

Poster Presentations, University Center Ballroom

1:00 – 3:00 p.m.

- Izath Aguilar** *Chemical Engineering* **Poster # 47**
“Prevention of A β Cell Interaction Using Sialic Acid Analogues”
Professor Theresa Good, Advisor
- Roderick Bautista** *Biological Sciences* **Poster # 38**
“Localization of an Inhibitory Region in the *hZIP1* Promoter”
Professor Renty Franklin, Advisor
- Abraham Beyene** *Chemical Engineering* **Poster # 45**
“Calcium Dynamics in the Extra-Cellular Space of Neural Tissue”
Professor Mariajose Castellanos, Advisor
- Sarah Bourdon** *Biochemistry and Molecular Biology* **Poster # 71**
“Sequencing Melanopsin from the Bovine Retina”
Professor Phyllis Robinson, Advisor
- Clifford Bridges** *Mathematics* **Poster # 51**
“Mathematical Study of Quaternions and Their Properties”
Professor Muddappa Gowda, Advisor
- LaToia Bryant** *Biological Sciences* **Poster # 55**
“Characterizing L4 and L22 Mutations in *E. coli* Strains Resistant to Oleandomycin Triacetate”
Professor Janice Zengel, Advisor
- Robin Cagey** *Sociology and Anthropology* **Poster # 41**
“The African American Experience at Eastern State Penitentiary: Insight into Prison Life and the History of Corrections”
Professor Ann Frankowski, Advisor
- Jen lle Dowling** *Biological Sciences* **Poster # 78**
“Low Return Rates and Pairing Infidelity in Two Maryland Oriole Species”
Professor Kevin Omland, Advisor
- Ejiofor Ezekwe** *Biological Sciences* **Poster # 13**
“Olfactory Epithelial Cell Degradation in Mice with Surgically Occluded Nostrils”
Professor Weihong Lin, Advisor
- Julie Fields** *Sociology and Anthropology* **Poster # 73**
“Is Socioeconomic Status Health Protective? Exploring the Mediating Role of Psychosocial Factors among African Americans”
Professor Jessica Kelly-Moore, Advisor

- Tiffany Fleet** *Biological Sciences* **Poster # 26**
“Analyzing the Interactions between RNase MRP and XRN-1 in Order to Further Investigate RNA Metabolism”
Professor Lasse Lindahl, Advisor
- Shilpa Gadwal** *Biological Sciences* **Poster # 17**
“The Effects of High-level Troleandomycin Resistance Mutations in rRNA of *Deinococcus radiodurans* on Ribosome Function”
Professor Janice Zengel, Advisor
- Darryl Gaines** *Biological Sciences* **Poster # 61**
“Novel Protein Secretion Systems in *Bordetella parapertussis*”
Professor Nicholas Carbonetti, Advisor
- Alison Gottschalk** *American Studies* **Poster # 59**
“Gender Shift From Spider-Man to Spider-Girl”
Professor Nicole King, Advisor
- Jonathan Grabe** *Psychology* **Poster # 09**
“Relationships and Interactions with Family and Peers as Predictors of Adolescent Substance Use and Depression”
Professor Lisa Jordan, Advisor
- Jamie Heard** *Biological Sciences* **Poster # 32**
“A Novel System for Inducible Gene Expression in the Prostate”
Professor Charles Bieberich, Advisor
- Joy Ihekweazu** *Chemistry* **Poster # 14**
“Non-Covalent Interactions Between 1,8-Naphthalimide Compounds and Amino Acids”
Professor Lisa Kelly, Advisor
- Hasina Jamal** *Computer Engineering* **Poster # 07**
“Fabrication and Characterization of Quantum Cascade Lasers”
Professor Fow-Sen Choa, Advisor
- Tamika John** *Biological Sciences* **Poster # 11**
“B-cell Delivered Gene Therapy for Tolerance”
Professor David Scott, Advisor
- Rasheeda Johnson** *Biochemistry and Molecular Biology* **Poster # 53**
“Elucidating the BLV Encapsidating Ψ -site in the 5' Noncoding Region of Gag”
Professor Michael Summers, Advisor
- Simonne-Michelle Jones** *Interdisciplinary Studies* **Poster # 65**
“Bridging the Gap Between HIV/AIDS and Awareness in Ghana, Africa”

Professor Cindy Schaeffer, Advisor

Vovanti Jones *Biological Sciences* **Poster # 86**
“Investigating Potential Second Site Suppressors in the Amp A Pathway in *Dictyostelium discoideum*”

Professor Daphne Blumberg, Advisor

Joseph Keller *Psychology* **Poster # 43**
“Age and Gender Effects in Pain Distraction Intervention”

Professor Lynnda Dahlquist, Advisor

Debora Lin *Chemical Engineering* **Poster # 44**
“The Effects of Osmolytes on A β Oligomer and Fibril Stability in Physiological Buffers”

Professor Theresa Good, Advisor

Bettel Mussie *Biological Sciences* **Poster # 34**
“Sex Differences in the Expression of Calcium Transporters in the Hypothalamus”

Professor Margaret McCarthy, Advisor

Kelechi Ndubuizu *Biological Sciences* **Poster # 67**
“Gene Expression of Omentin 1/2 in Stromal Vascular Cells of Adipose Tissue”

Professor John McLenithan, Advisor

Oluwaseun Olayiwola *Chemical Engineering* **Poster # 23**
“A Quantitative Model of the Rho GTPases Network”

Professor Mariajose Castellanos, Advisor

Peter Parker *Biological Sciences* **Poster # 63**
“Visualization and Analysis of RNase MRP in *Saccharomyces cerevisiae* using Optimized Tetracycline Tagging of SNM1p”

Professor Lasse Lindahl, Advisor

Irene Pastis *Biochemistry and Molecular Biology* **Poster # 57**
“Synthesis of Ring Expanded Nucleoside Analogues for Inhibition of the Hepatitis B and C Viruses”

Professor Ramachandra Hosmane, Advisor

Christopher Paul *English* **Poster # 39**
“The Cyberpeople Jack Implant: A Study of Remediation, Ethics, and Technology”

Professor Jennifer Maher, Advisor

Stephen Pirpiris *Department of Mechanical Engineering* **Poster # 49**
“The Feasibility of Biodiesel from Phytoplankton”

Professor Tony Farquhar, Advisor

Leila Potts and Debbie King *Psychology* **Poster # 40**

“Creating Academic Success Through Guided Study Sessions”

Professor Diane Alonso, Advisor

Akanksha Raja *Chemical Engineering*

Poster # 30

“Fluorescent Fluoride Ion Detection in Drinking Water Based on Alizarin Red S- Al(III) Complex”

Professor Govind Rao, Advisor

Jacqueline Redmond *Social Work*

Poster # 25

“Barriers to Optimal Health and Social Services Provision among Rural African American Women”

Professor Tiffany Sanders Baffour, Advisor

Robert Reeves *Chemical Engineering*

Poster # 19

“Drug Delivery Devices Based on Hydrogels of Naturally-Derived Biopolymers”

Professor Jennie Leach, Advisor

Brittany Richardson *Biochemistry and Molecular Biology*

Poster # 69

“Interactions Between DNA Repair Enzyme Thymine-DNA Glycosylase and Cell Cycle Checkpoint Protein Hus1”

Professor A-Lien Lu-Chang, Advisor

Astin Ross *Mechanical Engineering*

Poster # 29

“Particle Manipulation Using Dielectrophoresis”

Professor Dawn Bennett, Advisor

Charles Rutter *Psychology*

Poster # 88

“Habituation to the Distractive Properties of Virtual Reality in Pain Analgesia”

Professor Lynnda Dahlquist, Advisor

Maryann Salib *Biochemistry and Molecular Biology*

Poster # 36

“Metabolic Regulation of RUNX2 Transcription Factor Expression in Endothelial Cells”

Professor Antonino Passaniti, Advisor

Jaclyn Samek *Psychology*

Poster # 58

“Endorsement of BRIEF Validity Items May Identify Low Participant Investment in Behavioral Research”

Professor Shari Waldstein, Advisor

Ivette Santana-Cruz *Bioinformatics and Computational Biology*

Poster # 05

“Evaluating the Performance of the BLAST Sequence Similarity Searching Algorithm”

Professor Stephen Freeland, Advisor

Trevor Simpson *Music*

Poster # 02

“Study and Archiving of Impulses for Convolution Reverb”

Professor David Kim-Boyle, Advisor

Steven Tuyishime *Biological Sciences* **Poster # 80**
“Spiramycin-resistant Mutations in *Escherichia Coli* L4 and L22”
Professor Janice Zengel, Advisor

UMBC Game Developer’s Club *Computer Science* **Poster # 01**
President/Programmer: Eric Jordan
Programming: Josh Allen, Chris Conley, Charles Lohr, Paul Oliver, Elliot Paige
Art: Micha Betts, Katie Chrzanowski, Arthur Gould, Robert Jones, Marcus Lepage, Kiran Sudhakar,
Lesa Wilcox, Helen Zhang, Megan Zlock
Sound Effects/Music: George Aninwene II, Andrew Garrahan, Maura Sateriale
“Project Tetra”
Professor Penny Rheingans, Advisor

Dianne Weeks *Mechanical Engineering* **Poster # 20**
“Investigations of the Particle Distribution and the Temperature Elevation in Magnetic Fluid Hyperthermia”
Professor Liang Zhu, Advisor

Jeannie Yoon *Biochemistry and Molecular Biology* **Poster # 84**
“Transitions: Photographs by Robert Creamer”
Professor Lynn Cazabon, Advisor