### Dance, Music, and Theatre Presentations



#### Fine Arts Building, Room 317

Moderator: Doug Hamby

10:00 a.m. - 10:15 a.m. Shaun Vain Theatre

"Body Mechanics: Applying Suzuki, Viewpoints and Delsarte System of Expression to Stage Performance"

Professor Alan Kreizenbeck, Mentor

**10:15** a.m. - **10:30** a.m. Hannah Rider Music

"Ornamentation in the Historical Context" **Professor Lisa Cella, Mentor** 

10:30 a.m. - 10:45 a.m. Franki Trout Dance

"Investigating the Technique and Legacy of José

"Body Awareness: New Discoveries in Movement"

Limón"

**Professor Douglas Hamby, Mentor** 

10:45 a.m. - 11:00 a.m. Michelle Brandenburg Dance

**Professor Doug Hamby, Mentor** 

#### **The Commons Patio Terrace**

**11:15** a.m. - **11:30** a.m. Emily Kimak

**Outdoors** "Moving to Water"

**Professor Carol Hess, Mentor** 



### Video & Animation Screenings



#### Fine Arts Building, Room 221

Moderator: Frederic Worden

1:15 p.m. - 1:30 p.m. Theresa Columbus Visual and Performing Arts

"Nostalgia for Everything"

**Professor Preminda Jacob, Mentor** 

1:30 p.m. - 1:45 p.m. Christine Osazuwa Interdisciplinary Studies

"Always Wanting More: Access, Entitlement and Expectations of Popular Music Bands

in the Age of Social Media"

Professor Frederic Worden, Mentor

1:45 p.m. - 2:00 p.m. Mallorie Ortega Visual Arts

"Struggle to Collaborate with Strangers" **Professor Frederic Worden, Mentor** 

2:00 p.m. - 2:15 p.m. Diego Tapia Visual Arts

"Sinless"

**Professor Frederic Worden, Mentor** 

2:15 p.m. - 2:30 p.m. Daniel Vakharia Visual Arts

"Life of an Assassin"

**Professor Frederic Worden, Mentor** 



### **Oral Presentations**

### **University Center, Room 310 Session I**

Moderator: Katherine Seley-Radtke, Chemistry and Biochemistry

9:45 a.m. - 10:00 a.m. Phillip Fitzgerald Biochemistry and "Glutathione S-Transferases as Regulators Molecular Biology

of Tumor-Induced Myeloid-Derived Suppressor

Cell Survival"

**Professor Suzanne Ostrand-Rosenberg, Mentor** 

**10:00 a.m. - 10:15 a.m.** Phillip Geter Chemistry and "Synthesis of Gemcitabine Functionalized Biochemistry"

Dendron for Treatment of Advanced

Pancreatic Cancer"

**Professor Marie-Christine Daniel, Mentor** 

**10:15** a.m. - **10:30** a.m. Asa Adadey and Emily Doughty Bioinformatics and "Predicting Protein-Protein Interactions Computational Biology

"Predicting Protein-Protein Interactions for Integrins and an LDL Receptor" **Professor Maricel Kann, Mentor** 

10:30 a.m. - 10:45 a.m. Joshua François Mechanical Engineering

"Modeling Optical Stretching of a Chinese Hamster Ovary Cell"

**Professor Charles Eggleton, Mentor** 

#### Session II

Moderator: Phyllis Robinson, Biological Sciences

10:45 a.m. - 11:00 a.m. Peter Cangelosi Biochemistry and "Rat Model of Brain Injury Caused by Molecular Biology

Blast-Induced Hyper-Acceleration"

Professor Gary Fiskum, Mentor

Dr. Julie Hazelton, Mentor

11:00 a.m. - 11:15 a.m. Devyani Ujla Biological Sciences

"Understanding the Interaction between Melanopsin and Arrestin Using FRET" **Professor Phyllis Robinson, Mentor** 





### **Oral Presentations**

#### **University Center, Room 310 (continued)**

11:15 a.m. - 11:30 a.m. Kalyani Nambiar Biological Sciences

"Analysis of HIV Specific Shark Single Domain Antibodies by Phage Display" **Professor Martin Flajnik, Mentor** 

11:30 a.m. - 11:45 a.m. William Hanchett Economics

"The Effects of Risk Aversion on Portfolio Asset

Allocation"

**Professor Douglas Lamdin, Mentor** 

11:45 a.m. - 12:00 noon Leonid Kritz Economics

"A Market Timing Strategy to Achieve Excess Returns"

**Professor Douglas Lamdin, Mentor** 

#### **Session III**

Moderator: Charles Bieberich, Biological Sciences

1:15 p.m. - 1:30 p.m. Marie Steele Economics

"Human Capital Explanation of the Gender Wage Gap,

1875-1950"

**Professor William Lord, Mentor** 

1:30 p.m. - 1:45 p.m. Rima Kikani English

"Genetic Pathways Involved in Retinal Degeneration"

Dr. Rivka Rachel, Mentor

**Professor Sally Shivnan, Mentor** 

1:45 p.m. - 2:00 p.m. Aminah Wali Biological Sciences

"Developing a System to Regulate Gene Expression in the Mouse Prostate" **Professor Charles Bieberich, Mentor** 

2:00 - 2:15 p.m. Emily Kimak Interdisciplinary Studies

"Moving to Water"

**Professor Carol Hess, Mentor** 





#### **Oral Presentations**

#### <u>University Center, Room 310 (continued)</u> Session IV

Moderator: Dawn Biehler, Geography and Environmental Systems

2:30 p.m. - 2:45 p.m.

Julianna Kuhn

Geography and

"Measles in a Modern World: Comparing

Environmental Systems

"Measles in a Modern World: Comparing the 2008 Outbreaks in Austria and the

United States"

**Professor Dawn Biehler, Mentor** 

2:45 p.m. - 3:00 p.m. Claudia Valenzuela Biological Sciences

"Detection of Attaching/Effacing E. coli in Human

Tissue'

**Professor Michael Donnenberg, Mentor** 

3:00 p.m. - 3:15 p.m. Christopher Ecker Biological Sciences

"A Novel Mechanism of Resistance to Apoptosis in Immune Suppressive Cells in the Inflammatory

Tumor Environment"

**Professor Suzanne Ostrand-Rosenberg, Mentor** 

3:15 p.m. - 3:30 p.m. Natée Johnson Computer Science and "X-Ray Study of Nano-Scale Electrical Engineering"

"X-Ray Study of Nano-Scale Superlattice Materials"

**Professor Fow-Sen Choa, Mentor** 

UMBC

### **Oral Presentations**

### **University Center, Room 312 Session I**

Moderator: Nicole King, American Studies

9:30 a.m. - 9:45 a.m. Megha Jacob Music

"The Incorporation of Music Therapy into Physical Therapy Sessions for Physically Disabled Individuals"

Professor Airi Yoshioka, Mentor

9:45 a.m. - 10:00 a.m. Samantha Medema American Studies

"Pop-Tarts: A World unto Themselves" **Professor Warren Belasco, Mentor** 

10:00 a.m. - 10:15 a.m. Dora Korewa American Studies

"The Guido and the Mobster: Responses to Italian American Stereotypes in Italy and the United States"

**Professor Duncan Campbell, Mentor** 

10:15 a.m. - 10:30 a.m. Justin Eisenstadt American Studies

"A Matter of Taste: The Subculture of Vinyl"

Professor Jason Loviglio, Mentor

10:30 a.m. - 10:45 a.m. Katherine Bentz Ancient Studies

"The Effect of the Roman Empire's Decline on the

Ports of Pisa and Portus (Rome)"

**Professor Carolyn G. Koehler, Mentor** 

#### Session II

Moderator: Daniel Ritschel, History

10:45 a.m. - 11:00 a.m. Ryan Ramos American Studies

"The Effectiveness of Estates as Legacies"

Professor W. Edward Orser, Mentor

11:00 a.m. - 11:15 a.m. Ngeri Nnachi American Studies

"The Effects of Patriarchy and Migration on Nigerian-Igbo Culture Sibling Sets within the United States"

**Professor Kathy Bryan, Mentor** 





### **Oral Presentations**

#### **University Center, Room 312 (continued)**

11:15 a.m. - 11:30 a.m. Christina Briscoe Interdisciplinary Studies

"Adolescent Mothers in a Quilombo Community: Praia Grande, Brazil" **Professor Bambi Chapin, Mentor** 

**11:30** a.m. - **11:45** a.m. Sarah Hovde History

"Common Decency: The Evolving Socialism

of George Orwell"

**Professor Daniel Ritschel, Mentor** 

#### Session III

Moderator: Anne Rubin, History

1:15 p.m. - 1:30 p.m. Salma Warshanna English

"The Past that is Always Present: The Role of Memoir

in Identity"

**Professor Robin Farabaugh, Mentor** 

1:30 p.m. - 1:45 p.m. Abigail Bratcher History

"Reclaiming Maryland: Confederate Nationalism in

Popular Print Culture"

**Professor Anne Rubin, Mentor** 

1:45 p.m. - 2:00 p.m. Louise Djapgne Biochemistry and

"The Second Green Revolution in Africa: Molecular Biology

An Assessment of its Sustainability" **Professor Marie Deverneil, Mentor** 

2:00 p.m. - 2:15 p.m. Sarah Hovde Modern Language,

"Distinctive Features: Activist Linguists Linguistics, and and the Language of Activists" Intercultural Communication

**Professor Thomas Field, Mentor** 

2:15 p.m. - 2:30 p.m. Elizabeth Lynch Modern Language,

"English Standards in the Linguistics, and

UMBC Classroom" Intercultural Communication

**Professor Thomas Field, Mentor** 





#### **Oral Presentations**

#### <u>University Center, Room 312 (continued)</u> Session IV

Moderator: Sarah Chard, Sociology and Anthropology

2:30 p.m. - 2:45 p.m. Natasha Chae American Studies

"Capraesque America: The Great Depression Films

of Frank Capra from 1934-1939" **Professor Warren Belasco, Mentor** 

2:45 p.m. - 3:00 p.m. Daniet Moges Political Science

"The Role of Economic Disparity in Human Rights Abuses: Case Study on Rwanda and Sierra Leone"

**Professor Cynthia Hody, Mentor** 

3:00 p.m. - 3:15 p.m. Joshua Hunter Political Science

"NATO: Identity, Role and Function in the Post-Cold War

Period"

**Professor Brigid Starkey, Mentor** 

3:15 p.m. - 3:30 p.m. Tomiko Shine

"The Politics of The Criminal Justice System:

Anthropology

Anthropological Perspective" **Professor Sarah Chard, Mentor** 



### **Poster Presentations**

### University Center Ballroom 10:00 a.m. – 12:30 p.m.

	p	
Annam Abbasi	Biological Sciences  "Studying the Role of Ribosomal Protein rps2 in Maintaining Translational Fidelity"  Professor Philip Farabaugh, Mentor	Poster # 27
Laura Anzaldi	Biological Sciences  "BioBar: A Sequence Manipulation and Editing Toolkit for Microsoft Word"  Professor Ivan Erill, Mentor	Poster # 23
David Bartee	Biochemistry and Molecular Biology "Second Generation Analogs of UK-1" Professor Paul Smith, Mentor	Poster # 4
Shawn Barton	Biochemistry and Molecular Biology "A Novel Method to Structural Determination of HIV-1 5'-UTR" Professor Michael Summers, Mentor	Poster # 96
Samantha Bryant	Political Science "Analysis of Alternative Fuel Policy Options" Professor Laura Hussey, Mentor	Poster # 126

Patricia Castillo

Biological Sciences

"Fine-tuning of Mucosal Barrier Function for Tetanus

Poster # 116

Vaccine Delivery in Mice Using the Novel Peptide Adjuvant AT1002"

Professor Alessio Fasano, Mentor Professor Vincenzo Casolaro, Mentor

Mayukh Chakrabarti Bioinformatics and Computational Biology Poster # 66

"Angiotensin II Receptor Blockers (ARB) Reduce Brain

Inflammation" **Professor Juan Saavedra, Mentor** 

Geoffrey Clapp Mathematics and Statistics Poster # 20

"Modeling Sensory Input to the Lamprey Spinal Cord"

**Professor Kathleen Hoffman, Mentor** 



Poster # 43

#### **Poster Presentations**

**Biological Sciences Teklu Dawit** Poster # 94 "Genetic Analysis of the Role of PHT4;6 in Regulating Innate Immunity of Arabidopsis" **Professor Hua Lu, Mentor Payal Daya Biological Sciences Poster # 102** "Optimizing Feeding Rate Methodology in Drosophila to Determine the Effect of Energy Acquisition on Life Span" **Professor Jeff Leips, Mentor** Poster # 46 Sai Sachin Divakaruni **Chemistry and Biochemistry Courtney LaCotti** "HIV-1 Diploid Genome Selection is Mediated By a Novel Dimerization-Dependent RNA Structural Switch Mechanism" **Professor Michael Summers, Mentor Meredith Donaho** Music Poster #88 "Music for All: Private Music Education in Carroll County, Maryland" **Professor Joseph Morin, Mentor Ashley Dyjack Poster # 124** History "A Comparative Study: Courtesans and Prostitutes in England and Japan during the Early Modern Period (1400 - 1800)" **Professor Amy Froide, Mentor Rhoanne Esteban Political Science** Poster # 11 "Committee Power and Black State Legislators: When Perception and Reality Clash" **Professor Tyson King-Meadows, Mentor Bernadette Fausto Poster # 100 Psychology** "Sensation Seeking, Perceived Norms and Actual Nonmedical Use of Prescription Drugs among College Students" **Professor Carlo DiClemente, Mentor** 

**Bioinformatics and Computational Biology** 

**Professor Maricel Kann, Mentor** 

"Increasing EMU's Annotated Disease-Related

Mutations by Curating Acute Myeloid Leukemia"



**Veer Gariwala** 

**Ajmer Randhawa** 

**Olayinka Savage** 

#### **Poster Presentations**

Hashim Gibril Psychology Poster # 77

Khori-Jon Allen "Alcohol Consumption and Stress-Related Outcomes in Sickle Cell Disease"

Professor Shawn Bediako, Mentor

Eliza Gosc Biological Sciences Poster # 48

"Regulation of the Prostate-Specific Tumor Suppressor

NKX3.1 by Pim-1 Kinase"

**Professor Charles Bieberich, Mentor** 

Casey Gray English Poster # 79

"Americanized Pedagogy: Journey to El Salvador"

Professor Jean Fernandez, Mentor Professor Lucille McCarthy, Mentor

Lydia Grmai Biological Sciences Poster # 75

"Effects of Inflammation on Accumulation of Myeloid-Derived Suppressor Cells (MDSC) in Breast Cancer" **Professor Suzanne Ostrand-Rosenberg, Mentor** 

Krystyna Horn Biological Sciences Poster # 104

"How Rare is Red? Comparing Blackbirds and Related

Songbirds"

**Professor Kevin Omland, Mentor** 

**Professor Michelle Starz-Gaiano, Mentor** 

Chioma Ihekweazu Biological Sciences Poster # 92

"The Role of Coloration in Intersexual Selection in

Etheostoma barrenense"

**Professor Tamra Mendelson, Mentor** 

Lisa Jackson Psychology Poster # 58

"Perceived Mortality and Alcohol Use among

Individuals with Sickle Cell Disease" **Professor Shawn Bediako, Mentor** 

Cameron Johnson Chemistry and Biochemistry Poster # 90

"Design and Synthesis of Unnatural DNA Base Pairs

Containing Expanded Purine Analogues" **Professor Katherine Seley-Radtke, Mentor** 



### **Poster Presentations**

Sheriff Jolaoso	Computer Science and Electrical Engineering "Spectrogram Analysis and Evaluation and Brainwave Appreciation of Music" Professor Fow-Sen Choa, Mentor	Poster # 14
Achsah Joseph	Interdisciplinary Studies "An Analysis of the Peace-building Strategies in Ker Kwaro Acholi's Strategic Plan 2009-2014" Professor Devin Hagerty, Mentor	Poster # 86
Alpana Kaushiva	Sociology and Anthropology "Stroke Rehabilitation in Senior Center Environments: A Qualitative Study" Professor Sarah Chard, Mentor	Poster # 16
Alvin Kennedy	Biological Sciences  "Characterization of the Homophilic Adhesion Molecule Cadherin 74A in Cell Migration during Drosophila Oogenesis"  Professor Michelle Starz-Gaiano, Mentor	Poster # 50
Anthony Kronfli	Biochemistry and Molecular Biology "Incorporation of Tagged and Untagged L4 Ribosomal Protein into Ribosomes" Professor Lasse Lindahl, Mentor	Poster # 6
Kevin Lin	Psychology "Association between Parenting Goals and Parenting Practices among Chinese Immigrants" Professor Charissa Cheah, Mentor	Poster # 29
Morgan Madeira Rachel Sweeton	Computer Science and Electrical Engineering "Finding Communities through Social Media" Professor Anupam Joshi, Mentor	Poster # 8
Anastasia Mallillin	Psychology "Spatial Learning Deficits on a Virtual Radial Arm Task	Poster # 10



in Schizophrenia"

**Professor Laura Rowland, Mentor** 

#### **Poster Presentations**

Shana Martin Visual Arts Poster # 2

"Graffito: A Graffiti Museum"

**Professor Preminda Jacob, Mentor** 

Ms. May Chang, Mentor

Carmen Matos Biochemistry and Molecular Biology Poster # 81

"Acute Tolerance to Etophine for Wild Type

C57B1/6 Mice"

Professor Jia Bei Wang, Mentor

Sonia Metangmo Biological Sciences Poster # 84

"The Presentation of Plasmodium Antigen by Splenic

Dendritic Cells"

**Professor Fidel Zavala, Mentor** 

Archana Murali Biological Sciences Poster # 32

"Apontic, a Novel Regulator of Janus Kinase/Signal Transducer and Activator of Transcription (JAK/STAT)

Pathway in Drosophila Testis"

**Professor Michelle Starz-Gaiano, Mentor** 

Brandon Nemieboka Biochemistry and Molecular Biology Poster # 52

"Characterization of AC1-EXR and AC1-LetR Breast

Cancer Cell Lines"

**Professor Angela Brodie, Mentor** 

Pejmon Pashai Biological Sciences Poster # 118

"Measuring the Release of ATP from the Mouse

Carotid Body"

**Professor Machiko Shirahata, Mentor** 

Caroline Poff Biological Sciences Poster # 39

"Prostate-Specific Expression of MYC in a New Model

of Prostate Cancer"

**Professor Charles Bieberich, Mentor** 

Leida Rassouli-Taylor Biochemistry and Molecular Biology Poster # 62

"The Expression, Purification, and Crystallization of the H-NOX Regulatory Domain of Bovine Soluble Guanylate

Cyclase"

**Professor Elsa Garcin, Mentor** 



#### **Poster Presentations**

Annah Seo Psychology Poster # 60

"The Socialization Goals and Parenting Behaviors of Korean Immigrant Mothers and their Children's

Outcomes"

**Professor Charissa Cheah, Mentor** 

Reema Sharma Biological Sciences Poster # 122

"B7H1 Expression in Lung Cancer: A Potential

Therapeutic Biomarker"

**Professor Jonathan Powell, Mentor** 

Shiva Sharma Information Systems Poster # 120

"Toward Tactile Authentication for Blind Users"

**Professor Ravi Kuber, Mentor** 

Kayla Smith English Poster # 12

**Lisa Nicholson** "Writers and Artists Together: Design Students

Interpret the Words of Bartleby 2011"

Professor Sally Shivnan, Mentor

Professor Guenet Abraham, Mentor

Monét Stanford Biochemistry and Molecular Biology Poster # 83

"Retinal Expression and Pressure-sensitive Modulation

of CCR5, CCR3, and CCR1 in Glaucoma" **Professor Rebecca Sappington, Mentor** 

David Stonko Mathematics and Statistics Poster # 34

**Xuan Ge** "Building a Mathematical Model to Understand the Molecular

Interpretations of Spatial Gradients of Biological Activators"

**Professor Michelle Starz-Gaiano, Mentor** 

Margarita Tararina Biological Sciences Poster # 70

"Characteristics of Kynurenine Pathway Metabolites

and Enzymes in Human Blood Cells" **Professor Robert Schwarcz, Mentor** 

Andrea Thomson Political Science Poster # 25

"Worthwhile or Wasteful? An Evaluation of Techniques for Measuring the Impact of Business Subsidies"

**Professor Roy Meyers, Mentor** 



### **Poster Presentations**

Hamilton Townsend	Physics "Opto-Mechanical System Design and Development" Professor Vanderlei Martins, Mentor Professor Anne Marie Spence, Mentor	Poster # 98
UMBC Game Developers Club	Computer Science and Electrical Engineering "Innovations in Computer Game Development" Professor Neal McDonald, Mentor	Poster # 1
Melissa Velasquez	Chemical and Biochemical Engineering "Analysis of Oxygen Levels within S. aureus Biofilms using Fluorescent Microparticles" Professor Julia Ross, Mentor Professor Jennie Leach, Mentor	Poster # 73
Maria Vitery	Biochemistry and Molecular Biology "Crotamine, the Protein from the Venom of the South American Rattlesnake, and Its Binding to DNA" Professor Richard Karpel, Mentor	Poster # 18
Robert D. Wardlow II	Biochemistry and Molecular Biology "Mesenchymal Stem Cells Provide Protection of Cardiac Ventricular Myocytes by Paracrine Mechanism" Professor Terry B. Rogers, Mentor	Poster # 64
John Winder	Visual Arts "A Digital Skeleton Key to Art: Symbolism of Light and Dark in European Oil Painting from 1500-1900" Professor Preminda Jacob, Mentor	Poster # 128
Isleen Wride Pooja S. Patil	Biological Sciences  "The Costly Tradeoff between Immune Response and Enhanced Lifespan in <i>Drosophila melanogaster</i> "  Professor Jeff Leips, Mentor	Poster # 31
Breanne Wright	Biochemistry and Molecular Biology "The Effect of Transgenic Manipulation of the BK Channel (Kcnma1) on Circadian Rhythmicity in Mice"	Poster # 109

**Professor Andrea Meredith, Mentor** 



### **Poster Presentations**

Jojo Yeboa Biochemistry and Molecular Biology Poster # 111

"Increasing Aspergillus nidulans Chronological

Lifespan via Induced Autophagy" **Professor Mark Marten, Mentor** 

Mr. Bill Moss, Mentor

Brandon Young Biological Sciences Poster # 56

"The Functional Analyses of a Mutated Tentacle within

the L4 Protein"

**Professor Janice Zengel, Mentor** 

Albert Zhou Biological Sciences Poster # 114

"Combining Oncogene Activation and Tumor Suppressor Loss: Developing a New Combinatorial

Mouse Model of Prostate Cancer" **Professor Charles Bieberich, Mentor** 



### **Poster Presentations**

### **University Center Ballroom 12:30 p.m. – 3:00 p.m.**

Aleeza Abbasi	Biological Sciences "Genetic Analysis of Translational Accuracy in the Bacterium Escherichia coli" Professor Philip Farabaugh, Mentor	Poster # 36
Anissa Alexander	Biochemistry and Molecular Biology "Worldwide Literature Search and Gap Analysis of Antimalarial Drug Resistance Mutations" Professor Christopher Plowe, Mentor	Poster # 30
Britt Andersen	Chemistry and Biochemistry  "Identification of Compounds that Bind to the HIV-1 Capsid Protein and Inhibit Capsid Core Formation"  Professor Michael Summers, Mentor	Poster # 38
Pallavi Bhargava	Biochemistry and Molecular Biology "Inhibiting Matrix Targeting of the Gag Polyprotein towards the Plasma Membrane in HIV-1 Retrovirus Replication" Professor Michael Summers, Mentor	Poster # 40
Angela Brant	Psychology "Preschool Children's Moral Evaluations of Aggression: Reliability, Stability, and Discriminant Validity" Professor David Schultz, Mentor	Poster # 123
Keisha Carr	Chemical and Biochemical Engineering "New Chromatography Methods for Biological Macromolecules and Carbon Nanotubes" Professor Douglas Frey, Mentor	Poster # 110
Tania Chatterjee	<b>Biological Sciences</b> "TIMP-2 Overexpression Alters the Transcriptional	Poster # 108

Profile of Human Adenocarcinoma A549 Cells" **Professor William Stetler-Stevenson, Mentor** 



### **Poster Presentations**

Vanessa Cheng	Psychology "Chinese Mothers' Immigration Experiences in the U.S. and in their Young Children's Socioemotional Adjustment" Professor Charissa Cheah, Mentor	Poster # 57
Elisia Clark	Biological Sciences  "Analysis of the Hi-MYC Mouse Model Reveals Molecular Similarity to Human Prostate Cancer"  Professor Charles Bieberich, Mentor	Poster # 26
Ecaterina Coman	Mathematics and Statistics "Lunar Swirls: How Dark are 'Dark Lanes'?" Dr. David Blewett, Mentor	Poster # 42
Joseph Cornish	Bioinformatics and Computational Biology "Adaptive Learning Neural Networks for Binding Site Search in Genomic Sequences" Professor Ivan Erill, Mentor	Poster # 44
Colleen Courtney	Chemical and Biochemical Engineering "Studying the Aspergillus nidulans Cell Wall through Plate Assay" Professor Mark Marten, Mentor	Poster # 33
Thomas Dakermanji	Biochemistry and Molecular Biology "Measurement of Aggregates Formed by the Snake Venom Protein Crotamine and DNA" Professor Richard Karpel, Mentor	Poster # 121
Sonia Dalal	Biological Sciences  "Supertransfection of Costimulatory Molecule CD80 Decreases Expression of Inhibitory Molecule that Causes T-Cell Death" Professor Suzanne Ostrand-Rosenberg, Mentor	Poster # 91
Tylen Darling	Biological Sciences  "Investigations of RLS1: The Origins of Multicellularity	Poster # 47

within the Volvocine Algae"

**Professor Stephen Miller, Mentor** 



### **Poster Presentations**

Catherine Dodson Psychology Poster # 59
Allyson Crehan "School Attendance Rates of Food Allergic

and Non-allergic Children"

**Professor Lynnda Dahlquist, Mentor** 

Emily Doughty Bioinformatics and Computational Biology Poster # 67

"Improving Approach in Automatic Method for Mutation Extraction and Disease-Relationship

Mutation Annotation"

**Professor Maricel Kann, Mentor** 

Dinah Douglas Political Science Poster # 9

**Rhoanne Esteban** "Blue over Black: Racial

**Andrew Kent** Parochialism, Incumbent Protection,

Merertu Kitilaand the 2010 DemocraticEbonie RileyPrimary in Memphis"

Donald Suica Professor Tyson King-Meadows, Mentor

Kedy Edme Chemistry and Biochemistry Poster # 71

"Towards Using NMR to Identify NC-RNA Interaction in

HIV-1"

**Professor Michael Summers, Mentor** 

Katelyn Erickson Chemistry and Biochemistry Poster # 129

**Kathleen Heasley** "Parameterization of Ligands Associated with the

RNA Dependent RNA Polymerase Found in Hepatitis

C Virus"

Professor Ian Thorpe, Mentor

Wendy Gaultney Psychology Poster # 55

"Peer Interaction Frequency and Peer Network Size in Children with Food Allergy"

**Professor Lynnda Dahlquist, Mentor** 

Nikodimos Gebreselassie Chemical and Biochemical Engineering Poster # 53

"Effect of Shear Stress on the Adhesion of S. aureus

to Collagen"

**Professor Julia Ross, Mentor** 



### **Poster Presentations**

Jessica Hopkins	Biochemistry and Molecular Biology "Programmed Errors in the Ribosome of S. cerevisiae" Professor Phillip Farabaugh, Mentor	Poster # 119
Lucas Horn	Biological Sciences  "Blood Cell Phagocytic Ability Changes with Age in Adult Drosophila"  Professor Michelle Starz-Gaiano, Mentor	Poster # 35
Azra Hosic	Chemical and Biochemical Engineering "NMR Evidence of the U5:AUG Long Range Interaction in HIV-1" Professor Michael Summers, Mentor	Poster # 93
Dalton Hughes	Chemical and Biochemical Engineering "Signaling Response of Neuronal Cells to 3D Tissue Scaffolds" Professor Jennie Leach, Mentor	Poster # 112
Donna Huynh	Psychology "Smoking and Perceived Health Status among Adults with Sickle Cell Disease" Professor Shawn Bediako, Mentor	Poster # 78
Isaac Jensen	Bioinformatics and Computational Biology "Detection of Lateral Gene Transfer with Codon Usage Bias in Mutationally Biased Genomes" Professor Ivan Erill, Mentor	Poster # 69
Amar Kaneria	Chemistry and Biochemistry  "Characterization of the Monomer/Dimer Equilibrium within the 5'-Untranslated Region of HIV-1 RNA"  Professor Michael Summers, Mentor	Poster # 61
Nathaniel Kim	Chemistry and Biochemistry  "Carbocyclic Nucleoside Aromatic Fleximers as Antiviral Targets for Inhibiting S-Adenosyl-L-homocysteine Hydrolase"  Professor Katherine Seley-Radtke, Mentor	Poster # 115
Richard Maduka	Chemical and Biochemical Engineering "Understanding How cdc42 Impacts Growth and	Poster # 51

Branching in the Model Fungus Aspergillus nidulans"

**Professor Mark Marten, Mentor** 



### **Poster Presentations**

Trevor Mathias

Biochemistry and Molecular Biology

"Retroviral RNA Packaging Elements Promote GAG

Assembly"

**Professor Michael Summers, Mentor** 

Fialelei Matthews Bioinformatics and Computational Biology Poster # 89

"De Novo Mapping of Regulatory Networks by

Comparative Genomics" **Professor Ivan Erill, Mentor** 

Saloni Mehta Biological Sciences Poster # 72

"RNA in Situ Hybridization Analysis of G-Protein  $\beta$  and  $\gamma$  Subunits in the Main Olfactory Epithilium of Mice"

**Professor Weihong Lin, Mentor** 

Angela Mensah Psychology Poster # 80

"The Effects of Sexual Harrassment on Ambulatory Blood Pressure in African American and Hispanic

Women"

**Professor Danielle Beatty, Mentor** 

Chatura Nagaradona Biological Sciences Poster # 15

yima "Translational Misreading in *rbfA* Compensatory Mutants"

Professor Philip Farabaugh, Mentor

Eliana NessAiver Physics Poster # 3

**Soutry De** "Evaluating the Mid-Atlantic Wind Energy Resource:

A Multi-Platform Data Analysis Study" **Professor Lynn Sparling, Mentor** 

Felix Nwogbo Biochemistry and Molecular Biology Poster # 65

"Analysis of Brca1 DNA and RNA Expression in a

Transgenic Mouse Model"

**Professor Laundette Jones, Mentor** 

Mofiyinfoluwa Obadina Biological Sciences Poster # 113

"Searching for Proteins that Recognize Signals that Determine the Sorting of Endosomal Cargo Proteins"

Dr. Lymarie Maldonado-Baez, Mentor

**Dr. Julie Donaldson, Mentor** 



**Chiemeka Onyima** 

### **Poster Presentations**

Chikezie Okoro	Chemistry and Biochemistry  "Reverse Carbocyclic Fleximers as a Means of Overcoming Drug Resistance"  Professor Katherine Seley-Radtke, Mentor	Poster # 17
Olumide Omobo Hanna Fenta	Bioinformatics and Computational Biology "Toward an Automatic Method for Drug-Related Mutational Extraction from Text" Professor Maricel Kann, Mentor	Poster # 45
Mindy Or	Bioinformatics and Computational Biology "Automatic Detection of the Major Codon Bias in Mutationally Biased Genomes" Professor Ivan Erill, Mentor	Poster # 87
Stephanie Owusu	Biological Sciences  "Utilizing Artificial MicroRNAs to Analyze Gene Function in the Green Alga Volvox carteri"  Professor Stephen Miller, Mentor	Poster # 19
Nana Owusu-Boaitey	Biological Sciences "Immune Tolerance and CD20-Specific Lentiviruses" Professor David Scott, Mentor	Poster # 41
Nicole Parker	Biochemistry and Molecular Biology "Study of Morphine Tolerance and Dependence" Professor Jia Bei Wang, Mentor	Poster # 13
Divya Patel Ajay Vaghasia	Biochemistry and Molecular Biology "Investigation of the Binding Affinity of GP32, an SSB Protein, for dsDNA" Professor Richard Karpel, Mentor	Poster # 117
Janell Payano Sosa	Biological Sciences  "A Plausible Mechanism for Vomeronasal Organ Protection"  Professor Tatsuya Ogura, Mentor Professor Weihong Lin, Mentor	Poster # 28
Thomas Peterson	<b>Bioinformatics and Computational Biology</b> "DMDM: Domain Mapping of Disease Mutations"	Poster # 85

**Professor Maricel Kann, Mentor** 



### **Poster Presentations**

Ross Pokorny	Computer Science and Electrical Engineering "TweetCollector: A Framework for Retrieving, Processing, and Storing Live Data from Twitter" Professor Timothy Finin, Mentor Professor Anupam Joshi, Mentor	Poster # 21
Evan Raines Mahnoor Siddiqui	Psychology "Gender Differences in Coping and Self-Esteem among Adults with Sickle Cell Disease" Professor Shawn Bediako, Mentor	Poster # 37
Kaitlyn Sadtler	Biological Sciences  "In-Situ Bioremediation of Explosive Residue for Reduction of Trace Signatures"  Professor Charles Young, Mentor	Poster # 54
Christelle Samen	Biochemistry and Molecular Biology "Annotation of Highly Up-/Down-regulated Aedes aegypti Genes and Investigation of their Anti-Dengue Activity" Professor George Dimopoulos, Mentor	Poster # 22
Sadella Santos	Chemical and Biochemical Engineering "Intuitive Fluorescent Biosensor for Millimolar Glucose" Professor Leah Tolosa, Mentor	Poster # 95
Sarah Sexton	History  "Plantation Management in Post-Reconstruction South Carolina: White House Plantation and the Aimars"  Professor Anne Rubin, Mentor	Poster # 97
Igor Shusterman	Biochemistry and Molecular Biology "Hippocampal Activity in the Neonatal Ventral Hippocampal Lesion Model of Schizophrenia" Professor Patricio O'Donnell, Mentor	Poster # 99
David Shyu	Computer Science and Electrical Engineering "Patient Identification and Diagnosis Using Fourier Analysis and Beam Forming of Multi-electrode Brain	Poster # 105



Wave Signals"

**Professor Fow-Sen Choa, Mentor** 

### **Poster Presentations**

Skylar Spangler	Psychology "Hiccupping: Who Does it and When?" Professor Robert Provine, Mentor	Poster # 101
Patrice Starck	Biochemistry and Molecular Biology "NMR Analysis of the Conserved Bulge in the Core Encapsidation Signal of Type-C Gammaretroviruses" Professor Michael Summers, Mentor	Poster # 68
David Sweigart	Physics "Effectiveness of Spin-on-Glass Films on Reducing Dielectric Breakdown in Poled Polymer Devices" Professor L. Michael Hayden, Mentor	Poster # 5
Robby Tietz	Chemical and Biochemical Engineering "Investigation of Poly(N-Isopropylmethacrylamide) Hydrogels" Professor Lisa Kelly, Mentor	Poster # 7
UMBC Game Developers Club	Computer Science and Electrical Engineering "Innovations in Computer Game Development" Professor Neal McDonald, Mentor	Poster # 1
Amond Uwadineke	Political Science "Nigeria's Resource Curse: Conflict in the Niger Delta" Professor Carolyn Forestiere, Mentor	Poster # 24
Shelby Vargo	Chemical and Biochemical Engineering "Effects of Environment Dimensionality on Sensory Neurons Process Outgrowth and $\beta$ 1-Integrin Cytoskeleton Signaling" Professor Jennie Leach, Mentor	Poster # 49
Donna Viola	Interdisciplinary Studies "Life on 'Mars': Diversity of Endolithic Microorganisms in a Terrestrial Martian Analog" Professor Ian George, Mentor Professor Stephen Freeland, Mentor	Poster # 103
Rebecca Walter	<b>Biological Sciences</b> "A Mouse Model for Inducible Inflammation in the	Poster # 63

**Professor Charles Bieberich, Mentor** 



Prostate"



**Poster # 127** 

### **Poster Presentations**

**Interdisciplinary Studies** Joseph Wesolowski "Historic Preservation: Developing Sense of Place on the University of Maryland, Baltimore County Campus" **Professor Denise Meringolo, Mentor Professor Preminda Jacob, Mentor** Ms. Carrie Sauter, Mentor **Melanie Wiley Biochemistry and Molecular Biology** Poster # 76 "The Role of Human Endogenous Retroviruses (HERVS) in the Pathogenesis of Acute Onset Schizophrenia" **Professor Erik Lillehoj, Mentor Chemistry and Biochemistry** Poster # 74 Julia Wittkamper "Optimization of Metal Film on Nanostructure SERS Substrate" **Professor Brian Cullum, Mentor** Kojo Yeboa **Biochemistry and Molecular Biology Poster # 107** "Cross-Talk Detection in Surface-Enhanced Raman Scattering Nano-imaging probes" **Professor Brian Cullum, Mentor** 

**Biological Sciences Poster # 106** Lucia Zegarra "Mitochondrial Gene Shows Recent Diversification of

the Yellow-backed Oriole"

**Professor Kevin Omland, Mentor** 





### **Poster Presentations**

### <u>University Center Ballroom Lounge</u> 4:30 p.m. – 5:30 p.m.

Education/Secondary Teacher Certification Students Presenting Action Research Moderator and Mentor: Linda Oliva, Education

William Archer "Encouraging Increased Attendance among Inner City High School

Students"

Michelle Birky "Using Feedback to Increase Student Motivation, Effort, and Success"

Casey Dahle "Forms of Positive Reinforcement in a Seventh-Grade Classroom"

**Lian French** "Fostering Social and Emotional Intelligence in the Classroom"

Susan Hade "The Effects of the Focused Question Card Strategy on Student Writing"

Maureen Harvie "Prewriting Strategies: Tools for Success"

Jessica Henn "Primary Sources and their Effect on Learning in the Seventh Grade Social

Studies Classroom"

**Rebecca Horowitz** "Heterogeneous Versus Homogenous Gender Groupings of High School

Students"

Victoria Kohl "The Effects of Extrinsic Rewards for Secondary Students in a Mathematics

Classroom"

**Leanne Lenhart** "Facebook as a Tool for Communicating Homework"

Catherine Perry "The Effects of Students' Surnames on their Academic Success"

Yira Rawlins-Prins "Do Students Achieve the Mastering of a Foreign Language at a Faster Rate

in a Same Sex Class?"

Joey Schenning "Is America Really Singing? A Review of (Supposedly) Common Song

Repertoire"

Alexander Scott "Using Musical Instruments to Support Student Learning"

Jonathan Shumway "Increasing Depth of Homework Assignments: Integration of Writing in

Chemistry"

**Christian Solliday** "Limiting the Distractions of Cell Phone Use in the Classroom"

Hope Stone "The Cool Kids Call Them C-Notes: The Effectiveness of Cornell Notes in a

Social Studies Class"

Ashish Vadalia "Determining Student Engagement Through Various Warm-Up Activities"

