URCAD 2007 Presenters by Affiliation

Students from these programs are listed below, in alphabetical order by program.

**CWIT**
- Erickson Hall Residents
- Golden Key
- Harbor Residents
- Hillside Residents
- Honors College
- Howard Hughes Medical Institute
- Humanities Scholars
- MARC U STAR and Pre MARC
- McNair Scholars
- Meyerhoff Scholars
- Susquehanna Residents
- Walker Ave Residents

**CWIT**

Student: Katie Chrzanowski  
Mentor: Frederic Worden  
Video Production  
11:15 - 11:30 AM, Fine Arts 317  
Second Screening  
2:45 – 3:00 PM, Fine Arts 221

“Who Says the Old Can't Move?”

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**Golden Key**

Artistic Presentations

Student: Andrew Shoenfeld

“The Seven Deadly Sins”

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**Erickson Hall**

Student: Brittany Richardson  
Mentor: A-Lien Lu-Chang  
Poster Presentation  
1:00 – 3:00 PM  
UC Ballroom

“Interactions Between DNA Repair Enzyme Thymine-DNA Glycosylase and Cell Cycle Checkpoint Protein Hus 1”

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**AM Poster Session**

Ballroom

“Improving Software Maintenance Through Better Documentation”
Mentor: Lynn Cazabon
Fine Arts First Floor Lighting
Studio 9:30 – 11:30 AM

Student: Christina Ralls and
Katie Better
Mentor: Steve Bradley
Ballroom

“Traum Baum Public Art as Catharsis: Interactive
Sculpture and Community Outreach”

Oral Presentations

Student: Stephanie Núñez
Mentor: Anandarup Gupta
9:30 - 9:45 AM, Room 312

“Interaction of PYK2 and PTP-PEST with Leupaxin in
Prostate Cancer Cells”

Student: Eric Grollman
Mentors: Ilsa Lottes
and Fred Pincus
10:45 - 11:00 AM, Room 310

“Traditional and Modern Homophobia”

Student: Uzoma Iheagwara
Mentor: Suzanne Ostrand-Rosenberg
9:45 - 10:00 AM, Room 312

“Uveal Melanoma Vaccines express Major
Histocompatibility Class II Molecules in the Absence of
Invariant Chain”

Student: Philip Graff
Mentor: Markos Georganopoulos
10:00 - 10:15 AM, Room 312

“A State-of-the-Art Numerical Code for Probing the
Workings of Quasar Jets”

Student: Kyle Clelan
Mentor: Douglas Lamdin
10:30 - 10:45 AM, Room 310

“Are Super Bowl Betting Markets Informationally
Efficient? The Time-Series Evidence”

Student: Maddy Fickes
Mentor: Kathy Bryan
11:00 - 11:15 AM, Room 310

“How Momma Raised Me: Understanding the
Upbringing of Rural and Urban Students and its
Relation to College Attendance”

Student: Brandon Johnson
Mentor: Tim Topoleski
1:30 - 1:45 PM, Room 310

“Improving Mechanical Properties of PMMA Bone
Cement with Nano and Micro Particles”

Student: Askia Hill
Mentor: Fow-Sen Choa
2:45 - 3:00 PM, Room 312

“Autonomous Flying Control Systems for Mini-flying
Robots”
Student: Julie Fields
Mentor: Jessica Kelley-Moore
2:45 - 3:00 PM, Room 310

“Is Socioeconomic Status Health Protective? Exploring the Mediating Role of Psychosocial Factors among African Americans”

Poster Presentations – UC Ballroom, 9:30 – 11:30 AM

Student: Haroon Ahmad
Mentor: C. Allen Bush

“High Pressure Anion-Exchange Chromatography of Carbohydrates”

Student: Christopher Bednarek
Mentor: Stephen Miller

“CR-nitA; the Synthesis of a Selectable Marker for Volvox carteri Transformations”

Student: Caryn Bell
Mentor: William LaCourse

“Development of a Novel Food Spoilage Sensor”

Student: Foyin Fasanmi
Mentor: Steven Johnson

“Comparison of Markers of Disease Severity in Patients with Sepsis and Matched Controls”

Student: Adrian Feijoo
Mentor: Weihong Lin

“Phosphodiesterase 2-Labeled Atypical Glomeruli and Sensory Neurons in the Olfactory System”

Student: Frances Onyimba
Mentor: Margaret McCarthy

“The Neurotoxic Effects of Glutamate on Neonatal Rats”

Student: Charles Rutter
Mentor: Angelika Burger

“Detection of Circulating Hsp90a in Plasma from Tumor-Bearing Mice and Patients”

Student: Adjoa Smalls-Mantey
Mentor: Michael Summers

“Characterization of Nucleocapsid Protein BINDing to the Psi-Site of the Moloney Murine Leukemia Virus Genome”

Student: Erin Voss
Mentor: Jennie Leach

“Neurite Outgrowth and Integrin Signaling Pathways in 3D Systems”

Harbor Residents

Student: Jessica Dulaney
Mentor: Colette Searls
Dance Program
Fine Arts 317, 10:45 – 11:00 AM

“Acting from a Musical Approach”
Student: Danielle Durbin  
Mentor: Anna Rubin  
Dance Program  
Fine Arts 344, 11:35 – 11:50 AM  
“Miracle”

**Oral Presentations**

Student: Julie Fields  
Mentor: Jessica Kelley-Moore  
University Center, 310  
2:45 - 3:00 PM  
“Is Socioeconomic Status Health Protective? Exploring the Mediating Role of Psychosocial Factors among African Americans”

**Poster Presentations 9:30 – 11:30 AM, University Center Ballroom**

Student: Caroline Andes  
Mentor: Carolyn Forestiere  
“Facebook Me: The Facebook™ and Social Capital”

Student: Sarah Bourdon  
Mentor: Phyllis Robinson  
“Sequencing Melanopsin from the Bovine Retina”

Student: Cally Brandt  
Mentor: Richard Mason  

**Poster Presentations 1:00 – 3:00 AM, University Center Ballroom**

Student: Robin Cagey  
Mentor: Ann Frankowski  

Student: Darryl Gaines  
Mentor: Nicholas Carbonetti  
“Novel Protein Secretion Systems in *Bordetella parapertussis*”

Student: Debora Lin  
Mentor: Theresa Good  
“The Effects of Osmolytes on Aβ Oligomer and Fibril Stability in Physiological Buffers”

Student: Robert Reeves  
Mentor: Jennie Leach  
“Drug Delivery Devices Based on Hydrogels of Naturally-Derived Biopolymers”

**Hillside Residents**

**Oral Presentation**

Student: Matthew Loftus  
Mentor: Lisa Kelly  
University Center 312  
“Laser-Stimulated Raman Spectroscopy as a Method for Remote Atmospheric Sensing Technology”
10:15 - 10:30 AM

Poster Presentations, UC Ballroom – 9:30 – 11:30 AM

Student: Ramon Cabrera  
Mentor: Mauricio Bustos  
“A Genetic Approach to Identify Targets of Ubiquitin Ligases from Animals and Plants”

Students: Sarah M. Bourdon and Nancy Chiles  
Mentor: Phyllis Robinson  
“Sequencing Melanopsin from Bovine Retina”

Students: Jenny Ficco and Stefanie Kirk  
Mentor: Stanley Feldstein  
“The Reliability and Internal Consistency of the Revised Dyad Adjustment Scale”

Student: Jessica McGrath  
Mentor: Michael Summers  
“The Relationship Between the Structure of the FIV Matrix Protein and its Ability to Target the Plasma Membrane”

Student: Sean Patro  
Mentor: Michael Summers  
“Structural Analysis of the Myristoylated Matrix Protein of the Feline Immunodeficiency Virus”

Student: Sasan Salimian  
Mentor: Hua Lu  
“Characterization of HTA8, a Histone H2A Gene, in Arabidopsis Defense Regulation”

Poster Presentations, UC Ballroom – 1:00 – 3:00 PM

Student: Abraham Beyene  
Mentor: Mariajose Castellanos  
“Calcium Dynamics in the Extra-Cellular Space of Neural Tissue”

Student: Clifford Bridges  
Mentor: Muddappa Gowda  
“Study of Quaternions and Their Uses”

Student: Ejiofor Ezekwe  
Mentor: Weihong Lin  
“Olfactory Epithelial Cell Degradation in Mice with Surgically Occluded Nostrils”

Student: Whitney Fields  
Mentor: Janice Zengel  
“Isolation of Mutations in L4 and L22 That Confer Resistance to the Antibiotic Tylosin”

Student: Askia Hill  
Mentor: Fow-Sen Choa  
“Autonomous Flying Control Systems for Mini-flying Robots”

Student: Joy Ihekweazu  
Mentor: Lisa Kelly  
“Non-Covalent Interactions Between 1,8-Naphthalimide Compounds and Amino Acids”

Student: Vovanti Jones  
Mentor: Daphne Blumberg  
“Investigating Potential Second Site Suppressors in the Amp A Pathway in Dictyostelium discoideum”
Student: Akanksha Raja  
Mentor: Govind Rao  
“Fluorescent Fluoride Ion Detection in Drinking Water Based on Alizarin Red S- Al(III) Complex”

Student: Steven Tuyishime  
Mentor: Janice Zengel  
“Spiramycin-resistant Mutations in *Escherichia coli* L4 and L22”

**Howard Hughes Medical Institute**

Student: Stephanie Núñez  
Mentor: Anandarup Gupta  
Oral Presentation, UC 312  
9:30 - 9:45 AM  
“Interaction of PYK2 and PTP-PEST with Leupaxin in Prostate Cancer Cells”

Student: Nerg AchiríMofor  
Mentor: Michael Summers  
Oral Presentation, UC 312  
10:30 - 10:45 AM  
“Studying the Protein-Protein Interactions Involved in HIV-1 Assembly”

Student: Amber Gaither  
Mentor: Christopher Plowe  
Oral Presentation, UC 312  
11:30 -11:45 AM  
“Nested PCR to Amplify the *Plasmodium falciparum* Chloroquine Resistance Transporter (PfCRT) in Samples from Clinical Trials in Malawi”

**9:30 – 11:30 AM Poster Session, UC Ballroom**

Student: Ramon Cabrera  
Mentor: Mauricio Bustos  
“A Genetic Approach to Identify Targets of Ubiquitin Ligases from Animals and Plants”

Student: Foyin Fasanmi  
Mentor: Steven Johnson  
“Comparison of Markers of Disease Severity in Patients with Sepsis and Matched Controls”

Student: Marcus Gillis  
Mentor: Paul Yarowsky  
“Parkinsonism Development in Cycad-Fed Rats”

Student: Candace Mainor  
Mentor: Laundette Jones  
“In *vivo* Effects of Bisphenol A on the Expression of BRCA1 in the Mouse Mammary Gland”

Student: Jessica McGrath  
Mentor: Michael Summers  
“The Relationship Between the Structure of the FIV Matrix Protein and its Ability to Target the Plasma Membrane”

Student: Frances Onyimba  
Mentor: Margaret McCarthy  
“The Neurotoxic Effects of Glutamate on Neonatal Rats”
Student: Sean Patro  
Mentor: Michael Summers  
“Structural Analysis of the Myristoylated Matrix Protein of the Feline Immunodeficiency Virus”

Student: Adjoa Smalls-Mantey  
Mentor: Michael Summers  
“Composition and Sequence-Dependent Binding of RNA to the Nucleocapsid Protein of Moloney Murine Leukemia Virus Genome”

1:00 – 3:00 PM Poster Session, UC Ballroom

Student: Whitney Fields  
Mentor: Janice Zengel  
“Isolation of Mutations in L4 and L22 That Confer Resistance to the Antibiotic Tylosin”

Student: Tiffany Fleet  
Mentor: Lasse Lindahl  
“Analyzing the Interactions between RNase MRP and XRN-1 in Order to Further Investigate RNA Metabolism”

Student: Joy Ihekweazu  
Mentor: Lisa Kelly  
“Non-Covalent Interactions Between 1,8-Naphthalimide Compounds and Amino Acids”

Student: Tamika John  
Mentor: David Scott  
“B-Cell Delivered Gene Therapy for Tolerance”

Student: Vovanti Jones  
Mentor: Daphne Blumberg  
“Investigating Potential Second Site Suppressors in the Amp A Pathway in Dictyostelium discoidium”

Student: Steven Tuyishime  
Mentor: Janice Zengel  
“Spiramycin-resistant Mutations in Escherichia Coli L4 and L22”
Poster Presentations – UC Ballroom, 9:30 – 11:30 AM

Student: LaToia Bryant  
Mentor: Janice Zengel  
“Characterizing L4 and L22 Mutations in *E. coli* Strains Resistant to Oleandomycin Triacetate”

Student: Jonathan Grabe  
Mentor: Lisa Jordan  
“Relationships and Interactions with Family and Peers as Predictors of Adolescent Substance Use and Depression”

Student: Hasina Jamal  
Mentor: Fow-Sen Choa  
“Fabrication and Characterization of Quantum Cascade Lasers”

Student: Debora Lin  
Mentor: Theresa Good  
“The Effects of Osmolytes on Aβ Oligomer and Fibril Stability in Physiological Buffers”

Student: Bettel Mussie  
Mentor: Margaret McCarthy  
“Sex Differences in the Expression of Calcium Transporters in the Hypothalamus”

Student: Charles Rutter  
Mentor: Lynnda Dahlquist  
“Habituation to the Distractive Properties of Virtual Reality in Pain Analgesia”

Student: Maryann Salib  
Mentor: Antonino Passaniti  
“Metabolic Regulation of RUNX2 Transcription Factor Expression in Endothelial Cells”

Honors College

Oral Presentations

Student: Charlene Kuo  
Mentor: Warren Belasco  
University Center, 310  
9:15 - 9:30 AM

“Dare for More: Analysis of Pepsi’s Global Television Marketing Campaign”

Student: Stephanie Núñez  
Mentor: Anandarup Gupta  
University Center, 312  
9:30 - 9:45 AM

“Interaction of PYK2 and PTP-PEST with Leupaxin in Prostate Cancer Cells”

Student: Philip Graff  
Mentor: Markos Georganopoulos  
University Center, 312  
10:00 - 10:15 AM

“A State-of-the-Art Numerical Code for Probing the Workings of Quasar Jets”

Student: Christie Finn  
Mentor: David Smith  
University Center, 312

“Movement and the Singer”
11:15 - 11:30 AM

Student: Aaron Stoler  
Mentor: Christopher Swan  
University Center, 310  
2:00 - 2:15 PM  

“Microbial Respiration on Mixed Leaf Substrates Mediated by Insect Feeding”

Student: Lidiya Mishchenko  
Mentor: Todd Pittman  
University Center, 310  
2:15 - 2:30 PM  

“Production of Tapered Optical Fibers”

Poster Presentations 9:30 – 11:30 AM, UC Ballroom

Student: Cally Brandt and Morgan Little  
Mentor: Richard Mason  

Student: Kelly Kovack  
Mentor: Christopher Murphy  
“Domestic Violence: Risks of Contact and Restraining Orders”

Student: Charles Rutter  
Mentor: Angelika Burger  
“Detection of Circulating Hsp90a in Plasma from Tumor-Bearing Mice and Patients”

Student: Adjoa Smalls-Mantey  
Mentor: Michael Summers  
“Composition and Sequence-Dependent Binding of RNA to the Nucleocapsid Protein of Moloney Murine Leukemia Virus Genome”

Poster Presentations 1:00 – 3:00 AM, UC Ballroom

Student: Robin Cagey  
Mentor: Ann Frankowski  

Student: Simonne-Michelle Jones  
Mentor: Cindy Schaeffer  
“Bridging the Gap Between HIV/AIDS and Awareness in Ghana, Africa”

Student: Charles Rutter  
Mentor: Lynnda Dahlquist  
“Habituation to the Distractive Properties of Virtual Reality in Pain Analgesia”
Humanities Scholars

Student: Dorothy Kenny  
Mentor: Daniel Ritschel  
Oral Presentation  
University Center, Room 312  
1:45 - 2:00 PM

“Seeing Through Smoke: The Role of Science in Public Health Policy Following the 1952 London Fog”

Student: Cally Brandt and Morgan Little  
Mentor: Richard Mason  
Poster Presentation  
University Center, Ballroom  
9:30 – 11:30 AM


Student: Robin Cagey  
Mentor: Ann Frankowski  
Poster Presentation  
University Center, Ballroom  
1:00 – 3:00 PM


MARC U STAR and Pre MARC

Oral Presentations

Student: Stephanie Núñez  
Mentor: Anandarup Gupta  
University Center, 312  
9:30 - 9:45 AM

“Interaction of PYK2 and PTP-PEST with Leupaxin in Prostate Cancer Cells”

Student: Uzoma Iheagwara  
Mentor: Suzanne Ostrand-Rosenberg  
University Center, 312  
9:45 - 10:00 AM

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Mentor: Michael Summers  
University Center, 312  
10:30 - 10:45 AM

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Student: Amber Gaither  
Mentor: Christopher Plowe  
University Center, 312  
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Student: Brandon Johnson  
Mentor: Tim Topoleski  
University Center, 310  
1:30 - 1:45 PM  
“Improving Mechanical Properties of PMMA Bone Cement with Nano and Micro Particles”

Student: Shayla Shorter  
Mentor: Violeta Rus  
University Center, 310  
1:45 - 2:00 PM  
“Role of TRAIL in Induced and Spontaneous Murine Lupus Models”

Student: Julie Fields  
Mentor: Jessica Kelley-Moore  
University Center, 310  
2:45 - 3:00 PM  
“Is Socioeconomic Status Health Protective? Exploring the Mediating Role of Psychosocial Factors among African Americans”

Poster Presentations, 9:30 – 11:30 AM, University Center Ballroom

Student: Anthony Agyapong  
Mentor: Renty Franklin  
“Activity of Promoter Regions Critical in hZip1's Role in Prostate Cancer”

Student: Olufolakemi Awe  
Mentor: Colin Garvie  
“Investigation of the Interaction between RFX5 and CREB: Implications for the Regulation of MHC II Gene Expression”

Student: Caryn Bell  
Mentor: William LaCourse  
“Development of a Novel Food Spoilage Sensor”

Student: Sarah Bourdon  
Mentor: Phyllis Robinson  
“Sequencing the Melanopsin from the Bovine Retina”

Student: Ramon Cabrera  
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Student: Nancy Chiles  
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“Sequencing Melanopsin from Bovine Retina”

Student: Andrew Ciupek  
Mentor: Janice Zengel  
“Analysis of Mutations in Ribosomal Proteins L4 and L22 in Spiramycin-Resistant Deinococcus radiodurans”

Student: Luis Cocka  
Mentor: Katherine Seley-Radtke  
“Synthesis of Carbocyclic Nucleoside Analogues as Potential Inhibitors of SAHase and Adenosine Deaminase”

Student: Ryan Connor  
Mentor: Michael Summers  
“Analysis of HIV-1 SL4-U5 Binding Region”
Student: Foyin Fasanmi  
Mentor: Steven Johnson  
“Comparison of Markers of Disease Severity in Patients with Sepsis and Matched Controls”

Student: Adrian Feijoo  
Mentor: Weihong Lin  
“Phosphodiesterase 2-Labeled Atypical Glomeruli and Sensory Neurons in the Olfactory System”

Student: Ayanna Flegler  
Mentor: Abdu Azad  
“Differential Gene Expression in Cultured Rodent Malaria Parasite”

Student: Candace Mainor  
Mentor: Laundette Jones  
“In vivo Effects of Bisphenol A on the Expression of BRCA1 in the Mouse Mammary Gland”

Student: Donnetta McFadden  
Mentor: Jai Bei Wang  
“Using the Tail Suspension Test to Assess Involvement of PKCI/HNIT1 on Mouse Behavior”

Poster Presentations, 9:30 – 11:30 AM, University Center Ballroom

Student: Jessica McGrath  
Mentor: Michael Summers  
“The Relationship Between the Structure of the FIV Matrix Protein and its Ability to Target the Plasma Membrane”

Student: Chinyere Nwaneri  
Mentor: Rosalinda Roberts  
“The Localization of Parvalbumin in the Human Prefrontal Cortex: A Light and Electron Microscopic Study”

Student: Frances Onyimba  
Mentor: Margaret McCarthy  
“The Neurotoxic Effects of Glutamate on Neonatal Rats”

Student: Sean Patro  
Mentor: Michael Summers  
“Structural Analysis of the Myristoylated Matrix Protein of the Feline Immunodeficiency Virus”

Student: Carlita Phillip  
Mentor: David Eisenmann  
“Determination of Spatial and Temporal Location of Candidate Bar-1 Target Genes in Caenorhabditis elegans during Development”

Student: Adjoa Smalls-Mantey  
Mentor: Michael Summers  
“Composition and Sequence-Dependent Binding of RNA to the Nucleocapsid Protein of Moloney Murine Leukemia Virus Genome”

Student: Ryann Williams  
Mentor: Christopher Swan  
“The Effect of Species Leaf Litter on Tri-trophic Interactions in a Detritus-based Stream Ecosystem”

Poster Presentations, 1:00 – 3:00 PM, University Center Ballroom

Student: Izath Aguilar  
Mentor: Theresa Good  
“Prevention of Abeta Cell Interaction Using Sialic Acid Analogues”

Student: Roderick Bautista  
Mentor: Renty Franklin  
“Localization of an Inhibitory Region in the hZIPI Promoter”
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Mentor: Dawn Bennett  
“Particle Manipulation Using Dielectrophoresis”

Student: Maryann Salib  
Mentor: Antonino Passaniti  
“Metabolic Regulation of RUNX2 Transcription Factor Expression in Endothelial Cells”

Student: Ivette Santana-Cruz  
Mentor: Stephen Freeland  
“Evaluating the Performance of the BLAST Sequence Similarity Searching Algorithm”

Student: Steven Tuyishime  
Mentor: Janice Zengel  
“Spiramycin-resistant Mutations in Escherichia Coli L4 and L22”

Student: Dianne Weeks  
Mentor: Liang Zhu  
“Investigations of the Particle Distribution and the Temperature Elevation in Magnetic Fluid Hyperthermia”

**McNair Scholars**

Student: DeLeon Gray  
Mentor: Charissa Cheah  
Oral Presentation, UC 310  
10:00 - 10:15 AM  
“Enhancing the Educational Outlooks of Adolescent Mothers through Social Relationships”

Student: Maddy Fickes  
Mentor: Kathy Bryan  
Oral Presentation, UC 310  
11:00 - 11:15 AM  
“How Momma Raised Me: Understanding the Upbringing of Rural and Urban Students and its Relation to College Attendance”

Student: Durell Callier  
Mentor: Laura Ting  
Oral Session, UC 312  
2:30 - 2:45 PM  
“Analyzing Predictors of Academic Success among African American Adolescents within an Urban Charter School”
**Poster Presentations in University Center Ballroom**

**Student: Caryn Bell**  
**Mentor: William LaCourse**  
9:30 – 11:30 AM  
“Development of a Novel Food Spoilage Sensor”

**Student: Shilpa Gadwal**  
**Mentor: Janice Zengel**  
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**Mentor: Marijose Castallanos**  
1:00 – 3:00 PM  
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**Meyerhoff Scholars**

**Oral Presentations, University Center**

**Student: Stephanie Núñez**  
**Mentor: Anandarup Gupta**  
Room 312  
9:30 - 9:45 AM  
“Interaction of PYK2 and PTP-PEST with Leupaxin in Prostate Cancer Cells”

**Student: Uzoma Iheagwara**  
**Mentor: Suzanne Ostrand-Rosenberg**  
Room 312  
9:45 - 10:00 AM  
“Uveal Melanoma Vaccines express Major Histocompatibility Class II Molecules in the Absence of Invariant Chain”

**Student: Nerg AchiriMofor**  
**Mentor: Michael Summers**  
Room 312  
10:30 - 10:45 AM  
“Studying the Protein-Protein Interactions Involved in HIV-1 Assembly”

**Student: Amber Gaither**  
**Mentor: Christopher Plowe**  
Room 312  
11:30 - 11:45 AM  
“Nested PCR to Amplify the Plasmodium falciparum Chloroquine Resistance Transporter (PfCRT) in Samples from Clinical Trials in Malawi”

**Student: Brandon Johnson**  
**Mentor: Tim Topoleski**  
“Improving Mechanical Properties of PMMA Bone Cement with Nano and Micro Particles”
Room 310
1:30 - 1:45 PM
Student: Shayla Shorter  Mentor: Violeta Rus
Room 310
1:45 - 2:00 PM
Student: Anthony Agyapong  Mentor: Renty Franklin

Poster Presentations, Ballroom, 9:30 – 11:30 AM

Student: Anthony Agyapong  Mentor: Renty Franklin
“Activity of Promoter Regions Critical in hZip1’s Role in Prostate Cancer”

Student: Olufolakemi Awe  Mentor: Colin Garvie
“Investigation of the Interaction between RFX5 and CREB: Implications for the Regulation of MHC II Gene Expression”

Student: Caryn Bell  Mentor: William LaCourse
“Development of a Novel Food Spoilage Sensor”

Student: Sarah Bourdon  Mentor: Phyllis Robinson
“Sequencing Melanopsin from the Bovine Retina”

Student: Ramon Cabrera  Mentor: Mauricio Bustos
“A Genetic Approach to Identify Targets of Ubiquitin Ligases from Animals and Plants”

Student: Nancy Chiles  Mentor: Phyllis Robinson
“Sequencing the Melanopsin Gene from Bovine Retina”

Student: Andrew Ciupek  Mentor: Janice Zengel
“Analysis of Mutations in Ribosomal Proteins L4 and L22 in Spiramycin-Resistant Deinococcus Radiodurans”

Student: Luis Cocka  Mentor: Katherine Seley-Radtke
“Synthesis of Carbocyclic Nucleoside Analogues as Potential Inhibitors of SAHase and Adenosine Deaminase”

Student: Ryan Connor  Mentor: Michael Summers
“Analysis of HIV-1 SL4-U5 Binding Region”

Student: Adrian Feijoo  Mentor: Weihong Lin
“Phosphodiesterase 2-Labeled Atypical Glomeruli and Sensory Neurons in the Olfactory System”

Student: Ayanna Flegler  Mentor: Abdu Azad
“Differential Gene Expression in Cultured Rodent Malaria Parasite”
Student: Marcus Gillis  
Mentor: Paul Yarowsky  
“Parkinsonism Development in Cycad-Fed Rats”

Student: Candace Mainor  
Mentor: Laundette Jones  
“In vivo Effects of Bisphenol A on the Expression of BRCA1 in the Mouse Mammary Gland”

Student: Jessica McGrath  
Mentor: Michael Summers  
“The Relationship Between the Structure of the FIV Matrix Protein and its Ability to Target the Plasma Membrane”

Student: Chinyere Nwaneri  
Mentor: Rosalinda Roberts  
“The Localization of Parvalbumin in the Human Prefrontal Cortex: A Light and Electron Microscopic Study”

Student: Frances Onyimba  
Mentor: Margaret McCarthy  
“The Neurotoxic Effects of Glutamate on Neonatal Rats”

Student: Sean Patro  
Mentor: Michael Summers  
“Structural Analysis of the Myristoylated Matrix Protein of the Feline Immunodeficiency Virus”

Student: Carlita Phillip  
Mentor: David Eisenmann  
“Determination of Spatial and Temporal Location of Candidate Bar-1 Target Genes in Caenorhabditis elegans during Development”

Student: Sasan Salimian  
Mentor: Hua Lu  
“Characterization of HTA8, a Histone H2A Gene, in Arabidopsis Defense Regulation”

Student: Adjoa Smalls-Mantey  
Mentor: Michael Summers  
“Composition and Sequence-Dependent Binding of RNA to the Nucleocapsid Protein of Moloney Murine Leukemia Virus Genome”

Student: Malcolm Taylor  
Mentor: John Pinkston  

Student: Ryann Williams  
Mentor: Christopher Swan  
“The Effect of Species Leaf Litter on Tri-trophic Interactions in a Detritus-based Stream Ecosystem”

Poster Presentations, Ballroom, 1:00 --- 3:00 PM

Student: Roderick Bautista  
Mentor: Renty Franklin  
“Localization of an Inhibitory Region in the hZIP1 Promoter”

Student: Abraham Beyene  
Mentor: Mariajose Castellanos  
“Calcium Dynamics in the Extra-Cellular Space of Neural Tissue”
<table>
<thead>
<tr>
<th>Student: Clifford Bridges</th>
<th>“Mathematical Study of Quaternions and Their Properties”</th>
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<tbody>
<tr>
<td>Mentor: Muddappa Gowda</td>
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<tr>
<td>Student: LaToia Bryant</td>
<td>“Characterizing L4 and L22 Mutations in E. coli Strains</td>
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<tr>
<td>Mentor: Janice Zengel</td>
<td>Resistant to Oleandomycin Triacetate”</td>
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<td>Student: Ejiofor Ezekwe</td>
<td>“Olfactory Epithelial Cell Degradation in Mice with</td>
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<td>Mentor: Weihong Lin</td>
<td>Surgically Occluded Nostrils”</td>
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<tr>
<td>Student: Whitney Fields</td>
<td>“Isolation of Mutations in L4 and L22 That Confer</td>
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<tr>
<td>Mentor: Janice Zengel</td>
<td>Resistance to the Antibiotic Tylosin”</td>
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<tr>
<td>Student: Tiffany Fleet</td>
<td>“Analyzing the Interactions between RNase MRP and XRN-1</td>
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<td>Mentor: Lasse Lindahl</td>
<td>in Order to Further Investigate RNA Metabolism”</td>
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<td>Student: Shilpa Gadwal</td>
<td>“The Effects of High-level Troleandomycin Resistance</td>
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<tr>
<td>Mentor: Janice Zengel</td>
<td>Mutations in rRNA of Deinococcus radiodurans on</td>
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<td>Ribosome Function”</td>
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<td>Student: Darryl Gaines</td>
<td>“Novel Protein Secretion Systems in Bordetella</td>
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<td>Mentor: Nicholas Carbonetti</td>
<td>parapertussis”</td>
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<tr>
<td>Student: Jamie Heard</td>
<td>“A Novel System for Inducible Gene Expression in the</td>
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<td>Mentor: Charles Bieberich</td>
<td>Prostate”</td>
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<td>Student: Askia Hill</td>
<td>“Autonomous Flying Control Systems for Mini-flying</td>
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<td>Mentor: Fow-Sen Choa</td>
<td>Robots”</td>
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<td>Student: Joy Ihekweazu</td>
<td>“Non-Covalent Interactions Between 1,8-Naphthalimide</td>
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<td>Mentor: Lisa Kelly</td>
<td>Compounds and Amino Acids”</td>
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<td>Student: Hasina Jamal</td>
<td>“Fabrication and Characterization of Quantum Cascade</td>
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<td>Mentor: Fow-Sen Choa</td>
<td>Lasers”</td>
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<tr>
<td>Student: Tamika John</td>
<td>“B-cell Delivered Gene Therapy for Tolerance”</td>
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<td>Mentor: David Scott</td>
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<tr>
<td>Student: Rasheeda Johnson</td>
<td>“Elucidating the BLV Encapsidating psi-site in the 5’</td>
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<td>Mentor: Michael Summers</td>
<td>Noncoding Region Of Gag”</td>
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<td>Student: Vovanti Jones</td>
<td>“Investigating Potential Second Site Suppressors in the</td>
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<td>Mentor: Daphne Blumberg</td>
<td>Amp A Pathway in Dictyostelium discoideum”</td>
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<td>Student: Joseph Keller</td>
<td>“Age and Gender Effects in Pain Distraction”</td>
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Mentor: Lynnda Dahlquist
Student: Debora Lin
Mentor: Theresa Good
Student: Bettel Mussie
Mentor: Margaret McCarthy
Student: Kelechi Ndubuizu
Mentor: John McLenathan
Student: Akanksha Raja
Mentor: Govind Rao
Student: Brittany Richardson
Mentor: A-Lien Lu-Chang
Student: Astin Ross
Mentor: Dawn Bennett
Student: Maryann Salib
Mentor: Antonino Passaniti
Student: Ivette Santana-Cruz
Mentor: Stephen Freeland
Student: Steven Tuyishime
Mentor: Janice Zengel
Student: Dianne Weeks
Mentor: Liang Zhu

**Susquehanna Residents**

Student: Meghan DeVore
Mentor: Nicole King
Oral Presentation, UC 310
11:15 - 11:30 AM

Student: Jamie Heard
Mentor: Charles Bieberich
Poster Presentation, Ballroom
1:00 – 3:00 PM

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**Intervention”**

“The Effects of Osmolytes on Aβ Oligomer and Fibril Stability in Physiological Buffers”

“Sex Differences in the Expression of Calcium Transporters in the Hypothalamus”

“Gene Expression of Omentin 1/2 in Stromal Vascular Cells of Adipose Tissue”

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

“Interactions Between DNA Repair Enzyme Thymine-DNA Glycosylase and Cell Cycle Checkpoint Protein Hus 1”

“Particle Manipulation Using Dielectrophoresis”

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

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

“Spiramycin-resistant Mutations in Escherichia Coli L4 and L22”

“Investigations of the Particle Distribution and the Temperature Elevation in Magnetic Fluid Hyperthermia”

“Fan Tourism: Exploring the Creation of Religious Experience and the Deprivation of Culture”

“A Novel System for Inducible Gene Expression in the Prostate”
Walker Ave Residents

Artistic Works

Student: Katie Chrzanowski  
Mentor: Frederic Worden  
11:15 – 11:30 AM, Fine Arts 317  
2:45 – 3:00 pm, Fine Arts 221

“Who Says the Old Can't Move?”

Student: Stephanie Potter  
Mentor: Calla Thompson  
9:30 – 11:30 AM  
Fine Arts First Floor Hallway Gallery

“Recollections of Katrina: A Visual Exploration of the Subjectivity of Memory”

Student: Andrew Shoenfeld  
Mentor: Lynn Cazabon  
9:30 – 11:30 AM  
Fine Arts First Floor Lighting Studio

“The Seven Deadly Sins”

Oral Presentations

Student: Charlene Kuo  
Mentor: Warren Belasco  
University Center, 310  
9:15 - 9:30 AM

“Dare for More: Analysis of Pepsi's Global Television Marketing Campaign”

Student: Amber Gaither  
Mentor: Christopher Plowe  
University Center, 312  
9:30 - 9:45 AM

“Nested PCR to Amplify the Plasmodium falciparum Chloroquine Resistance Transporter in Samples from Clinical Trials in Malawi”

Student: Christina Stanley  
Mentor: Cynthia Hody  
University Center, 310  
9:30 - 9:45 AM

“Perceptions (or Misperceptions) and the Troubled State of US-Iranian Relations”

Student: Eric Grollman  
Mentors: Ilsa Lottes and Fred Pincus  
University Center, 310  
10:45 - 11:00 AM

“Traditional and Modern Homophobia at UMBC”

Student: Christie Finn  
Mentor: David Smith  
University Center, 312  
11:15 - 11:30 AM

“Movement and the Singer”

Student: Durell Callier  
Mentor: Laura Ting  
University Center, 312

“Analyzing Predictors of Academic Success among African American Adolescents within an Urban Charter School”
2:30 - 2:45 PM

Student: Louis Leibowitz  
Mentor: Ilsa Lottes  
University Center, 310  
2:30 - 2:45 PM

Student: UMBC Game Development Club  
Mentor: Penny Rheingans  
Ballroom  
Demonstrations, all day

“Evaluating the Fiscal Effects of Same-Sex Marriage in Maryland”

“Project Tetra”

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**Poster Presentations, Ballroom, 9:30 – 11:30 AM**

Student: William Becker  
Mentor: Theresa Good

“Developing a Platform for the Detection of Beta Amyloid, a Protein Associated with the Development of Senile Plaques Found in Alzheimer’s Disease”

Student: Donnetta McFadden  
Mentor: Jai Bei Wang

“Using the Tail Suspension Test to Assess Involvement of PKCI/HNIT1 on Mouse Behavior”

Student: Charles Rutter  
Mentor: Angelkia Burger

“Detection of Hsp90α, a Circulating Isoform of Hsp90, in Plasma from Tumor-Bearing Mice and Patients”

Student: Erin Voss  
Mentor: Jennie Leach

“Neurite Outgrowth and Integrin Signaling Pathways in 3D Systems”

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**Poster Presentations, 1:00 – 3:00 PM**

Student: Roderick Bautista  
Mentor: Renty Franklin

“Localization of an Inhibitory Region in the hZIP1 Promoter”

“Age and Gender Effects in Pain Distraction Intervention”

Student: Joseph Keller  
Mentor: Lynnda Dahlquist

“Sex Differences in the Expression of Calcium Transporters in the Hypothalamus”

Student: Bettel Mussie  
Mentor: Margaret McCarthy

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

Student: Charles Rutter  
Mentor: Lynnda Dahlquist

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

Student: Ivette Santana-Cruz  
Mentor: Stephen Freeland