimmelman, Neuroscience (SE)
Dayan Knox, Psychological & Brain Sciences
Fear Induced Hyperarousal Can Support Fear Responses to Unpaired Neutral Stimuli
- 51) Emily Moulton, Neuroscience (SE)
Dayan Knox, Psychological & Brain Sciences
Glucocorticoid Receptor Internalization in the Hippocampus in an Animal Model of Post-Traumatic Stress Disorder
- 52) Catherine Nadar, Psychology (SE)
Jared Medina, Psychological & Brain Sciences
Examining Somatosensory and Motor Reorganization after Stroke using fMRI
- 53) Stephanie Rodgers, Neuroscience (INBRE)
Jared Medina, Psychological & Brain Sciences
Examining Multisensory Integration of Visual and Tactile Stimuli
- 54) Alexandra Klysa, Cognitive Science (SE)
Peter Mende-Siedlecki, Psychological & Brain Sciences
Racial Bias in Pain Recognition: A Perceptual Pathway to Bias in Pain Care

- 55) Sierrah Harris, Communicative Sciences & Disorders (INBRE) (Hampton)
Anna Papafragou, Psychological & Brain Sciences
How Language Encodes Bounded and Unbounded Events
- 56) Queen Ralph, Biological Sciences (INBRE) (DSU)
Anna Papafragou, Psychological & Brain Sciences
Children's and Adult's Informativeness in Event Descriptions
- 57) Isabella Archer, Neuroscience (Hofmann Scholar)
Tania Roth, Psychological & Brain Sciences
Exploring the Link between Early Adversity, DNA Methylation, and Aberrant Maternal Behavior
- 58) Johanna Chajes, Neuroscience (NUCLEUS/SE)
Tania Roth, Psychological & Brain Sciences
Effects of DNMT Inhibitors on Maltreatment-Induced DNA Methylation
- 59) Anna Nowak, Neuroscience (SE)
Tania Roth, Psychological & Brain Sciences
Sex Differences in Pup Caregiving in a Rodent Model of Scarcity-adversity with Maltreatment
- 60) Lauren Reich, Biological Sciences (NUCLEUS/SE)
Tania Roth, Psychological & Brain Sciences
Altering the Epigenetic Landscape: Counteracting the Effects of Early Stress via Epigenome Modification
- 61) Pragyan Khanal, Neuroscience (SE)
Jaclyn Schwarz, Psychological & Brain Sciences
Examination of Prenatal Zika Virus Infection on Inflammatory Response of Maternal & Neonatal Brain
- 62) Ally Gorgone, Psychology (SE)
Robert Simons, Psychological & Brain Sciences
Neural Reactions to Negative Stimuli Suggest Automatic Regulation Processes
- 63) Kenjin Chang, Neuroscience (INBRE)
Timothy Vickery, Psychological & Brain Sciences
Exploring the Effects of Increasing Working Memory Demands on Visual Statistical Learning

LINGUISTICS & COGNITIVE SCIENCE

- 64) Kerry Pini, Cognitive Science (NUCLEUS -SF)
Kaja Jasinska, Linguistics & Cognitive Science
Neural Basis of Language, Cognition and Literacy Development Using Functional Near-Infrared Spectroscopy (fNIRS) Neuroimaging
- 65) LaChelle Stewart, Linguistics (McNair)
Irene Vogel, Linguistics & Cognitive Science
Acoustic Properties of Prominence in Romanian: Stress and Focus

KINESIOLOGY & APPLIED PHYSIOLOGY

- 66) Michael Christensen, Exercise Science/Applied Nutrition (INBRE)
Elisa Arch, Kinesiology & Applied Physiology
Evaluation of Accuracy of Step Activity Monitors for Individuals with Lower Limb Amputations
- 67) Abayomi Ilori, Mechanical Engineering (CBER NSF REU) (UMBC)
Elisa Arch, Kinesiology & Applied Physiology
Influence of Real-Time Feedback on AFO Use for Individual Post-stroke
- 68) Victoria Wilson, Engineering Physics (INBRE) (DSU)
Elisa Arch, Kinesiology & Applied Physiology
The Influence of Fast Walking on Personalized Ankle-foot Orthosis Use for Individuals Post-stroke
- 69) Justus Matteson, Electrical Engineering (UDRF)
Jeremy Crenshaw, Kinesiology & Applied Physiology
The Ankle Muscle Response to a Standing Postural Disturbance: A Pilot Study of Individuals at Risk of Falling
- 70) Alexandra Ecott, Medical Laboratory Science (INBRE)
Dave Edwards, Kinesiology & Applied Physiology
The Effects of Shear Stress on Cationic Amino Acid Transporter 1 Expression
- 71) Eduardo Arocha, Exercise Science (SE)
Thomas Kaminski, Kinesiology & Applied Physiology
The Reliability of the Trail Making Test in Assessing Concussion Symptoms
- 72) Kyle Weinberg, Athletic Training (SE)
Thomas Kaminski, Kinesiology & Applied Physiology
Correlation of ImPact Reaction Time and Clinical Reaction Time in Intercollegiate Athletes
- 73) Benjamin Sibson, Exercise Science (SF)
Christopher Knight, Kinesiology & Applied Physiology
High Speed Cycling and the Law of Initial Values in Parkinson's Disease
- 74) Donna Wood, Cellular & Molecular Biology (INBRE)
Shannon Lennon-Edwards, Kinesiology & Applied Physiology
The Effect of Dietary Potassium and Sodium on Oxidative Stress and Stiffness in Venous Endothelial Cells
- 75) Eryn Gerber, Biomedical Engineering (INBRE)
Steven Stanhope, Kinesiology & Applied Physiology
BWS-Speed Mapping: A Novel Approach for Administering Body-Weight Supported Treadmill Training

PHYSICAL THERAPY

- 76) Ikira Peace, Communication (CPW) & Kelly McGowan, Exercise Science (SE)
Anjana Bhat, Physical Therapy
“Take Physical Therapy by the Hand and Dance”: A Play Intervention Study with Children on the Autism Spectrum
- 77) De’Shjuan Triplett, Kinesiology (INBRE) (Hampton)
Anjana Bhat, Physical Therapy
Comparing fNIRS-based Cortical Activation Patterns between Children With and Without Autism during Interpersonal Synchrony Tasks
- 78) Caitlin Dyes, Apparel Design (AHSS)
Michele Lobo, Physical Therapy
Functional Designs for Teens with Cerebral Palsy
- 79) Emmeline Oltmans, Biological Sciences (CPW)
Darcy Reisman, Physical Therapy
Role of BDNF Val66Met Polymorphism on Effects of Single Bout of Exercise on Motor Learning after Stroke
- 80) Kim Hanchett, Exercise Science (DRI)
Karin Silbernagel, Physical Therapy
Region-Specific Viscoelastic Properties of Patellar Tendons
- 81) Samantha Hornsby, Exercise Science (INBRE)
Karin Silbernagel, Physical Therapy
Symptom Severity and Gait Parameters in Subjects with Achilles Tendon Injuries
- 82) Nadia Khoury, Exercise Science (INBRE)
Karin Silbernagel, Physical Therapy
Validation of Wearable Sensors for Measuring Symmetry While Running
- 83) Rene Lopez, Biomedical Engineering (CBER NSF REU) (Johns Hopkins)
Karin Silbernagel, Physical Therapy
Relationship of Muscle Activation Amplitude with Elongation and Mechanical Properties of the Achilles Tendon
- 84) Sheridan Parker, Biomedical Engineering (SF)
Karin Silbernagel, Physical Therapy
Forefoot versus Rear Foot Loading Validation Using the Smartboot
- 85) Nia Powell, Athletic Training (McNair)
Karin Silbernagel, Physical Therapy
Validation of Inertial Measurement Units for Gait Parameters in Walking
- 86) DeJ’a Crippen, Health Behavior Science (McNair)
Megan Sions, Physical Therapy
Using Ultrasound Imaging to Dose Neuromuscular Electrical Stimulation in Patients with Chronic Low Back Pain

- 87) Michayla Petel, Biological Sciences (NUCLEUS/SE)
Megan Sions, Physical Therapy
Adults with Lower-Limb Amputations: Higher Residual Limb Pain Intensity is Associated with Poorer Physical Function

BEHAVIORAL HEALTH & NUTRITION

- 88) Nicole Kushner, Biological Sciences (INBRE)
Sheau Ching Chai, Behavioral Health & Nutrition
The Adverse Effects of Fructose on Blood Pressure and Body Composition in Older Adults
- 89) Jessica McMahon, Medical Laboratory Sciences (INBRE)
Sheau Ching Chai, Behavioral Health & Nutrition
The Effects of Tart Cherry Juice on Biomarkers of Vascular Function
- 90) Cara Cicalo, Dietetics (Pattison)
Sheau Ching Chai, Behavioral Health & Nutrition
Effects of Whole Grape Consumption on Cognitive Function and Emotional Status in Postmenopausal Women
- 91) Darlaine Paul, Biological Sciences (McNair)
Laura Lessard, Behavioral Health & Nutrition
The Importance of Improving and Understanding Health Insurance Literacy
- 92) Adrienne Fraczkowski, Dietetics/Nutritional Sciences (INBRE)
Carly Pacanowski, Behavioral Health & Nutrition
Measuring Physiological and Psychological Stress Response to Daily Self-weighing

POSTER SESSION II 10:45 - 12:15PM

(Biological Sciences, Microbiology, Chemistry & Biochemistry, Delaware Energy Institute, Energy Technologies, Mathematical Sciences, Applied Economics & Statistics, Economics, Physics & Astronomy)

BIOLOGICAL SCIENCES

- 1) Daniel Morreale, Biological Sciences (INBRE)
Fidelma Boyd, Biological Sciences
*Distribution and Diversity of CRISPR-Cas Systems in *Vibrio cholerae**

- 2) John Vaile, Biochemistry/Spanish Studies (INBRE)
Fidelma Boyd, Biological Sciences
*Quorum Sensing Regulators Control Ectoine Biosynthesis Gene Expression in the Halophile *Vibrio parahaemolyticus**
- 3) Acadia Grimme, Biological Sciences (SE)
Matthew Butchbach, Biological Sciences
Dissection of the SMN2 Promoter for Small Molecule Mechanisms of Action Studies
- 4) David Arredondo, Biological Sciences (McNair)
Patricia A. DeLeon, Biological Sciences
Extracellular Vesicles Released in In Vitro Fertilization
- 5) Tayler Lewis, Pre-Veterinary Sciences (INBRE) (DSU)
Harb Dhillon, Biological Sciences (DSU)
*Development of Asymmetry in the *C. elegans* Embryo*
- 6) Erin Jackson, Pre-Veterinary Medicine & Animal Biosciences (CPWBIO)
Melinda Duncan, Biological Sciences
Exploration of Novel Markers for Posterior Capsular Opacification via Immunostaining
- 7) Morgan Kim, Biological Sciences (Stetson)
Randall Duncan, Biological Sciences
Release of NGF from Osteoblasts and Osteocytes in Response to Mechanical Load
- 8) Camryn Bernheimer, Biological Sciences (CPWBIO)
Deni Galileo, Biological Sciences
The Effects of CBD on Motility and Proliferation in Glioblastoma Cells
- 9) Kyle Plusch, Biological Sciences (SE)
Deni Galileo, Biological Sciences
Characterizing Glioblastoma Stem Cells for L1CAM Expression and Responsiveness
- 10) Alexander Stubbolo, Biological Sciences (SE)
Deni Galileo, Biological Sciences
Can L1CAM Secreting Cells Act as "Pathfinders" for Brain Cancer?
- 11) Lauren Perry, Biological Sciences (INBRE) (DSU)
Michael Gitcho, Biological Sciences (DSU)
Induction of HSP-27 Reduces Endogenous TDP-43
- 12) Leanna Thongvong, Biological Sciences (EPSCoR) (DSU)
Michael Gitcho, Biological Sciences (DSU)
Astrocytic Expression of TDP-43 Causes Neurodegeneration
- 13) Ahjalah Demby, Forensic Biological Sciences (EPSCoR) (DSU)
Krystal Hans, Biological Sciences (DSU)
Repeated Exposure to Sodium Hypochlorite (NaClO) and its Effect on Cadaver Decomposition and Blow Fly Colonization
- 14) Aderolake Bolarinwa, Computer Science/English (McNair)
John Jungck, Biological Sciences
Computational Image Analysis: A Biological ESTEEM Project
- 15) Tahlia Casey, Biological Sciences (INBRE) (DSU)
Hawan Kim, Biological Sciences (DSU)
Ubc9 Induced SUMOylation Protects Dopaminergic Neurons from Oxidative Stress
- 16) Juan Ruiz, Biochemistry (INBRE)
Salil Lachke, Biological Sciences
Investigation of New Biomarkers for Mammalian Corneal Development
- 17) Dominic Villalba, Biological Sciences (SE)
Salil Lachke, Biological Sciences
Identification of New Biomarkers in Mouse Eye Development
- 18) Bailey Weatherbee, Biological Sciences (Governor's Biotech Award)
Salil Lachke, Biological Sciences
Investigating the Significance of RNA Granule Components in Lens Development
- 19) Yelyzaveta Bessonova, Biological Sciences (EPSCoR) (DSU)
Hakeem Lawal, Biological Sciences (DSU)
TBA
- 20) Yessica Martinez, Biological Sciences (INBRE) (DSU)
Hakeem Lawal, Biological Sciences (DSU)
*The Role of Acetylcholine Release in the Regulation of Locomotion Behavior in *Drosophila**
- 21) Krushali Patel, Biological Sciences (INBRE) (DSU)
Hakeem Lawal, Biological Sciences (DSU)
*Interactions Involving Commercially-used Pesticides in a *Drosophila* Model of Parkinson's Disease*
- 22) Deja Latney, (INBRE) (DTCC)
John McDowell, Biological Sciences/Chemistry (DTCC)
*Functional Analysis of Transcriptional Regulators from a Unique *Pseudomonas fluorescens* Isolate*
- 23) Chukwudi Ikwuagwu, Biological Sciences (EPSCoR) (DSU)
Karl Miletti-Gonzalez, Biological Sciences (DSU)
Gene Expression in MCF-7/CD44 Cells in the Presence of Different Cell Culture Antibiotics
- 24) Holly Miller, Biological Sciences (INBRE) (DSU)
Karl Miletti-Gonzalez, Biological Sciences (DSU)
Detection of Protein-Protein Interaction of the Cd44-Intracytoplasmic Domain with Runx2 by Proximity Ligation Assay
- 25) Andre Cunningham, Biological Sciences (Hofmann Scholar)
Ramona Neuneubel, Biological Sciences
*Designing a Bioorthogonal Labelling Method to Track Secretion of *Legionella pneumophila* Effector Proteins during Infection*
- 26) Saurabh Dharmadhikari, Neuroscience (CPWBIO)
Anja Nohe, Biological Sciences
The Effect of Calcitriol on Inflammatory Breast Cancer

- 27) Ryan Kabrick, Mechanical Engineering (SE)
Anja Nohe, Biological Sciences
Effects of Aging on the Quantity of Osteoclasts and Osteoblasts in Femoral Heads of Female Patients with Osteoarthritis and Osteoporosis
- 28) John Nixon, Biomedical Engineering (SF)
Erica Selva, Biological Sciences
Identifying the Dynamic Oligomerization of Wntless
- 29) Anita Rao, Neuroscience (NUCLEUS-SF)
Erica Selva, Biological Sciences
*Localizing the Dimerization on Plasma Membranes in *Drosophila* Wls*
- 30) Alexander George, Biological Sciences (CPWBIO)
Jia Song, Biological Sciences
The Role of the Non-canonical Wnt Calcium Pathway in the Development and Function of Primary Mesenchyme Cells
- 31) Chelsea Lee, Biological Sciences (CPWBIO)
Jia Song, Biological Sciences
MicroRNA-31 Regulation of Eve Expression in the Early Sea Urchin Embryo
- 32) Michael Testa, Biological Sciences (NUCLEUS)
Jia Song, Biological Sciences
The Role of Rab35 GTPase in Sea Urchin Morphogenesis
- 33) Shrey Patel, Biological Sciences/Liberal Studies (INBRE)
Jessica Tanis, Biological Sciences
*Identification of Genes that Affect Acetylcholine Signaling at the *C. elegans* Neuromuscular Junction*
- 34) Alyssa Reed, Cellular & Molecular Biology (INBRE)
Jessica Tanis, Biological Sciences
*Identification of the Cellular Expression Pattern of CLHM-1 in *C. elegans**
- 35) Nupur Reddy, Neuroscience/Public Health (INBRE) (Muhlenberg)
Murali Temburni, Biological Sciences (DSU)
Elucidating the Role of Astrocytic Metabotropic Glutamate Receptors in Neuronal Synchrony Development
- 36) Jasmine Miller, Psychology (INBRE) (NYU)
Shuo Wei, Biological Sciences
Gene ZNF238 Participates in the Formation of the Neural Crest in Vertebrate Animals

MICROBIOLOGY

- 37) Khadijah Bland, Biological Chemistry (EPSCoR) (Wesley)
Kevin Shuman, Microbiology & Malcolm D'Souza, Chemistry (Wesley)
An Assessment on the Effects of Carbamoyl Chlorides on Isolated Environmental Microbes

- 38) Rachel Piper, Biological Chemistry (EPSCoR) (Wesley)
Kevin Shuman, Microbiology & Malcolm D'Souza, Chemistry (Wesley)
An Evaluation on the Effects of Carbamoyl Chlorides on Model Microbes

CHEMISTRY & BIOCHEMISTRY

- 39) Joseph Camacho, Chemistry (NSF)
Karl Booksh, Chemistry & Biochemistry
Detection of Degradation and Adulteration in Oils via Raman Spectroscopy
- 40) Rose Janvier, Biochemistry (McNair)
Karl Booksh, Chemistry & Biochemistry
Biding Studies of Bovine Serum Albumin on Electrografted Surface
- 41) Veronica Marrero, Chemistry (NSF) (Iona College)
Karl Booksh, Chemistry & Biochemistry
Spectroscopic Analysis of Asteroidal and Martian Meteorites
- 42) Elizabeth Van Winkle, Art Conservation (Hofmann Scholar)
Karl Booksh, Chemistry & Biochemistry
Spectroscopic Analysis of Artificially Aged Paint Binders
- 43) Edward Brandenburg, Biochemistry (EPSCoR) (Wesley)
Malcolm D'Souza, Chemistry (Wesley) & Louis Delgado (Delaware City Refining Company)
Initiating a Laboratory Internship with the Delaware City Refining Company
- 44) Matthew Dina, Biological Chemistry (INBRE) (Wesley)
Malcolm D'Souza, Chemistry (Wesley)
Substituent Effects of 2-methoxyethyl Chloroformate
- 45) Morgan Gannon, Biology (INBRE) (Wesley)
Malcolm D'Souza, Chemistry & Derald Wentzien, Mathematics (Wesley)
Data-Mining Impacts of U.S. Mortality from Diseases of the Circulatory System, Diabetes, and Neoplasms
- 46) Austin Lonski, Biological Chemistry (INBRE) (Wesley)
Malcolm D'Souza, Chemistry & Fady Gerges, Pathology Laboratory (Wesley College/Green Clinics Laboratory)
Molecular profiling of Malignant Melanoma in the State of Delaware with Demographic Metadata Correlation Analysis- Part II
- 47) Osama Mahmoud, Biological Chemistry (INBRE) (Wesley)
Malcolm D'Souza, Chemistry (Wesley)
Comparison of the Rates of Reaction of 3-Chloropropylchloroformate and Propyl Chloroformate
- 48) Jose Santana, Environmental Science (INBRE) (Wesley)
Malcolm D'Souza, Chemistry & Derald Wentzien, Mathematics (Wesley)
Geospatial Analysis for Contrasting Mortality Rates due to Obesity in the United States (1999 to 2015)

- 49) Jeremy Wirick, Biological Chemistry (NASA DESGC & INBRE) (Wesley)
Malcolm D'Souza, Chemistry (Wesley)
Leaving Group Effects on the Beta-Carbon in Ethyl Chloroformate Esters
- 50) Daniel Scanlon, Chemistry/Biochemistry (Plastino)
Catherine Grimes, Chemistry & Biochemistry
Expression and Purification of Yeast Protein CYR1p
- 51) Daniel Bodine, Chemistry (SE)
Lars Gundlach, Chemistry & Biochemistry
Photocatalytic Degradation of Methylene Blue using ZnO Nanowires and ZnO/CuO Nanocomposite
- 52) Stephen Fendt, Biochemistry (Plastino)
John Koh, Chemistry & Biochemistry
Optimizing Thyroid Hormone Receptor Probes for use in Fluorescent Labelling
- 53) Miranda Penney, Biological Sciences/Chemistry (INBRE) (DSU)
Cheng-Yu Lai, Chemistry (DSU)
APC Tumor Suppressor Protein for Treatment of Colon Cancer
- 54) Charlotte Champigny, Biology (NSF) (Adelphi)
Edward Lyman, Chemistry & Biochemistry
Lipid Packing and Hydrogen Bonding in Minimally Complex Lipid Mixtures
- 55) Emma Kamen, Biomedical Science (NSF) (Marymount Manhattan)
Andrew Teplyakov, Chemistry & Biochemistry
Surface Science and Architecture Conservation: An Investigation of Soot Samples from Vanderbilt Mansion National Historic Site
- 56) Ruth Mandel, Chemistry (Plastino)
Andrew Teplyakov, Chemistry & Biochemistry
Concentration Dependence and Applications of Mixed Azide-Terminated Self-Assembled Monolayers
- 57) Earl Bampo, Biochemistry (Plastino)
Mary Watson, Chemistry & Biochemistry
Nickel Catalyzed Cross Couplings of Amino Acids and Peptide Derivatives via C-N Bond Activation
- 58) Wing Cheung, Chemistry (INBRE)
Mary Watson, Chemistry & Biochemistry
Stereospecific Vinylation of Allylic Pivalates to Afford All Carbon Quaternary Centers
- 59) Joseph Quinlan, Chemistry/Biochemistry (Plastino)
Donald Watson, Chemistry & Biochemistry
Synthesis of Complex Amines from Nitroalkanes to Assay Biological Activity
- 60) Jingchen Yang, Chemistry (SE)
Mary Watson, Chemistry & Biochemistry
Enantioselective Alkynylation of Oxocarbenium Ions
- 61) Brian Clark, Chemistry (NSF) (VSU)
Zhihao Zhuang, Chemistry & Biochemistry
Generation of PolyUb PCNA and its Characterization
- 62) Rebecca DiBona, Biochemistry (Plastino)
Zhihao Zhuang, Chemistry & Biochemistry
Enzymatic Generation and Implementation of K48 and K63-linked Diubiquitin in USP15 Inhibitor Discovery
- 63) Harrison Greenberg, Biochemistry (SE)
Zhihao Zhuang, Chemistry & Biochemistry
Elucidation of the Mechanism behind Chain Linkage Specificity of the Deubiquitinase USP9x
- 64) Duncan Bower, Chemistry (Plastino)
Neal Zondlo, Chemistry & Biochemistry
Development of Novel Imaging Agents through the Synthesis and Application of Derivatives of Fmoc-4-Amino-Phenylalanine using Diazonium Chemistry
- 65) Nicole Raniszewski, Biochemistry (Heitzer)
Neal Zondlo, Chemistry & Biochemistry
Exploring Undiscovered Molecular Interactions of Phosphoserine: Elucidating the Mechanisms of Alzheimer's Disease
- 66) Joshan Wang, Biochemistry (SE)
Neal Zondlo, Chemistry & Biochemistry
Design of a Novel Deuterated Threonine Probe for Detection of Protein Phosphorylation via Infrared Spectroscopy

DELAWARE ENERGY INSTITUTE

- 67) Benjamin Fisher, Chemical Engineering/Material Science (DOE)
Stavros Caratzoulas, Chemical & Biomolecular Engineering
Renewable Butadiene Production from Tetrahydrofuran in P-beta: A Mechanistic Study
- 68) Amanda Lashenick, Chemical Engineering (DOE/NSF)
Basudeb Saha, Chemical & Biomolecular Engineering
Aqueous Two Phase Systems for Sugar and Salt Separation
- 69) Henry Ludwicki, Chemical Engineering (DOE)
Basudeb Saha, Chemical & Biomolecular Engineering
Transalkylation of 2-methylfuran with 1,2,4-trimethylbenzene for Catalytic Production of 2,5-dimethylfuran
- 70) Trent Simonetti, Chemical Engineering (DOE)
Basudeb Saha, Chemical & Biomolecular Engineering
Catalytic Hydrodeoxygenation of Renewable Oils to Diesel-range Hydrocarbons Using Ir-ReOx/SiO2 Catalyst
- 71) Tobias Mazal, Chemical Engineering (DOE)
Dionisios Vlachos, Chemical & Biomolecular Engineering
Uncovering Structure-Function Relations in the Transfer Hydrodeoxygenation of Furfural

- 72) Nick Xiao, Chemical Engineering (DOE)
Dionisios Vlachos, Chemical & Biomolecular Engineering
TBA
- 73) Harrison Landfield, Chemical Engineering (DOE)
Bingjun Xu, Chemical & Biomolecular Engineering
Catalytic Amination of Furfuryl Alcohol

ENERGY TECHNOLOGIES

- 74) Gail Yborra, Building Automation Systems (ESPCOR) (DTCC)
Cory Budischak, Energy Technologies (DTCC)
TBA
- 75) Benjamin Persondek, Energy Management (ESPCOR) (DTCC)
Daniel Kasper, Energy Technologies (DTCC)
TBA
- 76) Michael Woodcock, Energy Management (EPSCoR) (DTCC)
Daniel Kasper, Energy Technologies (DTCC)
Diagnosing HVAC Issues at the DTCC Stanton Campus
- 77) Charles Yeager, (EPSCoR) (DTCC)
Daniel Kasper, Energy Technologies (DTCC)
TBA

MATHEMATICAL SCIENCES

- 78) Joseph Buxton, Applied Mathematics (SE)
Sebastian Cioaba, Mathematical Sciences
Graphs from Systems of Equations over Finite Fields
- 79) Chunxu Ji, Mathematical Sciences (SE)
Sebastian Cioaba, Mathematical Sciences
Graph Theory
- 80) Samantha Rosenthal, Mathematical Sciences (SE/NSF)
Michelle Cirillo, Mathematical Sciences
Proof in Secondary Classrooms
- 81) Matthew Meyers, Applied Mathematics (SE)
Tobin Driscoll, Mathematical Sciences
Numerical Solutions to Ordinary and Delay Differential Equations in Chebfun
- 82) Lucas Onisk, Mathematics (NSF)
David Edwards, Mathematical Sciences
Multi-Site Reaction Rate Constant Evaluation
- 83) Clair Lubash, Mathematical Sciences (SE)
Louis Rossi, Mathematical Sciences
Mathematical Modeling of Plankton Behavior: Photosynthesis
- 84) John Pae, Applied Mathematics (SE)
Louis Rossi, Mathematical Sciences
Mathematical Modeling of Plankton Behavior: Predation and Toxicity

- 85) Connor Swalm, Mathematical Sciences (SE)
Francisco Sayas, Mathematical Sciences
Exploring Continuum Models of Viscoelastic Materials
- 86) Benjamin Clark, Mathematical Sciences (SE)
Gilberto Schleininiger, Mathematical Sciences
Agent-based Modeling of Tissue Structure
- 87) Megan Dilorio, Quantitative Biology (INBRE)
Gilberto Schleininiger, Mathematical Sciences (UD) & Bruce Boman, Cancer Genetics (Christiana Care)
Modeling Tissue Organization Based on Asymmetric Cell Division

APPLIED ECONOMICS & STATISTICS

- 88) Isabella Meshreki, Food & Agribusiness Marketing & Management (Allen Internship)
John Bernard, Applied Economics & Statistics
Is the Non-USDA Organic Label Misleading to Consumers
- 89) Carlos Estrada, Biological Sciences (EPSCoR) (DTCC)
Kent Messer, Applied Economics & Statistics
TBA
- 90) Samuel Furio, Environmental & Resource Economics (EPSCoR)
Kent Messer, Applied Economics & Statistics
TBA
- 91) James Geisler, Computer Science (Allen Internship)
Kent Messer, Applied Economics & Statistics
Computer Programming for Economic Experiments
- 92) Julia Parker, Economics (USDA CONSERVE)
Kent Messer, Applied Economics & Statistics
Consumer Preferences for Wine Grapes Irrigated with Non-Traditional Water Sources

PHYSICS & ASTRONOMY

- 93) Ashley Simpson, Biological Sciences (INBRE/OSCAR) (DSU)
Hacene Boukari, Physics (DSU)
Effect of Nanodiamonds on the Viability of the Human Breast Adenocarcinoma Cell Line
- 94) Caio Azevedo, Physics Bioengineering (INBRE) (DSU)
Mohammad Khan, Physics (DSU)
Ultrasensitive Detection of Biogenic Methane and Carbon Dioxide for Biomedical Applications
- 95) Hadiya Jolly, Biological Sciences (INBRE) (DSU)
Qi Lu, Physics (DSU)
Spectrofluorometric Analysis of Lipid Packing in Liposomes Treated with Silver Nanoparticles

- 96) Alexander Boeckenstedt, Physics (SE)
Bennett Maruca, Physics & Astronomy
Characterization of Hot-Wire Anemometer for Measurements of Atmospheric Turbulence
- 97) Manuel Cuesta, Physics / Applied Mathematics (McNair)
William Matthaeus & Tulasi Parashar, Physics & Astronomy
Magnetic Structures in Solar Wind
- 98) Jennifer Fanelle, Physics (SE)
Michael Shay, Physics & Astronomy
Plasma Dynamics and Morphology in Near-Earth Space Observed by the Magnetospheric Multiscale Satellites
- 99) Wenbin Li, Physics (NUCLEUS/SE)
Karl Unruh, Physics & Astronomy
Inverse Modeling of Diffusion in a Bimetallic Core/Shell Nanoparticle
- 100) Jacques Samaha, Physics (SE)
Barry Walker, Physics & Astronomy
Ultrafast Laser Technology/Precision Measurement of Relativistic Electrons

POSTER SESSION III

1:15 - 2:45PM

(Agriculture & Natural Resources, Animal & Food Sciences, Entomology & Wildlife Ecology, Environmental Science, Plant & Soil Sciences, Marine Studies, Geography, Human Ecology, Art Conservation, History, Political Science & Philosophy, Education, Community Engagement, Materials Science, Computer & Information Sciences)

AGRICULTURE & NATURAL RESOURCES

- 1) Aicha Diarra, Plant Science (EPSCoR) (DSU)
Kalpalatha Melmaiee, Agriculture & Natural Resources (DSU)
Determination of Heat Stress: On Three Blueberry Genotypes
- 2) Julian Jones, Plant Science (EPSCoR) (DSU)
Kalpalatha Melmaiee, Agriculture & Natural Resources (DSU)
Investigation of Anthocyanin Content and Antioxidant Activity in Blueberry Genotypes

- 3) Catrena Moore, Plant Science (EPSCoR) (DSU)
Kalpalatha Melmaiee, Agriculture & Natural Resources (DSU)
Measurement of Chlorophyll Content and its Relation to Heat Tolerance in Blueberries
- 4) Jillian Bradley, Natural Resources (EPSCoR) (DSU)
Gulnihal Ozbay, Agriculture & Natural Resources (DSU)
TBA
- 5) Mohana Gadde, (EPSCoR) (DSU)
Gulnihal Ozbay, Agriculture & Natural Resources (DSU)
TBA
- 6) Tajjay Gordon, Biological Sciences (EPSCoR) (DSU)
Gulnihal Ozbay, Agriculture & Natural Resources (DSU)
TBA
- 7) Luz Ward, Biological Sciences (EPSCoR) (DSU)
Gulnihal Ozbay, Agriculture & Natural Resources (DSU)
TBA
- 8) Dinh Ngo, Biological Chemistry (EPSCoR) (DSU)
Sigrid Smith, Agriculture & Natural Resources (DSU)
Zooplankton Composition in Delmarva Bays
- 9) Mara Baker, Biological Sciences (INBRE) (DTCC)
Eric Wommack, Agriculture & Natural Resources
Examination of the Differences in the Microbial Communities between Disease Resistant and Wild-type Oysters

ANIMAL & FOOD SCIENCES

- 10) Brilynn Brothers, Biological Sciences (INBRE)
Behnam Abasht, Animal & Food Sciences
Spatial and Sex Differences in Gene Expression in Pectoralis Major of Broiler Chickens
- 11) Benney Endoni, Biology/Biochemistry & Molecular Biology (Envision, NIFA-URE) (Lincoln)
Behnam Abasht, Animal & Food Sciences
RNA-Seq Study of Wooden Breast Disease in Commercial Broiler Chickens
- 12) Melanie Lopez, Pre-Veterinary Medicine & Animal Biosciences (USDA APHIS)
Eric Benson, Animal & Food Sciences
Evaluating the Environmental Impact of Foam Depopulation for Poultry Disease Outbreaks
- 13) Adrianna Szostek, Pre-Veterinary Medicine & Animal Biosciences (USDA APHIS)
Eric Benson, Animal & Food Sciences
The Efficacy of Foam Applied Disinfectants to Inactivate Infectious Bronchitis Virus in the Presence of an Organic Load

- 14) Rebecca Davis, Biological Sciences (NUCLEUS-SF)
Amy Biddle, Animal & Food Sciences
Correlating Small Strongyle Taxa Distribution with Bacteria Abundance in the Equine Gut
- 15) Anthony Pompetti, Biological Sciences (SF)
Amy Biddle, Animal & Food Sciences
Identifying Differences in Small Strongyle Species with Respect to Moxidectin Anthelmintic
- 16) Lauren Weems, Biological Sciences (SE)
Amy Biddle, Animal & Food Sciences
The Effect of KLASP Poultry Litter Amendment on Bacterial Communities
- 17) Elizabeth Wagura, Biology (Envision, NIFA-URE) (Lincoln)
Amy Biddle, Animal & Food Sciences
The Effect of a Feed Additive on the Development of Lactic Acidosis in Horses
- 18) Favour Chibueze, Biochemistry & Molecular Biology (Envision, NIFA-URE) (Lincoln)
Tanya Gressley, Animal & Food Sciences
Evaluating Rumen in Vitro Using Two Culture Systems
- 19) Shane Cronin, Pre-Veterinary Medicine & Animal Biosciences (SE)
Tanya Gressley, Animal & Food Sciences
Evaluating in Vitro Ammonia Production from Nitrogen Sources using Two Different Culture Systems
- 20) Sara Dietz, Pre-Veterinary Medicine & Animal Biosciences (SE)
Tanya Gressley, Animal & Food Sciences
Evaluating the Effects of Abomasal Starch Infusions on Bovine Hindgut Fermentation
- 21) Ashley Taylor, Pre-Veterinary Medicine & Animal Biosciences (SE)
Tanya Gressley, Animal & Food Sciences
Evaluating Activation Marker Expression on Bovine Peripheral Lymphocytes in Response to Post-Ruminal Starch
- 22) Anje Popoola, Biochemistry/Mathematics (Envision, NIFA-URE) (Lincoln)
Rolf Joerger, Animal & Food Sciences
Inactivation of Listeria monocytogenes Released from Biofilms
- 23) Sarina Murray, Biology (Envision, NIFA-URE) (Lincoln)
Calvin Keeler, Animal & Food Sciences
Host Responses to Infectious Laryngotracheitis Virus
- 24) Darielle Lewis-Sanders, Biology (CANR) (Spelman)
Calvin Keeler, Animal & Food Sciences
Cloning and Expression of Avian Genes
- 25) Jessica Ndiomu, Environmental Science/Biology (Envision, NIFA-URE) (Lincoln)
Kalmia Kniel, Animal & Food Sciences
Efficacy of ZVI Filtration in the Reduction of Gram-Positive and -Negative Bacteria in Reclaimed Water
- 26) Briana Young, Cultural & Global Studies (CANR) (CMU)
Kalmia Kniel, Animal & Food Sciences
Comparative Analysis of Multiple vs Single Pass Filtration Techniques Using Zero Valent Iron
- 27) Rachel Mester, Pre-Veterinary Medicine & Animal Biosciences (SE)
Limin Kung, Animal & Food Sciences
Improving the Aerobic Stability of a Total Mixed Ration with Chemical Additives
- 28) Melissa De Los Santos, Animal Science (Envision, NIFA-URE)
Hong Li, Animal & Food Sciences
Investigate and Characterize the Microbial Environment of Acid Treated Poultry Litter
- 29) Matthew Bott, Pre-Veterinary Medicine & Animal Biosciences (Discovery Learning)
Mark Parcels, Animal & Food Sciences
Metabolic Programming during Marek's Disease Virus Infection
- 30) Lois Mbachu, Biology (Envision, NIFA-URE) (Lincoln)
Mark Parcels, Animal & Food Sciences
Genetic Analysis of Marek's Disease Virus (MDV) Isolates from Nigeria
- 31) Meaghan Young, Pre-Veterinary Medicine & Animal Biosciences (Envision, NIFA-URE)
Carl Schmidt, Animal & Food Sciences
The Effect of Heat Stress on Eukaryotic Cells
- 32) Alexa Reyes, Food Science (Envision, NIFA-URE)
Changqing Wu, Animal & Food Sciences
Evaluation of Bacterial Isolates from Poultry Gastrointestinal Tract for Antimicrobial and Antioxidant Properties
- 33) Caitlin Carmody, Food Science (SE)
Changqing Wu, Animal & Food Sciences
Antioxidant and Antimicrobial Activity of Bacteria Isolated from Poultry Gastrointestinal Tract

ENTOMOLOGY & WILDLIFE ECOLOGY

- 34) Lindsey Cathcart, Entomology (SE)
Deborah Delaney, Entomology & Wildlife Ecology
Native Hydrangea Species and Their Cultivars as Food Sources for Pollinators and Other Flower Visitors
- 35) J. Conner Maxwell, Wildlife Ecology & Conservation (Allen Internship)
Kyle McCarthy, Entomology & Wildlife Ecology
Scent Lure Effect on Jagarundi Camera-Trap Rates

- 36) Taylor Tewksbury, Marine Biology (EPSCoR)
Greg Shriver, Entomology & Wildlife Ecology
*Breeding and Migratory Tidal Marsh Bird Community
Changes Over Five Years*

ENVIRONMENTAL SCIENCE

- 37) Ashley Melvin, Environmental Engineering & Technology (EPSCoR) (DTCC)
Bethany Krumrine, Environmental Engineering & Technology (DTCC)
Vegetative Response to Marsh Restoration Project at Prime Hook National Wildlife Refuge
- 38) Sydney Hall, Environmental Science (EPSCoR) (Wesley)
Michael Mensinger, DE National Estuarine Research Reserve & Stephanie Stotts, Environmental Science (Wesley)
Analysis of Water Quality in the St. Jones River
- 39) Kate Holden, Biological Sciences
Gerald Poirier, Advanced Materials Characterization Laboratory
Zinc Speciation in Red Clay Creek
- 40) Bryce Stevenosky, Geography (EPSCoR)
Kari St. Laurent, DE National Estuarine Research Reserve
An Introduction to Blue Carbon and its Implications for Delaware
- 41) Katelynn Fry, Environmental Science (EPSCoR) (Wesley)
Stephanie Stotts, Environmental Science (Wesley)
Discharge Precipitation Relationships for White Clay Creek
- 42) Olivia Gullede, Environmental Science (NASA DESGC) (Wesley)
Stephanie Stotts, Environmental Science (Wesley)
*Understanding *Chamaecyparis thyoides* Resiliency to Salinity Intrusion: Dendroecologically and Cellularly*
- 43) Teric Henry, Environmental Science (EPSCoR) (Wesley)
Stephanie Stotts, Environmental Science (Wesley)
Estimating Sediment Deposition Rates along the White Clay Creek Using Riparian Trees
- 44) Christina Hubert, Mathematics (EPSCoR) (Wesley)
Stephanie Stotts, Environmental Science (Wesley)
Using GIS to Measure the Water Quantity of the Monocacy River Watershed through a Period of Time
- 45) Cassandra Rodriguez, Environmental Science (EPSCoR) (Wesley)
Stephanie Stotts, Environmental Science (Wesley)
Sea Level Rise and Atlantic White Cedars: A Dendroecological Study

- 46) Michael Skivers, Environmental Science (EPSCoR) (Wesley)
Stephanie Stotts, Environmental Science & Malcolm D'Souza, Chemistry (Wesley)
Tree Growth and Cellular Response 20 Years after a Major Ice Storm in Kent and Sussex, Delaware

PLANT & SOIL SCIENCES

- 47) Benjamin Chadwick, Biological Sciences (CPWBIO)
Harsh Bais, Plant & Soil Sciences
Bacteria-Fungus Interactions: Finding Bacterial Components to Inhibit Rice Blast
- 48) Jonathon Cottone, Plant Science (EPSCoR)
Harsh Bais, Plant & Soil Sciences
Arsenic Toxicity Affects Rice Phenotype across Different Varieties
- 49) Priscilla Muhanji, Biology (EPSCoR) (Cheyney)
Harsh Bais, Plant & Soil Sciences
*Law of Attraction- *Cuscuta campestris*'s Proclivity towards Infected Hosts*
- 50) Danielle Mikolajewski, Plant Science (CANR)
Nicole Donofrio, Plant & Soil Sciences
Disruption of the Genome of Rice Blast to Identify Genes Involved in Production of Reactive Oxygen Species
- 51) Jonathan Neifert, Plant Science (SE)
Nicole Donofrio, Plant & Soil Sciences
*Characterizing Appressorial Development and Formation in *M. oryzae**
- 52) Jack Protokowicz, Biochemistry (EPSCoR)
Shreeram Inamdar, Plant & Soil Sciences
ATR-FTIR Characterization of POM Sources in a Small Forested Watershed
- 53) Ilana Schnauffer, Chemistry/Environmental Science (Willis Internship)
Deb Jaisi, Plant & Soil Sciences
An Isotopic Examination of Atmospheric Deposition and Cycling of Nitrogen in Stemflow along an Edge-To-Interior Transect of a Deciduous Forest
- 54) Zachary Wilson, Biology (EPSCoR) (Florida A&M)
Josh Sanchez, Plant & Soil Sciences
The Impact of Sea Level Rise on Arsenic Cycling and Mobility: pH and Ionic Strength Effects in a Goethite System
- 55) Mikaela Carty, Molecular Biology/Biochemistry (CANR) (Wesleyan)
Angelia Seyfferth, Plant & Soil Sciences
Changes in Si Plant-availability in Rice Paddy Soil Due to Rice Residue Incorporation and 3 Years of Rice Growth
- 56) Nathan Harlan, Plant Science
Janine Sherrier, Plant & Soil Sciences
Apios Americana: A Forgotten Food

- 57) Branden Bateman, Biomedical Engineering (EPSCoR)
Donald Sparks, Plant & Soil Sciences
TBA

MARINE STUDIES

- 58) Ashley Barnett, Marine Biology (SE)
Danielle Dixson, Marine Studies
The Effect of Sunscreen on Atlantic Horseshoe Crab Behavior
- 59) Megan Cain, Environmental Science (SE)
Danielle Dixson, Marine Studies
The Effects of UV-filters on the Development and Behavior of the Atlantic Horseshoe Crab, Limulus Polyphemus
- 60) Kameron Wong, Marine Biology (SE)
Danielle Dixson, Marine Studies
The Effect of Sunscreens on Atlantic Horseshoe Crab Growth and Development
- 61) Sol Choi, Environmental Science (SE)
Thomas Hanson, Marine Studies
Overexpression of Type IV Pili Genes in Chlorobaculum tepidum to Assess Their Role in Motility and S(0) Globule Metabolism
- 62) Cassandra Wilson, Marine Biology (SE)
Douglas Miller, Marine Studies
Estimating Size Dependence of Incidental Sea Scallop Mortality
- 63) Erin Papke, Marine Biology (SE)
Mark Warner, Marine Studies
The Effects of Climate Change on Harmful Algal Blooms

GEOGRAPHY

- 64) Margaret Orr, Environmental Science (SE)
Brian Hanson, Geography
Regional Climate Modeling of the Andes

HUMAN ECOLOGY

- 65) Mary Besong, Biological Sciences (EPSCoR) (DSU)
Alberta Aryee, Human Ecology (DSU)
Influence of Various Enzyme Combinations on Njangsa (Ricinodendron heudelotti) Seed Oil Extraction, Recovery and Quality

APPAREL DESIGN

- 66) Soraya Force, Apparel Design (AHSS)
Kelly Cobb, Fashion & Apparel Studies
Guatemalan Textiles: Opportunity and Innovation in the 21st Century

ART CONSERVATION & ART HISTORY

- 67) Caitlyn Ash, Computer Science (AHSS)
Vicki Cassman, Art Conservation
The Wyeth Walk
- 68) Miranda Armiger, Art History (SF)
Monica Dominguez-Torres, Art History
A Sociocultural Analysis: Women, Fashion and Sumptuary Law in Italian Renaissance Portraiture

HISTORY, POLITICAL SCIENCE & PHILOSOPHY

- 69) Omolade Oludare, Social Work (EPSCoR) (DSU)
Raymond Tutu, History, Political Science & Philosophy (DSU)
TBA
- 70) Sierra Schiritzinger, Environmental Studies (EPSCoR)
Thomas Powers, Philosophy & Public Policy
The Ethics of Water, Soil and Agriculture Policies of Farming Irrigation Practices in Delaware

EDUCATION

- 71) Margaret Chesser, Biological Sciences/Public Policy (INBRE)
Roberta Golinkoff, School of Education
Does Spatial Anxiety in Parents Influence the Math and Spatial Skills of their Children?
- 72) Daria Collins, Cognitive Science/Japanese Language Studies (McNair)
Roberta Golinkoff, School of Education
Adapting Psycholinguistic Measures to Study Early Speech Processing Abilities in Deaf and Hard-of-Hearing Infants

COMMUNITY ENGAGEMENT

- 73) Talia Gasko, Landscape Architecture (SL)
Jules Bruck, Plant & Soil Sciences
Community Partners: Towns of Laurel & Leipsic; City of Seaford
Rural Community Revitalization through Green Infrastructure Design and Landscape Performance Research
- 74) Jennifer Rushton, Pre-Veterinary Science & Animal Biosciences (Extension Scholars)
Nancy Gregory, Cooperative Extension & Plant Diagnostic Clinic
Downy Mildew

- 75) Amber Rance, Biochemistry, Nicodemus Williams, Organizational & Community Leadership, Rachel DeLauder, Exercise Science, Melissa Jones, Hotel, Restaurant & Institutional Management (PPF)
Lynnette Overby, Community Engagement Initiative
The Black Female Voice of Black Nationalism: The Perspectives of Mary Ann Shadd Cary and Angela Davis for Liberation and Abolition
- 76) Alexandra Cole, Environmental Studies (CANR) (NAU) & Caroline May, Environmental & Resource Economics (BHF)
Leah Palm-Forster, Applied Economics & Statistics
Community Partner: Bright Spot Farms
Civic Agriculture (Impacts of Initiatives on Customer Preference)
- 77) Shane Dorsey, Public Policy (IPA-PPF)
Marcia Scott & Sarah Pragg, Institute for Public Administration
Use of Social Media and Visual Tools to Promote Planning for Complete Communities in Delaware
- 78) Kelly James, Public Policy (IPA-PPF)
Marcia Scott & Julia O'Hanlon, Institute for Public Administration
Best Practices: Coordinated Public Transit – Human Services Transportation Plans
- 79) Sophia Vassar, Public Policy (IPA-PPF)
Kelly Sherretz & Chris Kelly, Institute for Public Policy
College Access for Delaware High School Students
- 80) Casey Moore, Public Policy (IPA-PPF)
Dan Smith, School of Public Policy & Administration
Institute for Public Administration
Evaluating State Fiscal Monitoring Systems
- 81) Emma Newell, Nutrition (Extension Scholars)
Sue Snider, New Castle County Cooperative Extension-Nutrition
Analysis of Nutrition Demonstrations with the Youth Community
- 82) Amanda Venuto, Nutritional Sciences/Dietetics (Extension Scholars)
Sue Snider, New Castle County Cooperative Extension-Nutrition
Examining the Effects of Nutrition Education on Children 9-12 Years
- 83) Amelia Gerson, Behavioral Health & Nutrition & Kelly Quigley, Exercise Science (SL)
Iva Obrusnikova, Behavioral Health & Nutrition
Community Partner: Bear-Glasgow YMCA; EPIC-Endless Possibilities in the Community
Promoting Physical Health and Function of Adults with Intellectual Disabilities
- 84) Autumn Bruemmer, Early Childhood Education, Hiba Chaudry, University Studies & Aliya Ranjber, Medical Diagnostics Interest (BHF)
David Teague, English, Associate in Arts
Community Partner: Our Future Childcare; Delaware Center for Justice “Read in Read Out” Program
Creative Writing Workshop, “Just Write!”
- 85) Simone Adkins, Political Science (IPA-PPF)
Leland Ware, School of Public Policy & Administration
Institute for Public Administration
Trump’s Appeals to Racism

MATERIALS SCIENCE

- 86) Kyle Lennon, Chemical Engineering (SE)
Matthew Doty, Materials Science & Engineering
Quantification of Upconversion Photoluminescence Quantum Yield in CdSe(Te)/CdS/CdSe Nanostructures
- 87) Philip Sitterle, Chemical Engineering (NSF-REU) (ASU)
Matthew Doty, Materials Science & Engineering
Synthesis and Characterization of Lanthanide-Doped Nanocrystals for Photon Upconversion
- 88) Kyle Smyth, Chemistry (W. M. Keck Foundation)
Matthew Doty, Materials Science & Engineering
Synthesis and Characterization of Upconversion Nanoparticles
- 89) Madeline Smith, Biomedical Engineering (SF)
Kristi Kiick, Materials Science & Engineering
Effect of Hydrogel Stiffness on Rho Kinase Signaling in Aortic Adventitial Fibroblasts
- 90) Erin Yizzi, Chemical Engineering (SE)
Kristi Kiick, Materials Science & Engineering
Analysis of Resilin-Like Polypeptide (RLP) Nanoparticle Stability
- 91) Grant Knappe, Chemical Engineering (SE)
Christopher Kloxin, Materials Science & Engineering
One-Pot Synthesis of an Interpenetrating Polymer Network (IPN) for Self-Healing Applications
- 92) Hansel Montalvo-Castro, Chemical Engineering (NSF-REU) (UPR)
Stephanie Law, Materials Science & Engineering
Thermophotovoltaic Metamaterials
- 93) Nicholas Radziul, Chemical Engineering (Clare Boothe Luce)
Stephanie Law, Materials Science & Engineering
Optical Properties of (Bi1-xInx)2Se3 Alloys across the Spectrum
- 94) Eriq Gloria, Environmental Engineering (NSF/Delaware Space Grant)
David Martin, Materials Science & Engineering
Electrodeposition of Conjugated Polymer Bio-Nanocomposites

- 95) Nathan Walker, Electrical Engineering (NSF)
David Martin, Materials Science & Engineering
Quantitative Analysis of Conjugated Polymer Electrodeposition
- 96) John Latkowski, Chemistry (NSF) (Cabrini)
Robert Opila, Materials Science & Engineering
Optimal Geometry Design for an Inverse Photoemission Spectrometer
- 97) Malhar Sakarwala, Biomedical Engineering (EPSCoR)
Ismat Shah, Materials Science & Engineering
Fe-C Nanoscale Catalyst for PCB Removal
- 98) Charles Jabbour, Chemical Engineering (NSF-DOT)
Joshua Zide, Materials Science & Engineering
Development of Metal/Semiconductor Photoconductive Switches for THz Applications

COMPUTER & INFORMATION SCIENCES

- 99) Michael Gonzalez, Computer Science (SE)
Keith Decker, Computer & Information Sciences
Computer Modeling of Colon Tissue
- 100) Brittany Hart, Biochemistry (INBRE)
Shawn Polson, Computer & Information Sciences
High Starch Diets in Dairy Cattle and its Effect on their Microbiome Relating to Metabolic Disease
- 101) Thomas Kitson, Elizabeth Racca, Computer & Information Sciences,(UD) & Paula Olaya Computer & Information Sciences (Javeriana University)
Michela Taufer, Computer & Information Sciences, Mario Guevara & Rodrigo Vargas, Plant & Soil Sciences
Data Analytics for Modeling Soil Moisture Patterns across United States Ecoclimatic Domains

POSTER SESSION IV 3:00 - 4:30PM

(Engineering: Biomedical, Chemical & Biomolecular, Civil & Environmental, Electrical & Computer, Mechanical)

BIOMEDICAL ENGINEERING

- 1) Margaret Billingsley, Biomedical Engineering (SF)
Emily Day, Biomedical Engineering
ELISA-Based Detection of Circulating Tumor Cells Using Antibody-Nanoparticle Conjugates

- 2) Stephen Ioele, Biomedical Engineering (SE)
Emily Day, Biomedical Engineering
Delivery of miR-34a to Triple Negative Breast Cancer Cells via Spherical Nucleic Acids
- 3) Nicole Kreuzberger, Biomedical Engineering (SE, BMEG & CBER NSF REU)
Emily Day, Biomedical Engineering
Spherical Nucleic Acid Architecture Improves the Efficacy of Polyethylenimine-Mediated siRNA Delivery
- 4) Rachel O'Sullivan, Biomedical Engineering (SE)
Emily Day, Biomedical Engineering
Combination Photothermal Therapy and Photodynamic Therapy for Cancer Treatment
- 5) Ellie Papoutsakis, Biomedical Engineering (SF)
Emily Day, Biomedical Engineering
Detection Limits in Circulating Tumor Cells Suspended in Solution
- 6) Nisha Raman, Chemical Engineering (SF)
Emily Day, Biomedical Engineering
Antibody-Conjugated Nanoshells to Inhibit Circulating Tumor Cell Extravasation
- 7) Anna McGough, Biomedical Engineering (SE)
Dawn Elliot, Biomedical Engineering
Damage in Meniscus Tissue Tested by Cyclic Loading and Recovery
- 8) Jessica Natriello, Biomedical Engineering (SE)
Dawn Elliott, Biomedical Engineering
Experimental Multi-scale Investigation of Mechanisms of Inelasticity in Tendon
- 9) Chad Rafetto, Biomedical Engineering (CBER NSF REU) (Duke)
Dawn Elliott, Biomedical Engineering
Effect of Gene Knockout of HuR Protein in Nucleus Pulposus Cells on Mechanical Properties
- 10) Mary Athanasopoulos, Biomedical Engineering (SE)
Jason Gleghorn, Biomedical Engineering
Development of a Microfluidic Ex-Vivo Culture System for the Study of Ventilator-Induced Lung Injury in Preterm Infants
- 11) Mercedes Dayan, Biological Sciences (NUCLEUS-SF)
Jason Gleghorn, Biomedical Engineering
An in-vitro Stretch Culture Model of MLE-12 Epithelial Cells
- 12) Caitlin Grasso, Biomedical Engineering (SF)
Jason Gleghorn, Biomedical Engineering
Converting Automated Branching Morphogenesis Image Processing Algorithm from MATLAB to JAVA
- 13) Kaitlyn Krewson, Biomedical Engineering (SE)
Jason Gleghorn, Biomedical Engineering
Determination and Control of Expression Levels of TRPV4 Protein in Mouse Lung Epithelium

- 14) Olivia Powell, Mechanical Engineering (McNair)
Jason Gleghorn, Biomedical Engineering
Measuring the Traction Forces of Smooth Muscle Cells
- 15) Laurel Schappell, Biomedical Engineering (BMEG & CBER NSF REU)
Jason Gleghorn, Biomedical Engineering
Measuring the Compliance of the Embryonic Lung over Development
- 16) Zachary Sexton, Biomedical Engineering/Public Policy (INBRE)
Jason Gleghorn, Biomedical Engineering
A Computational Framework to Understand Growth and Remodeling of Blood Vessel Networks during Embryonic Development
- 17) Srinivasa Gajjala, Biomedical Engineering (INBRE)
Amira Idris, Vibration Therapeutic Apparel (Industry)
Design and Characterization of a Vibrational Culture System to Study the Effect of Vibratory Force on Neuronal and Osteoblastic Cell Activity in Vitro
- 18) Emily Ebeling, Physics (CBER NSF REU) (TSU)
Curtis Johnson, Biomedical Engineering
Measuring the Stiffness of Human Calf Muscles using Magnetic Resonance Elastography
- 19) Grace McIlvain, Biomedical Engineering (SE)
Curtis Johnson, Biomedical Engineering
The Mechanical Properties of the Adolescent Human Brain
- 20) Gabrielle Villermaux, Neuroscience (SE)
Curtis Johnson, Biomedical Engineering
Magnetic Resonance Elasticity of the Brain
- 21) Patrick Canning, Biomedical Engineering (SE)
Megan Killian, Biomedical Engineering
The Effects of FGFR Inhibition on the Behavior of Mouse Mesenchymal Stem Cells and Tenocytes
- 22) Elisabeth Lemmon, Pre-Veterinary & Animal Biosciences (INBRE)
Megan Killian, Biomedical Engineering
Structural Properties and Composition of the Tendon-Bone Attachment are Altered Following Acute Partial-Width, Full-Thickness Tendon-Bone Injury in a Rat Rotator Cuff Defect Model
- 23) Nicholas Ruggiero, Biomedical Engineering (SE)
Megan Killian, Biomedical Engineering
Tracking Localization of Fibroblast Growth Factor Receptor 1 & 2 throughout Entesis Development
- 24) Brianna Hulbert, Biomedical Engineering (DRI)
Christopher Price, Biomedical Engineering
Effect of Free and Liposomal Zoledronic Acid on the Homeostasis of Cells Relevant to Joint Health
- 25) Charlotte DeVol, Biomedical Engineering (CBER NSF REU) (NCSU)
Christopher Price, Biomedical Engineering
Evolution of 3-D Strain Recovery Following Tribological Rehydration in Cartilage Explants
- 26) Sejal Shah, Biomedical Engineering (DRI)
Christopher Price, Biomedical Engineering
Free vs. Encapsulated Zoledronic Acid for Preventing Cartilage Degeneration in a Coculture Model of PTOA
- 27) Alison Wright, Biomedical Engineering (SE)
Christopher Price, Biomedical Engineering
Quantifying Diffusivity in Human Osteoarthritic Cartilage
- 28) Emily Patterson, Biological Engineering (CBER NSF REU) (LSU)
Fabrizio Sergi, Biomedical Engineering
EMG Measurement of Reflex Responses to Wrist Perturbations
- 29) Amanda Studnicki, Biomedical Engineering (NSF- CBET & CBER NSF REU)
Fabrizio Sergi, Biomedical Engineering
Rocking or Rolling? -- A Kinematic Analysis of the Leg during the Stance Phase of Normal Walking
- 30) Joshua Blotnick, Biomedical Engineering (SF)
Abhyudai Singh, Biomedical Engineering
The Effects of Multiplicity of Infection on the Temperateness of a Bacteriophage
- 31) Emily Paglione, Biomedical Engineering (BMEG & CBER NSF REU)
John Slater, Biomedical Engineering
Optimization of Traction Force Microscopy Using Acrylated Fluorophores as Fiducial Markers
- 32) Laura Sturgill, Biomedical Engineering (SF)
John Slater, Biomedical Engineering
Photopolymerizable and Degradable Semi-Synthetic Blood Clots to Replicate Microstrokes in a Tissue-Engineered in Vitro Model

CHEMICAL & BIOMOLECULAR ENGINEERING

- 33) Robert Cipolla, Chemical Engineering (NSR-MCB/SE)
Maciek Antoniewicz, Chemical & Biomolecular Engineering
Metabolic Flux Analysis of Extreme Thermophiles
- 34) Lencho Amente, Chemical Engineering (SE)
Douglas Buttrey, Chemical & Biomolecular Engineering
Synthetic Control of Crystallite Size, Shape, and Characteristics of Mo-V-Nb-Te-O (M1 Catalyst)
- 35) Richard Egan, Chemical Engineering (NECA)
Douglas Buttrey, Chemical & Biomolecular Engineering
Investigation of Novel Perovskite Compounds for Photovoltaic Applications

- 36) Rohan Narayan, Chemical Engineering (SE)
Wilfred Chen, Chemical & Biomolecular Engineering
Mechanistic Studies and Reengineering of the MIB/MIP System
- 37) Justin Terr, Chemical Engineering (SE)
Wilfred Chen, Chemical & Biomolecular Engineering
LOV is BLISS: Creating a Blue Light Induced SpyCatcher System
- 38) Lauren Armus, Quantitative Biology
Prasad Dhurjati, Chemical & Biomolecular Engineering/
Mathematical Sciences & Jonathan Gorky, Jefferson College
of Biomedical Sciences (TJU)
TBA
- 39) Shelby Babcock, Chemical Engineering (NSF DMR) (ASU)
Thomas Epps, Chemical & Biomolecular Engineering/
Materials Science
Towards Recyclable Bio-based Thermosets from Lignin
- 40) Christine Castagna, Chemical Engineering (NECA)
Thomas Epps, Chemical & Biomolecular Engineering/
Materials Science
Effects of Additives on Block Polymer Electrolytes for Lithium-Ion Batteries
- 41) Sophia Freaney, Chemical Engineering (NSF DMR)
Thomas Epps, Chemical & Biomolecular Engineering/
Materials Science
Shear Alignment of Perpendicular Lamellae in High-X Star Block Polymer
- 42) Grace Kresge, Chemical Engineering (DOEBES/ NSF DMR) (Princeton)
Thomas Epps, Chemical & Biomolecular Engineering/
Materials Science
Bio-based Styrene Alternatives in Block Polymer Lithium-ion Battery Electrolytes
- 43) James Mannino, Chemical Engineering (SE)
Thomas Epps, Chemical & Biomolecular Engineering/
Materials Science
Metal Organic Framework Crystallization within Polymer Thin Films
- 44) Maura Swift, Chemical Engineering (NSF DMR)
Thomas Epps, Chemical & Biomolecular Engineering/
Materials Science
Sugar-Based Thermoresponsive Block Copolymers
- 45) Sean Overa, Chemical Engineering (NSF-REU) (USC)
Feng Jiao, Chemical & Biomolecular Engineering
Electrochemical Reduction of Carbon Monoxide to Alcohols using Copper Based Catalysts
- 46) Harrison Ball, Chemical Engineering (SE)
April Kloxin, Chemical & Biomolecular Engineering
Fabrication of Microfluidic Devices for Hydrogel Droplet Formation Using 3D Printing Technology
- 47) Emily Eastburn, Materials Science & Engineering (CBER NSF REU) (GIT)
April Kloxin, Chemical & Biomolecular Engineering
Investigating Multifunctional Collagen Mimetic Materials to Promote Regeneration of Musculoskeletal Tissues
- 48) Mark LaRue, Biomedical Engineering (SE)
April Kloxin, Chemical & Biomolecular Engineering
Investigating if Amino Acid Position within Collagen Mimetic Peptides Affects Triple Helix Stability
- 49) Joseph Spohn, Biomedical Engineering (SE)
April Kloxin, Chemical & Biomolecular Engineering
Using Bi-layer Hydrogels to Understand and Quantify Fibroblast Activation via Migration
- 50) Colleen McGovern, Chemical Engineering (NSF-REU) (Lafayette)
Christopher Kloxin, Chemical & Biomolecular Engineering
The Effect of Solution Conditions on the Secondary Structure of Peptides
- 51) Gabriella DiDomizio, Chemistry (NSF-REU) (Iona)
Raul Lobo, Chemical & Biomolecular Engineering
Capture and Recycle of Aqueous Phosphate Using Metal Oxide Adsorbents
- 52) Chase Herman, Chemical Engineering (NSF-REU) (MUST)
Raul Lobo, Chemical & Biomolecular Engineering
Polymer Precursors from Biomass Derivatives
- 53) Lateef Aliyu, Chemical Engineering (NSF-REU) (CCNY)
Christopher Roberts, Chemical & Biomolecular Engineering
Impact of Hofmeister Salts on Therapeutic Monoclonal Antibody Aggregation and Interactions
- 54) Carly Battistoni, Chemical Engineering
Christopher Roberts, Chemical & Biomolecular Engineering
Modeling of High Concentration Protein Solutions
- 55) Grace Michaels, Chemical Engineering (SE)
Christopher Roberts, Chemical & Biomolecular Engineering
Monoclonal Antibody Protein-Protein Interactions
- 56) Michael Paisner, Chemical Engineering (SE)
Christopher Roberts, Chemical & Biomolecular Engineering
Reversibility and Mechanisms of alpha-Chymotrypsinogen Aggregation
- 57) Connor Shannon, Biomedical Engineering (CBER REU/ NIH)
Millicent Sullivan, Chemical & Biomolecular Engineering
Covalent Crosslinking Histone H3 Tails and Polyethylenimine to Improve Stability and Transfection Efficiency during Gene Delivery
- 58) Steven Kuntz, Chemical Engineering (SE)
Dionisios Vlachos, Chemical & Biomolecular Engineering
Machine Learning for Computational Catalysis in Energy Applications

- 59) Jacob Lawton, Chemical Engineering (SE)
Norman Wagner, Chemical & Biomolecular Engineering
Using Shear-Thickening Fluid to Improve the Needle Puncture Resistance of Work Gloves
- 60) Nathanael Reinsma, Chemical Engineering (NSF-REU) (RPI)
Norm Wagner, Chemical & Biomolecular Engineering
Low Viscosity High Conductivity High Storage Capacity Nanoparticle Suspensions for Flow Batteries via Nanoscale Engineering

CIVIL & ENVIRONMENTAL ENGINEERING

- 61) Rachel Schaefer, Civil Engineering & Erin Rezich, Mechanical Engineering (SE)
Michael Chajes, Civil & Environmental Engineering & Valery Roy, Mechanical Engineering
Powering the Delaware Memorial Bridge Roadway Lighting with On-Site Vibrational, Wind, and Solar Energy Harvesters
- 62) Sydney Cargill, Environmental Engineering (EPSCoR)
Paul Imhoff, Civil & Environmental Engineering
TBA

ELECTRICAL & COMPUTER ENGINEERING

- 63) Xiangqi Li, Electrical Engineering (ECE)
Tingyi Gu, Electrical & Computer Engineering
Evaluation of Integrated Silicon Nanophotonic Circuits in Space
- 64) Zulfqar Salahuddin, Electrical Engineering (ECE)
Tingyi Gu, Electrical & Computer Engineering
TBA
- 65) Casey Campbell, Electrical Engineering (ECE)
Fouad Kiamilev, Electrical & Computer Engineering
Redesigning a Controller Interface for System Optimization
- 66) Alexis Deputy, Jolyne Stoup & Kyle Weidmann, Electrical Engineering (SE)
Fouad Kiamilev, Electrical & Computer Engineering
Design and Development for Infrared Scene Projector
- 67) Tianne Lassiter, Electrical Engineering (ECE)
Fouad Kiamilev, Electrical & Computer Engineering
Modular Carrier Board for Megapixel IRLED Emitter Arrays
- 68) Benjamin Steenkamer, Computer Engineering (SE)
Fouad Kiamilev, Electrical & Computer Engineering
Analog Design Improvements for the SLEDS System
- 69) Chu Qiao, Computer Engineering (SE)
Xiaoming Li, Electrical & Computer Engineering
Experimenting with Key Elements in Parallel Programming

- 70) Colby Banbury, Electrical & Computer Engineering (ECE)
Mark Mirotznik, Electrical & Computer Engineering
TBA
- 71) Ryan Beneck, Electrical Engineering (ECE)
Mark Mirotznik, Electrical & Computer Engineering
TBA
- 72) Kaleb Burd, Electrical Engineering (ECE)
Mark Mirotznik, Electrical & Computer Engineering
TBA
- 73) Paul Jureidini, Computer Engineering (ECE)
Mark Mirotznik, Electrical & Computer Engineering
TBA
- 74) Rebecca Larimore, Biological Sciences (ECE) (Missouri S&T)
Mark Mirotznik, Electrical & Computer Engineering
TBA
- 75) Jingcheng Lu, Electrical Engineering (ECE)
Mark Mirotznik, Electrical & Computer Engineering
TBA
- 76) Naim Mason, Computer Science (NUCLEUS)
Mark Mirotznik, Electrical & Computer Engineering
Integrating Capacitive Sensing Capabilities with Wearable Garments
- 77) Patrick Nicholson, Electrical Engineering (ECE)
Mark Mirotznik, Electrical & Computer Engineering
TBA
- 78) Vinay Vazir, Computer Engineering (ECE)
Mark Mirotznik, Electrical & Computer Engineering
TBA
- 79) Collin Wallish, Electrical Engineering (ECE)
Mark Mirotznik, Electrical & Computer Engineering
3D Printed Absorbers
- 80) Joshua Weinick, Computer Engineering (ECE)
Mark Mirotznik, Electrical & Computer Engineering
TBA
- 81) Hunter Wieman, Mathematics (ECE) (Williams)
Mark Mirotznik, Electrical & Computer Engineering
Optimization of Spatially Graded Dielectric Properties for Beam Steering Lenses
- 82) Samuel Paleen, Computer Science (ECE)
Andrew Novocin, Electrical & Computer Engineering
Web Development in React
- 83) Kolby Kuratnick, Electrical Engineering (ECE)
Yuping Zeng, Electrical & Computer Engineering
TBA
- 84) Samuel Romano, Electrical Engineering (ECE)
Yuping Zeng, Electrical & Computer Engineering
TBA

MECHANICAL ENGINEERING

- 85) Latifa Ali, Mechanical Engineering (SE)
Suresh Advani, Mechanical Engineering
Characterization of Permeability in 2D/3D Experiments
- 86) Marisa Bisram, Mechanical Engineering (SE)
Suresh Advani, Mechanical Engineering
Void Closure in Post Filling of VARTM Produced Composites
- 87) Riley Curtin, Biomedical Engineering (DRI)
Tom Buchanan, Mechanical Engineering
Inter-Limb Differences in Knee Gait and Quantitative Magnetic Resonance Imaging Variables after Anterior Cruciate Ligament Reconstruction
- 88) Sophia Marianiello, Mechanical Engineering (SE)
David Burris, Mechanical Engineering
Transfer Film Wear Rate as a Driver of Polymer Performance
- 89) Jordyn Schrader, Biomedical Engineering (SE)
David Burris, Mechanical Engineering
Delineating Between Suction and Adhesion in Articular Cartilage Contacts
- 90) Christopher Blackwell, Mechanical Engineering (SE)
Zubaer Hossain, Mechanical Engineering
Optimization of Lightweight Insulating Composites for Automotive Applications
- 91) Justice Calderon, Mechanical Engineering (MEEG)
Zubaer Hossain, Mechanical Engineering
Designing Van Der Waals Heterostructures for Extreme Applications
- 92) Colin McDermitt, Mechanical Engineering (SF)
Zubaer Hossain, Mechanical Engineering
Using Atomic Stitching to Improve Interfacial Strength and Toughness in Carbon-based Nanocomposites
- 93) Christopher Pasquale, Mechanical Engineering (MEEG)
Zubaer Hossain, Mechanical Engineering
Developing High Temperature Thermoelectrics
- 94) Benjamin Silverman, Mechanical Engineering (SE)
Zubaer Hossain, Mechanical Engineering
Predicting a Pathway for Engineering Compositionally Varying Thin Film for Solar Applications
- 95) Tianyi Weng, Mechanical Engineering (SE)
Zubaer Hossain, Mechanical Engineering
Developing Multisize Alloy Quantum Dot Photovoltaics
- 96) Kerstin Hinrichs, Engineering Leadership (CBER NSF REU) (UTEP)
Lucas Lu, Mechanical Engineering
Statin Attenuates the Inflammatory Damage On Cartilage by Inhibiting Rho Activity in Chondrocytes
- 97) Kevin Rahn, Biomedical Engineering (CBER NSF REU) (PSU)
Lucas Lu, Mechanical Engineering
Synthesis Rate of Extracellular Matrix by Breast Cancer Cells
- 98) Tiange Zhang, Mechanical Engineering (SE)
Lucas Lu, Mechanical Engineering
Resveratrol for the Protection of Articular Cartilage
- 99) James Allen, Bioengineering (CBER NSF REU) (Syracuse University)
Kurt Manal, Mechanical Engineering
Minimal Detectable Change for Knee Joint Contact Forces
- 100) EJ Carron, Mechanical Engineering (SE)
Valery Roy, Mechanical Engineering
Testing and Optimization of a Torsional Galloping Energy Harvester
- 101) Ian Goldie, Mechanical Engineering (SE)
Erik Thostenson, Mechanical Engineering
Carbon Nanotube based Piezoresistive Sensors for Human Motion Detection
- 102) Tyler Lyness, Mechanical Engineering (SE)
Erik Thostenson, Mechanical Engineering
Carbon Nanotube Sensing for Structural Health Monitoring
- 103) Michael Considine, Mechanical Engineering (DRI)
Liyun Wang, Mechanical Engineering
Development and Validation of Mouse Treadmill Running Model
- 104) Lauren Paschall, Chemical Engineering (CBER NSF REU) (UF)
Liyun Wang, Mechanical Engineering
Imaging Breast Cancer Metastasis over Endothelium to Bone

ORAL SESSION I

9:00 – 10:00AM

EDUCATION/YOUTH DEVELOPMENT (ROOM 110)

Moderator: Suzanne Burton, Music

Shanna Abram, Ali DeAngelis & Rebecca Robbins, English Education (BHF)

Deborah Bieler, English

Community Partners: Delaware Freedom School; Delaware Historical Society

Wilmington 1968: Freedom School Scholars Oral History Project

Anna Krammes, Tristan Leung & Danny Pineyro, Music Education (SL)

Suzanne Burton, Music

Community Partners: Capital Music Camp at Dover High School; Choir School of Delaware Music Camp; Salvation Army Summer Camp; Girls Inc. Summer Camp

The Beat Goes On

Janine Burdette, Health Behavior Science (Extension Scholars)

Doug Crouse, Cooperative Extension Service

4H Youth Development

Chu Zhou, Dietetics (Extension Scholars)

Karen Johnston, 4-H Youth Development

4H Teen Leaders Development

PUBLIC POLICY RESEARCH & DATA (ROOM 222)

Moderator: Philip Barnes, Public Policy & Administration

Kylie Taylor, Public Policy (SL)

Signe Bell, School of Public Policy & Administration

Community Partner: Wilmington City Council

Community Engagement and Public Policy

Olivia Rogal, Public Policy (IPA-PPF)

Philip Barnes, School of Public Policy & Administration

Institute for Public Administration

Best Practices to Engage Minority Communities in Cycling and Urban Bikeshare Networks

Nicholas Konzelman, Public Policy (IPA-PPF)

Troy Mix, Institute for Public Administration

Small Business Trends and Conditions in Delaware

Gerard Weir, Public Policy (IPA-PPF)

Kelly Sherretz & Chris Kelly, Institute for Public Administration

Economic Development in Delaware

HISTORY & CULTURE (ROOM 322)

Moderator: David Shearer, History

William Eichler, English Education (AHSS)

Kristen Poole, English

Breaking Down the Bard

Sofia Curran-Munn, History (AHSS)

Jesus Cruz, History

Españoles in Brooklyn: Pre and Post War Migrations, Communities, and Organizations

Paige Morrison, History (AHSS)

Michael Frassetto, History

Historical & Cultural Impact of Local Cryptids and Urban Legends

Michael Mossessian, History (AHSS)

David Shearer, History

Radicalism, The Enlightenment, and You - Deciphering Natural Republicanism in the French Revolution

ART CONSERVATION (ROOM 417)

Moderator: Vicki Cassman, Art Conservation

Vivien Barnett, Art Conservation; & Emma Heath, Art Conservation (AHSS)

Jocelyn Alcantara-Garcia, Art Conservation

Aging and Dyeing: A Scientific Study of the Degradation of the Natural Dye Quercitron and its Implications in Historic Textiles

Claire Martin, Art Conservation (AHSS)

Vicki Cassman, Art Conservation

An Alphabet of Names: Studying Carton Moore Park's Evolving Identity through the Conservation of His Alphabet of Animals

Eric Tommer, Visual Communications (AHSS)

Troy Richards, Art

NC Wyeth and Pokémon GO: How Contemporary Design Engages the Public

ORAL SESSION II

10:10 – 11:10AM

REVITALIZATION & COMMUNITY EDUCATION (ROOM 110)

Moderator: Jennifer Volk, Plant & Soil Sciences

Rob Kuntz & Haley Stanko, Landscape Architecture (SL)

Jules Bruck, Plant & Soil Sciences

Community Partner: Towns of Laurel and Leipsic; City of Seaford
*Rural Community Revitalization through Green Infrastructure
Design and Landscape Performance Research*

Christina Valenti, Environmental Engineering (Extension Scholars)

Jennifer Volk, Plant & Soil Sciences

*Using Online Interactive Tools to Educate the Public on
Environmental Issues*

Joseph Wheeler, Wildlife Ecology & Conservation (Extension
Scholars)

Bill Cissel, Entomology & Wildlife Ecology

Experiences Working with the Extension IPM Program

POLICY (ROOM 222)

**Moderator: Signe Clayton Bell, Center for Community
Research & Service**

Antonina Tantillo, Public Policy (CCRS-PPF)

Signe Clayton Bell, Center for Community Research & Service

*Putting a Plan into Action: the Washington Heights Blueprint
Community*

Madeline Fuller, Public Policy (CCRS-PPF)

Kelly Duran & Hira Rashid, Center for Community Research &
Service

*A Systematic Literature Review of the American Opioid Epidemic and
What We Can Do Next*

Maxwell Lasher, Public Policy & Ryan Richardson, Public Policy
(DRC-PPF)

Joseph Trainor, Disaster Research Center

*Collaborative Research: Multi-Perspective Evacuation Performance
Measurement*

BLACK AMERICAN STUDIES/HEALTH/ HISTORY (ROOM 322)

Moderator: April Veness, Geography

Kobe Baker, Anthropology/Black American Studies (McNair)

Jorge Serrano, Black American Studies

Interpretations of History and Its Impact on African-Americans

Tonisha Hurd, Public Policy/Leadership (McNair)

Kelebogile Setiloane, Behavioral Health & Nutrition

*Knowledge and Attitudes of African American College Students to
Breastfeeding*

Eden Negusse, Political Science (McNair)

Carl Suddler, Black American Studies

*"A Rose in a Whiskey Glass:" Delinquent Girlhood in the First State,
1919-1948*

Lisa Pham, History Education (McNair)

April Veness, Geography

*The First Generation American Dream: How First-Generation
Students and Americans Navigate Higher Education*

LONGWOOD GARDENS LEGACY PROJECT (ROOM 417)

Moderator: Jonathan Cox, Art

Max Gold, Visual Communications; Joy McCusker, Landscape
Horticulture & Design & Rebecca Ralston, Wildlife Conservation
(AHSS/Longwood Gardens)

Jonathan Cox, Art, Jules Bruck, Plant & Soil Sciences, & McKay

Jenkins, English

Cultivating Horticultural Legacy through Visual Media

ORAL SESSION III

11:20AM – 12:20PM

SUPPORTING FAMILIES (ROOM 110)

**Moderator: Mary Dozier, Psychological & Brain
Sciences**

Hannah Watts, Emily Griffith, & Marissa Nardella, Psychology (SL)

Mary Dozier, Psychological & Brain Sciences

Trajectory of Fidelity and Effectiveness of Certified Parent Coaches

Haley Ringenary, Madison Mullins, & Lizzy Marano, Psychology (SL)

Mary Dozier & Julie Hubbard, Psychological & Brain Sciences

Working with High Risk Families

Sophia Conners, Psychology (SE)
Julie Hubbard, Psychological & Brain Sciences
The Specificity of Relations between Victimization and Internalizing Symptoms in Adolescents

Anna Shields, Public Policy (CCRS-PPF)
Janice Barlow, Center for Community Research & Service
Kids Count!

HUMAN DEVELOPMENT (ROOM 222)

Moderator: Ruth Fleury-Steiner, Human Development & Family Sciences

Ayanna Bundy, Elementary Education (McNair)
Rosalie Rolon-Dow, Education & Human Development
Tell it like it is: The UD Storytelling Project for Diversity and Inclusion

Ana Ramirez-Irineo, Human Services (McNair)
Ruth Fleury-Steiner, Human Development & Family Sciences
Impact of Social Support on Women's Satisfaction in Civil Protection Orders

Nadisha Downs, Human Services (McNair)
Rob Palkovitz, Human Development & Family Sciences
Father Involvement of Young African American Men ages 18-25, in an Urban Context

FOX CHASE CANCER CENTER (ROOM 322)

Moderators: Amanda Purdy & Glenn Rall, Fox Chase Cancer Center

Julie Sosa, Biological Sciences (UD/FCCC/Hofmann)
Edna Cukierman, Cancer Biology (FCCC)
Microenvironmental Influences on the Activation and Maintenance of Cancer Associated Fibroblasts

Maame Riverson, Neuroscience (UD/FCCC/Hofmann)
Camille Ragin, Cancer Prevention & Control (FCCC)
Can Ancestry and Mental Health Aid in Predicting Smoking Status in African Americans?

Franklin Iheanacho, Biological Sciences (UD/FCCC/Hofmann)
Erica Golemis, Molecular Therapeutics (FCCC)
The Effect of Protein-Targeted Cancer Drugs on Regulation of Cilia

Emily Wong, Biological Sciences (UD/FCCC/Hofmann)
Lori Rink, Molecular Therapeutics (FCCC)
Exploring the Role of Bex1 in Targeted Drug Therapies of Gastrointestinal Stromal Tumors

ART & VISUAL COMMUNICATIONS (ROOM 417)

Moderator: Amy Hicks, Art

Madison Bacon, Fine Arts (AHSS)
Abigail Donovan, Art
Education through Narration: How Sequential Images Can Teach Empathy

Forrest Hines, Fine Arts (AHSS)
Abigail Donovan, Art
Church of the Freaks

Cynthia Yoo, Art (AHSS)
Amy Hicks, Art
Godspeed: Exploring the Use of Modern Abstractions and Metaphors to Convey an Ancient Story

Jessica Stevenson, Fine Arts (CMCS)
Edward (Lance) Winn, Art
Diversifying Fashion Photography

ORAL SESSION IV 1:30 – 2:30PM

STEM/STEAM! (ROOM 110)

Moderator: Mark Parcells, Animal & Food Sciences

Marcos Miranda, Environmental Engineering (SL)
Jenni Buckley, Mechanical Engineering & Marianne Johnson, RISE Program
National Benchmarks for Minorities in Engineering Programs at 4-Year Engineering Colleges

Robert Johnston, Animal & Food Sciences (Extension Scholars)
Mark Parcells, Animal & Food Sciences
Envision: An Undergraduate Research Experience Designed for the Next Generation of Scientists

Alexander Pardus, Mechanical Engineering (SL)
Jenni Buckley, Mechanical Engineering
*Community Partner: FabNewport
Building an Ecosystem of Learning*

Margaret Elkins, Art Conservation & Ashley Ware, Anthropology (SL)
Vicki Cassman, Art Conservation
Community Partners: Winterthur Museum, Garden and Library; Salvation Army Summer Camp
STEAM Outreach at Winterthur Museum and Salvation Army

PSYCHOLOGY & EDUCATION (ROOM 222)

Moderator: Roberta Golinkoff, School of Education

Samantha Leonard, Human Services (AHSS)

Laura Eisenman, School of Education

Examining the Social Networks of College-Aged Students with and without Intellectual Disabilities

Cassidy Ware, Psychology (NUCLEUS)

Roberta Golinkoff, School of Education

Shaping Up Play Time: Influence of Toy Type on Parent-Child Interactions

Vanessa Hatton, Psychology/Black American Studies (McNair)

James Jones, Psychological & Brain Sciences

The Mitigation of Attitude-Related Behaviors

Cristina Sosa, Psychology (McNair)

Jean-Phillippe Laurenceau, Psychological & Brain Sciences

Longitudinal Associations between Fear of Cancer Recurrence and Protective Buffering in Couples Coping with Breast Cancer

BIOCHEMISTRY, ENGINEERING & DESIGN (ROOM 322)

Moderator: Michele Lobo, Physical Therapy

Tyler Reagle, Biochemistry (INBRE)

Joe Fox, Chemistry & Biochemistry

Biomedical Applications of Surface-Functionalized Tetrazine and Strained trans-Cyclooctene Polymers in Topics of Cell Culture and Tissue Engineering

Celine Robinson, Environmental Engineering (McNair)

Rachel Davidson, Civil & Environmental Engineering

Voluntary Home Acquisition to Reduce Hurricane Risk: A Multivariate Analysis

Hannah Young, Fashion Merchandising (AHSS)

Abigail Clarke-Sather, Fashion & Apparel Studies

SnuggleTime Garment - Kangaroo Care in the NICU

MUSIC (ROOM 417)

Moderator: Daniel Stevens, Music

Stephanie Schrader, Music Education (AHSS)

Phillip Duker, Music

How to Take a Melodic Dictation: A Study of Methods and Strategies

Joshua Dill, Music Education (AHSS)

Maria Anne Purciello, Music

Unfinished Musical Works: An Examination of their Completion and Reception

Alexander Sallade, Music Theory (AHSS)

Daniel Stevens, Music

Sergei Prokofiev's use of Heteroglossia in His "War Sonatas" as a Response "Zdravitsa"

Rachel Schwab, Music Education (AHSS)

Bruce Tychinski, Music

Melodic Playing in the Low, Middle and High Registers of the Trombone: An Online Pedagogical Etude Resource.

ORAL SESSION V 2:40 – 3:55PM

HEALTH & SOCIAL SCIENCES (ROOM 110)

Moderator: Karen Rosenberg, Anthropology

Emaline Reyes, Anthropology (AHSS)

Karen Rosenberg, Anthropology

Assessing the Role of Fear in Childbirth Planning and Elective Cesarean Sections

Lovely Lacey, Sociology (McNair)

Kelebogile Setiloane, Behavioral Health & Nutrition

Assessing Health Disparities: Why Do Black American Women Have Lower Rates of Breastfeeding?

Nhu Nguyen, Neuroscience (AHSS)

Alan Fox, Philosophy

Feasibility and Effectiveness of Mindfulness-Based Interventions for Foster Care Children

Charlotte Shreve, Cognitive Science (AHSS)

Asia Friedman, Sociology

"Skeptics" and "Traditionalists" in the Mammography Screening Debate: Analysis of News Media 2002-2015 and Interviews with Women, Clinicians, and Researchers

WOMEN'S STUDIES (ROOM 222)

Moderator: Alan Fox, Philosophy

Kimberly Ploeg, Philosophy (AHSS)

Alan Fox, Philosophy

The Authorization of Women's Mystical Experiences

Iris Turner, Political Science/Black American Studies (McNair)

Emerald L. Christopher-Byrd, Women & Gender Studies

Twenty-First Century Jane Crow: Racialized and Gendered Violence against Black Women

Timothy Deska-Kahn, Anthropology (AHSS)
Patricia Sloane-White, Women & Gender Studies
Service Labor in New Castle County - An Ethnographic Treatment

Darian Lawrence, Political Science/Asian Studies (McNair)
Patricia Sloane-White, Women & Gender Studies
"Blackness" and Race in Japan

FASHION STUDIES (ROOM 322)

Moderator: Kelly Cobb, Fashion & Apparel Studies

Eleanor Born, Fashion & Apparel Studies (AHSS)
Kelly Cobb, Fashion & Apparel Studies
Developing an On-Campus Sustainable Fashion Pop Up Shop Experience

Katherine Kornienko, Fashion Merchandising (AHSS)
Hye-Shin Kim, Fashion & Apparel Studies
The Impact of Psychological Cognitive Dissonance on Apparel Product Returns

Jillian Luetje, Fashion Merchandising (AHSS)
Sheng Lu, Fashion & Apparel Studies
Communication of Social Responsibility in the Apparel Industry

WOMEN OF CONSEQUENCE* (ROOM 417)

Moderator: Lynnette Overby, Community Engagement Initiative

Amber Rance, Biochemistry (PPF)
Lynnette Overby, Community Engagement Initiative
TBA

Nicodemus Williams-Snow, Organizational & Community Leadership (PPF)
Lynnette Overby, Community Engagement Initiative
Music of the Colored Conventions as Recorded in 1843 -1860

Rachel DeLauder, Exercise Science (PPF)
Lynnette Overby, Community Engagement Initiative
TBA

Melissa Jones, Hotel, Restaurant, & Institutional Management (BHF)
Lynnette Overby, Community Engagement Initiative
TBA

Amos Tarley, Black American Studies & Noa Mills, University Studies (RCWF)
Lynnette Overby, Community Engagement Initiative
Women of Consequence

**Dance performances for Women of Consequence & Same Stories, Different Countries: Energy to follow oral presentations*

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Winterthur Museum, Garden and Library

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Publicity

Rebecca Ramos, Composer, University Printing
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Michael Czerepak, Manager, University Printing

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