

Mentored Undergraduate Summer Experience

Presentations & Reception

September 12, 2012

Program

4:00 – 7:00 pm	View Posters (see the following pages for a directory; even numbers 4:00-5:30 pm, odd numbers 5:30-7:00 pm)
5:00 – 7:00	Oral Presentations
5:30	The Reception and Rejection of Roman Imperial Portrait Models in the Eastern Provinces, 235-270 CE Emily Conforto Faculty Mentor: Lee Ann Riccardi
6:00	Ortler Mountain Range: Paper, Pigment, and Glacial Research Bryan Borut & Allison Tumminia Faculty Mentor: Elizabeth Mackie

The program received major financial support from Academic Affairs with supplemental funding from the School of Humanities and Social Sciences (Dean Benjamin Rifkin), School of Engineering (Dean Steve Schreiner). We are thankful to our external funders, Bristol Meyers Squib, National Science Foundation, National Aeronautic and Space Administration, Marshall University School of Medicine, and Garden Club of America.

Poster Directory

(NOTE: Posters are arranged randomly in order to foster cross-disciplinary conversation)

<u>Interdisciplinary Research</u>	<u>Poster Number</u>
Computer Science/Mechanical Engineering	
Development of a Conducting Robot	
Laurence Agina & Michael Bauer	
Faculty Mentors: Andrea Salgian	4
School of the Arts and Communication	
Art	
Exploring Contemporary Art in Art Education	
Matthew Pembleton & Gabriel Randazzo	
Faculty Mentor: Lisa LaJevic	21
School of Humanities & Social Sciences	
Criminology	
Pains of Imprisonment with a Focus on LWOP Inmates Michael Ryder	
Faculty Mentor: Margaret Leigey	8
History	
Borderline Citizens: The US, Puerto Rico, and the Politics of Colonial Law	v and Migration, 1898-1948
Eulogio Kyle Romero Faculty Mentor: Robert McGreevey	41
Psychology	
Political Stereotype Content Along Human Nature and Human Uniquene	ess Traits and Warmth and
Competence Dimensions	
Sean Modri	
Faculty Mentor: Jarret Crawford	12

Career Barriers and Supports for Individuals with Physical Disabilities Empirical Rachel Tenenbaum Faculty Mentor: Jason Dahling
Predictors of Intergroup Anxiety Iris Chiu Faculty Mentor: Julie Hughes
Women's & Gender Studies
Virtual Freedom Trail Project Alyssa Fountain & Shannon Grooms Faculty Mentor: Marla Jaksch
World Languages
Applying Conversation Analysis to Interviews with Japanese Politicians about the Trans-Pacific Partnership Russell Wolf Faculty Mentor: Holly Didi-Ogren
School of Education Special Education, Language, & Literacy
Paired Peer Placements Jacqueline DeNarie & Tara Farrell Faculty Mentor: Lauren Madden & Louise Ammentorp
School of Engineering Biomedical Engineering
A Computational Stochastic Model of the Distributions of Physiological Processes George Banis Faculty Mentor: Brett BuSha
Electrical/Computer Engineering
Remote Controlled Three Phase Relays Tyler Wardlow Faculty Mentor: Anthony Deese
Mechanical Engineering
Effect of Inlet Flow Conditions on Flow Uniformity Within a Fuel Cell Manifold Manthan Kothari & Andrew Specian Faculty Mentor: Lisa Grega
Design Criteria for Preventing Friction-Induced Squeak of Ceramic-on-Ceramic Hip Implants Mark Sidebottom Faculty Mentor: Manish Paliwal

Development of a Damage Model for Fiber Reinforced Composite Materials Daniel Christiansen
Faculty Mentor: Karen Yan39
Characterization of Tissue Damage via Dynamic Heart Phantom and MRI Robert Seither
Faculty Mentor: Karen Yan
Fabrication of Polymer and Cellular Composite Constructs for Tissue Engineering Applications James Ferrie & Pamela Hitscherich Faculty Mentor: Karen Yan24
Technological Studies
Expanded Investigations into Remediation of Metal-Contaminated Water Through Electrospun Biopolymer Nanofibers Melissa Bradley Faculty Mentor: Matthew Cathell
School of Science Biology
Effects of Urbanization and Extreme Weather on the Life Cycle of a Common Songbird, the Carolina Chickadee (<i>Poecile carolinensis</i>) Sydney Hope & Frank Stabile Faculty Mentor: Luke Butler
The Effects of Prenatal Nicotine Exposure on Respiratory Behavior in the <i>Pet-1</i> Knockout Mouse Robert Myers Faculty Mentor: Jeffrey Erickson
Exploring Genetic Variation in Invasive and Native Populations as well as Infected and Uninfected Populations of <i>Andropogon virginicus</i> Using a Population Genetics Approach Brian Giacopelli & Michael Readinger Faculty Mentor: Janet Morrison
Characterization of Mutations that Change GLD-1 Expression Jennifer Aleman
Faculty Mentor: Sudhir Nayak
Extension of <i>C. elegans</i> Lifespan through HIF-1 Activation Emily Keppen
Faculty Mentor: Sudhir Nayak
Analysis of GLD-1 Post Translational Modification John Fang
Faculty Mentor: Sudhir Navak

OpenShade: An Open-Source Multiple Sequence Alignment Shading and Editing Utility Peter Swetits Faculty Mentor: Sudhir Nayak
Alternative Polyadenylation of <i>grk</i> mRNA of <i>Drosophila</i> Letitia Thompson Faculty Mentor: Amanda Norvell
Maternal Regulation of Dorsal/Ventral Patterning in Zebrafish William Cavallo Faculty Mentor: Marcia O'Connell
Determination of the function of two genes, <i>hnrnpab</i> and <i>zgc</i> :77052-201, in early <i>Danio rerio</i> embryogenesis Daniel Ferrer Faculty Mentor: Marcia O'Connell
Molecular Genetics and Biochemical Analysis of Cytochrome P450s in <i>A. thaliana</i> Dylan McDivitt, Joseph Montes, & Amanda Soler Faculty Mentor: Leeann Thornton
Chemistry
Using Fluorescence Correlation Spectroscopy to Investigate the Unfolding of Human Serum Albumin Andrew Apicello & Priya Gupta Faculty Mentor: Michelle Bunagan
Testing Hormone Mimic Function Against Biological Protein Targets Implied in Human Health Jessica Gruskos & Ari Goldwaser Faculty Mentor: Danielle Guarracino
Development of a Novel Ring Forming Reaction John Farrokh Faculty Mentor: David Hunt
Michael Additions of Unsaturated Ketones and Alkynes to 1,2-cyclohexanedione Tyler Higgins Faculty Mentor: David Hunt
A Study for Strategies for the Synthesis of Aromatic Silyl Ketones Katrina Wunderlich Faculty Mentor: David Hunt
Progress Towards the Synthesis of Nickel Complexes Containing Hemilabile Arene Groups for Applications in Catalysis Christopher Bregna Faculty Mentor: Abby O'Connor

Synthesis & Reactivity Studies of Ni(II) Complexes Containing Hemilabile Groups Jacob Levene Faculty Mentor: Abby O'Connor
Computer Science
Integrating Cloud Services in Application Development
Alexa Cain & Lindsey Nice
Faculty Mentor: Peter DePasquale
Balancing Open Information Access With Maintaining Privacy, Security, and Reliability in the Age
of Social Computing
Francisco Estevez & Shahzore Qureshi
Faculty Mentor: Monisha Pulimood
Mathematics/Statistics
Mathematical Model of Tumor-Immune System Interactions
Warren Jagger Faculty Mentor: Jana Gevertz
racuity Mentor, Jana Gevertz44
A Mathematical Model of Cancer: Tumor Growth and Invasion
Kayla Spector
Faculty Mentor: Jana Gevertz
Physics
Eastern United States Crust Characterization
Melanie Crampton Farelly Mantau Manager Reneit
Faculty Mentor: Margaret Benoit
Mesoscopic Surface Structures of Ice Crystals More Prevalent than Thought
Andrew Miller
Faculty Mentor: Nathan Magee
Tornadogenesis
Megan Hartline
Faculty Mentor: Nathan Magee
Two-dimensional Surface Mapping of Second Harmonic Generation in Nonlinear Optical Materials
Jan Brauburger & Dacoda Nelson
Faculty Mentor: David McGee
Optical Control of Birofringones in Chromophore Functionalized Manatuba Films
Optical Control of Birefringence in Chromophore-Functionalized Nanotube Films Mina Shenouda
Faculty Mentor: David McGee
,
Blazar Research Using the Kepler Satellite: A Search for Periodic Variations
Paolo Di Lorenzo, Mitchell Revalski, Daniel Sprague
Faculty Mentor: Paul Wiita

Density of Active Galactic Nuclei at Various Redshifts	
Walter Ingram	
Faculty Mentor: Paul Wiita	