CELEBRATION OF RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITIES
Friday, April 13, 2012

Office of Undergraduate Research and STEMM Activities
3640 Colonel Glenn Highway, Dayton, Ohio 45435-0001
(937) 775-4744
www.wright.edu/urop
Schedule of Events

<table>
<thead>
<tr>
<th>Event</th>
<th>Time</th>
<th>Location</th>
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<tbody>
<tr>
<td>Conference Check-In and Registration:</td>
<td>7:30 am—11:30 am</td>
<td>Student Union Atrium</td>
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<tr>
<td>Oral Presentation, Morning Session:</td>
<td>9 am—11:20 am</td>
<td>Student Union, E156, E157, E163</td>
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<tr>
<td>COLA Dean's Colloquium, E156A</td>
<td>9:20—11 am</td>
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<tr>
<td>Poster Presentations and Lunch:</td>
<td>11:40 am—1:30 pm</td>
<td>Apollo Room, Student Union</td>
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<tr>
<td>Oral Presentations, Afternoon Session:</td>
<td>1:45—3:45 pm</td>
<td>Student Union, E156 A</td>
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<tr>
<td>Time</td>
<td>Student</td>
<td>Faculty Mentor</td>
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<tr>
<td>9:20</td>
<td>Carin Benning</td>
<td>Dr. Karen Lahm</td>
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<tr>
<td></td>
<td><strong>Title:</strong> Parent-Child Relationships as a Motivation for Improved Behavior Among Prison Inmates</td>
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<tr>
<td>9:40</td>
<td>Kyleigh Clark</td>
<td>Dr. December Green</td>
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<tr>
<td></td>
<td><strong>When Prohibiton and Violence Collide: The Case of Mexico</strong></td>
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<tr>
<td>10</td>
<td>Leslie Matthews</td>
<td>Dr. Christopher Chaffee</td>
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<tr>
<td></td>
<td><strong>Title:</strong> Music Instruction for Students who are Blind: A Collection of Methods and Materials for the Music Educator</td>
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<tr>
<td>10:20</td>
<td>Rebekkah Mulholland</td>
<td>Dr. Tracy Snipe</td>
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<tr>
<td></td>
<td><strong>Title:</strong> African American Female Artists and the Sea Islands: Exploring Africanisms and Religious Expressions in Creative Works</td>
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<tr>
<td>10:40</td>
<td>Hayley Hughes</td>
<td>Dr. Barry Milligan</td>
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<tr>
<td></td>
<td><strong>Title:</strong> A manly, and almost womanly tenderness: Imagining a Unified Masculinity in Trollope’s Doctor Thorne</td>
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</table>
**Session 2: E156B**

Session Chair: Cathy Sayer, Dr. Tarun Goswami,

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<thead>
<tr>
<th>Time</th>
<th>Student</th>
<th>Faculty Mentor</th>
<th>Department</th>
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<tbody>
<tr>
<td>9</td>
<td>Raquel Dues</td>
<td>Dr. Gary Burns</td>
<td>Psychology</td>
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<tr>
<td></td>
<td><strong>Title:</strong> <em>Job Quality and Webpage Aesthetics</em></td>
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<tr>
<td>9:20</td>
<td>Erica Kemp</td>
<td>Dr. Pamela Tsang</td>
<td>Psychology</td>
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<tr>
<td></td>
<td><strong>Title:</strong> <em>Timesharing Skill Among Athletes and Non-Athletes</em></td>
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<tr>
<td>9:40</td>
<td>Orly Leiva</td>
<td>Dr. Mariana Morries</td>
<td>Pharmacology and Toxicology</td>
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<tr>
<td></td>
<td><strong>Title:</strong> <em>Localization of Renin Angiotensin Peptidases In Mouse Kidney Using Dual Immunofluorescence and Microscopy</em></td>
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<tr>
<td>10</td>
<td>Nadine Morgan</td>
<td>Dr. Courtney Sulentic</td>
<td>Pharmacology and Toxicology</td>
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<td></td>
<td><strong>Title:</strong> <em>Determining the role of the AhR in TCDD-induced suppression of immunoglobulin heavy chain expression</em></td>
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<tr>
<td>10:20</td>
<td>Jing Liu</td>
<td>Dr. Courtney Sulentic</td>
<td>Pharmacology and Toxicology</td>
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<tr>
<td></td>
<td><strong>Title:</strong> <em>Transcriptional regulation by 2,3,7,8-tetrachlorodibenzo-p-dioxin within the human polymorphic hs1,2 enhancer</em></td>
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<tr>
<td>10:40</td>
<td>Kevin Hatcher</td>
<td>Dr. Tarun Goswami</td>
<td>Biomedical, Industrial and Human Factors Engineering (BIE)</td>
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<tr>
<td></td>
<td><strong>Title:</strong> <em>Neck and Head Injury Criteria and How It Relates to Pilot Ejection</em></td>
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<tr>
<td>11:00</td>
<td>Isiah Kendall</td>
<td>Dr. Tarun Goswami</td>
<td>Biomedical, Industrial and Human Factors Engineering (BIE)</td>
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<td></td>
<td><strong>Title:</strong> <em>Analysis of NFL Concussions</em></td>
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<tr>
<td>9:20</td>
<td>Cody Watson</td>
<td>Dr. K.T. Arasu</td>
<td>Mathematics and Statistics</td>
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<tr>
<td>9:40</td>
<td>Akhilesh Pathak</td>
<td>Dr. K.T. Arasu</td>
<td>Mathematics and Statistics</td>
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<tr>
<td>10:20</td>
<td>Satya Ganti</td>
<td>Dr. Jason Deibel</td>
<td>Physics</td>
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<tr>
<td>10:40</td>
<td>Lindsay Owens</td>
<td>Dr. Jason Deibel</td>
<td>Physics</td>
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<tr>
<td>11:00</td>
<td>Alyssa Fosnight</td>
<td>Dr. Ivan Medvedev</td>
<td>Physics</td>
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### Title:

- **Non-Existence of Relative Difference Sets in Several Previously Unresolved Cases**
- **Partially Balanced Incomplete Block Designs**
- **On the bounds of the entropy defined for an orthogonal matrix**
- **Characterization and Modeling of Laser Micro-Machined Periodically Corrugated Metallic Terahertz Wire Waveguides**
- **Characterization of Terahertz Frequency Scattering from Multi-Walled Carbon Nanotube Arrays**
- **Characterization of Ceramic Composite Materials using Terahertz Reflection Imaging Technique**
- **Analytical Chemical Sensing using high resolution Terahertz/submillimeter wave spectroscopy**
## Session 4: E163A
Session Chair: Dr. Michael Markey, Dr. Heather Hostetler

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<thead>
<tr>
<th>Time</th>
<th>Student</th>
<th>Faculty/Research Mentor</th>
<th>Department</th>
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<tbody>
<tr>
<td>9:20</td>
<td>Pooja Mandke</td>
<td>Dr. Michael Markey</td>
<td>Biochemistry and Molecular Biology</td>
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<td></td>
<td>Title: <em>miR-34a mediated post transcriptional regulation of MDM4</em></td>
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<td>9:40</td>
<td>Mary Leonard</td>
<td>Dr. Madhavi Kadakia</td>
<td>Biochemistry and Molecular Biology</td>
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<td></td>
<td>Title: <em>PTEN impacts integrity and composition of mitotic centrosomes</em></td>
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<td>10</td>
<td>Nathasha Hill</td>
<td>Dr. Madhavi Kadakia</td>
<td>Biochemistry and Molecular Biology</td>
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<td></td>
<td>Title: <em>Dose dependent effects of 1-alpha-25-dihydroxyvitamin D3 on keratinocyte proliferation and Delta-Np63alpha stabilization.</em></td>
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<td>10:20</td>
<td>Dhawal Oswal</td>
<td>Dr. Heather Hostetler</td>
<td>Biochemistry and Molecular Biology</td>
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<tr>
<td></td>
<td>Title: <em>Fatty acids and their thioester derivatives as ligands for human PPARα</em></td>
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<td>10:40</td>
<td>Madhupriya Mahankali</td>
<td>Dr. Julian Gomez-Cambronero</td>
<td>Biochemistry and Molecular Biology</td>
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<tr>
<td></td>
<td>Title: <em>Characterization of PLD2 GEF activity and its regulation</em></td>
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<td>11:00</td>
<td>Ahmed Obeidat</td>
<td>Dr. Timothy Cope</td>
<td>Neuroscience, Cell Biology and Pathology</td>
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<td></td>
<td>Title: <em>Modulation of Afterhyperpolarization by Recurrent Inhibition</em></td>
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<tr>
<td>Lindora Hubel</td>
<td>Dr. Yi-Hui Lee</td>
<td>College of Nursing</td>
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<tr>
<td><strong>Title:</strong> Childhood Obesity and Participation in a Health and Fitness</td>
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<tr>
<td>Sarah Aisenbrey</td>
<td>Dr. Susan Carafiello</td>
<td>History</td>
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<tr>
<td><strong>Title:</strong> Carl Schurz, The Revolutions of 1848, and Abolition: The Forty-Eighters in America</td>
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<tr>
<td>Joshowa Yost</td>
<td>Dr. Meyer</td>
<td>History</td>
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<tr>
<td><strong>Title:</strong> The Warrior Image in Modern Japanese Media and its Implica-</td>
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<tr>
<td>Spencer Brannon</td>
<td>Dr. Donna Schlagheck</td>
<td>Political Science</td>
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<tr>
<td><strong>Title:</strong> Clash of the Titans: The Future of Competing Spheres of Influence in the South China Sea</td>
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<td>Matthew Conaway</td>
<td>Dr. December Green</td>
<td>Political Science</td>
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<tr>
<td><strong>Title:</strong> When ‘Boys Will Not Be Boys’: Variations of Wartime Sexual Violence by Armed Opposition Groups in Sri Lanka, Sierra Leone, and Nepal</td>
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<tr>
<td>Kathryn Chaney</td>
<td>Dr. December Green</td>
<td>Political Science</td>
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<tr>
<td><strong>Title:</strong> Solutions to the Problem of Corruption in Brazil</td>
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<tr>
<td>Moneeka Gentry, Chad Lovins, Michael Tyler, Philip Logan, Rebekkah Mulholland, Allison Desimio, Sharita Jackson</td>
<td>Dr. Tracy Snipe</td>
<td>Political Science</td>
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<tr>
<td><strong>Title:</strong> Keep the Faith: Student Reflections on the 12th Congressional Civil Rights Pilgrimage to Alabama</td>
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# Session 6: E157
Session Chair: Dr. Kate Excoffon, Dr. Mill Miller

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<tr>
<td>Cory Knick</td>
<td>Dr. Amir Farajian</td>
<td>Mechanical and Materials Engineering</td>
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<td>9:20</td>
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<tr>
<td><strong>Title:</strong> Modeling the Liquid Phase Exfoliation of Graphene</td>
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| Deah Lieurance | Dr. Don Cipollini | Biological Sciences |
| 9:40           |                    |                    |
| **Title:** Exotic Lonicera species both escape and resist specialist and generalist herbivores in the introduced range |

| Ran Yan | Dr. Kate Excoffon | Biological Sciences |
| 10      |                    |                    |
| **Title:** The C-terminus of the Coxsackievirus and adenovirus receptor directly interacts with the PDZ1 and PDZ3 domains of MAGI-1 with high affinity |

| Poornima Kotha Lakshmi Naran-yan | Dr. Kate Excoffon | Biological Sciences |
| 10:20    |                    |                    |
| **Title:** Regulation of Coxsackie and Adenovirus Receptor (CAR) by Cytokines |

| Alexandra McCann | Dr. Kate Excoffon | Biological Sciences |
| 10:40           |                    |                    |
| **Title:** MAGI-1 Mediated Degradation of Coxsackievirus and Adenovirus Receptor Exon 8 (CAREx8) |

| Daniel Davis | Dr. John Stireman | Biological Sciences |
| 11:00        |                    |                    |
| **Title:** The phylogenetics of Tachinidae (Insecta: Diptera) with an emphasis on subfamily structure |
### Session 7: E156A
Session Chair: Dr. Courtney Sulentic,

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<th>Time</th>
<th>Student</th>
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<tbody>
<tr>
<td>1:45</td>
<td>Andrew Lyda</td>
<td>Dr. Christopher Barton</td>
<td>Earth and Environmental Sciences</td>
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<tr>
<td></td>
<td><strong>Title:</strong> Power Scaling to Forecast Water Height and Life Loss in Japan Tsunamis</td>
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<tr>
<td>2:05</td>
<td>Miyong Hughes</td>
<td>Dr. Suzanne Lunsford</td>
<td>Chemistry</td>
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<tr>
<td></td>
<td><strong>Title:</strong> Nanoscale Modification and Functionalization of Carbon Electrodes for the Detection of Harmful Organic Chemicals in Water</td>
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<td>2:25</td>
<td>Nora Hunter</td>
<td>Dr. Paul Seybold</td>
<td>Chemistry</td>
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<td></td>
<td><strong>Title:</strong> Modeling Second-Order Chemical Reactions using Cellular Automata</td>
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<td>2:45</td>
<td>Adam Stahler</td>
<td>Dr. Ioana Pavel Sizemore</td>
<td>Chemistry</td>
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<td></td>
<td><strong>Title:</strong> Effects of Substrate Temperature on the SERS-based Sensing Performance of Silver Nanorod Thin Films Fabricated Through Oblique Angle Deposition</td>
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<td>3:05</td>
<td>Joshua Baker</td>
<td>Dr. Ioana Pavel Sizemore</td>
<td>Chemistry</td>
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<td></td>
<td><strong>Title:</strong> “Green” size-selection and concentration of unfunctionalized silver nanoparticles for SERS-based sensing applications</td>
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<td>3:25</td>
<td>Jessica Dagher</td>
<td>Dr. Ioana Pavel Sizemore</td>
<td>Chemistry</td>
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<tr>
<td></td>
<td><strong>Title:</strong> Transport of Engineered Silver Nano Particles through Saturated Porous Media</td>
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# Session 8: E156B

Session Chair: Dr. Frank Ciarallo, Dr. Nasser Kashou

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<th>Time</th>
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<tr>
<td>1:45</td>
<td>Gregory Noble</td>
<td>Dr. Frank Ciarallo</td>
<td>BIE</td>
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<tr>
<td></td>
<td><strong>Title:</strong> Supplier Decisions in a Two-Retailer, One Supplier Transshipment System with Quantity Discounts</td>
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<tr>
<td>2:05</td>
<td>Victor Middleton</td>
<td>Dr. Frank Ciarallo</td>
<td>BIE</td>
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<tr>
<td></td>
<td><strong>Title:</strong> Imperfect Situation Awareness: Representing the Role of Error and Uncertainty in Modeling, Simulation &amp; Analysis</td>
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<td>2:25</td>
<td>Dewei Guan</td>
<td>Dr. Hong Huang</td>
<td>Mechanical and Materials Engineering</td>
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<td><strong>Title:</strong> Electric wheelchair Design</td>
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<td>2:45</td>
<td>Kirti Kant Paulla</td>
<td>Dr. Amir Farjan</td>
<td>Mechanical and Materials Engineering</td>
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<td><strong>Title:</strong> Molecular Vibrational Effects in Electron Transport of Ultra Thin and Narrow Gas Sensors: An ab-initio Study</td>
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<td>3:05</td>
<td>Tim Osborn</td>
<td>Dr. Amir Farjan</td>
<td>Mechanical and Materials Engineering</td>
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<td><strong>Title:</strong> Computational modeling of silicene hydrogenation</td>
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<tr>
<td>1:45</td>
<td>Michael Tyler</td>
<td>Dr. Tracy Snipe</td>
<td>Political Science</td>
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<tr>
<td></td>
<td><strong>Title:</strong> <em>The Rearview Mirror: A Forward Journey Back</em></td>
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<td>2:05</td>
<td>Thomas Knickerbocker</td>
<td>Dr. Damaris Serrano</td>
<td>Modern Languages</td>
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<tr>
<td></td>
<td><strong>Title:</strong> <em>Los Ninjas, insight into modern Cuba</em></td>
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<td>2:25</td>
<td>Michael Garison</td>
<td>Dr. Damaris Serrano</td>
<td>Modern Languages</td>
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<tr>
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<td><strong>Title:</strong> <em>Innocence Kidnapped</em></td>
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<td>2:45</td>
<td>Angela Borgerding,</td>
<td>Dr. Damaris Serrano</td>
<td>Modern Languages</td>
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<td>Briana Weisner,</td>
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<td>Kourtney Yarger, Ty‐</td>
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<td>ler Chilton</td>
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<td><strong>Title:</strong> <em>The Lost Children of Franco</em></td>
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Posters

ATHLETIC TRAINING

Allison Church
Title: *The Etiology and Management of Achilles Tendon Ruptures*
Undergraduate Student in Athletic Training
Mentor: Tony Ortiz, Athletic Training

BIological SCIENCES

Renalda Munubi
Title: *The Influence of Depth, Rugosity, Food Quality and Primary Productivity on Abundances of Algivorous Fishes in Lake Tanganyika*
Graduate Student in Biological Sciences
Mentor: Yvonne Vedeboncoeur, Bio. Science

Samantha Davis
Title: *How environmental conditions and changing landscapes influence the survival of a rare woodland butterfly, Pieris virginiensis.*
Graduate Student in Biological Sciences
Mentor: Don Cipollini, Biological Sciences

Daniel Hyman
Title: *Moderate Exercise in Mice*

Provides Protection against Diet-Induced Diabetes
Undergraduate Student in Biological Sciences
Mentor: Roberta Pohlman, Biological Sciences

Arlene Maliekal
Title: *Effects of Chronic Exercise on Diet-Induced Obesity in Developing Mice*
Undergraduate Student in Biological Sciences
Mentor: Roberta Pohlman, Biological Sciences

James Readler
Title: *Identification of novel proteins that interact with the Coxackievirus and adenovirus receptor exon 8 (CAR^Ex8))*
Undergraduate Student in Biological Sciences
Mentor: Katherine Excoffon, Biological Sciences

Sapna Varia
Title: *Btf colocalizes with pre-mRNA splicing and mRNA export factors at transcription sites and affects the cellular distribution of mRNAs*
Graduate Student in Biological Sciences
Mentor: Paula Bubulya, Biological Sciences
Alexandra Zelles  
Title: **Positive feedback does not occur between garlic mustard (Alliaria petiolata) and Eurasian earthworms**  
Graduate Student in Biological Sciences  
Mentor: Tom Rooney, Biological Sciences

Alexandria Woodward  
Title: **Effects of salicylic acid and jasmonic acid on defensive chemistry of garlic mustard**  
Undergraduate Student in Biological Sciences  
Mentor: Don Cipollini, Biological Sciences

Jeremy Heath  
Title: **Testing optimal defense theory in Solidago altissima**  
Graduate Student  
Mentor: John Stireman III, Biology

Nickellatt Edwards  
Title: **Characterization of HIV Rev and Tubulin Interactions**  
Undergraduate Student in Clinical Laboratory Science  
Mentor: Mill Miller, Biological Sciences

**BIOCHEMISTRY AND MOLECULAR BIOLOGY**

Khadijah Alnajjar  
Title: **Isolation and Characterization of a Triple Histidine Mutation in the Proton-Collecting Antenna of Cytochrome c Oxidase in Rhodobacter Sphaeroides**  
Graduate Student in Biological Sciences  
Mentor: Lawrence Prochaska, Biochemistry and Molecular Biology

**CHEMISTRY**

Daniel Brown  
Title: **Halogenations of Aryl Substituted Sydnones**  
Graduate Student in Chemistry  
Mentor: Kenneth Turnbull, Chemistry

Mark Duffy  
Title: **Cyclopentadienone Dimers**  
Graduate Student in Chemistry  
Mentor: William Feld, Chemistry

Kelsi Eberst  
Title: **Synthesis of Molybdenum Trinuclear Clusters**  
Undergraduate Student in Pre-Med/Pre-professional health  
Mentor: Vladimir Katovic, Chemistry

Andria Fortney  
Title: **Tailoring the Solubility and Thermal Characteristics of Poly (ether ether ketone)**  
Undergraduate Student in Chemistry  
Mentor: Eric Fossum, Chemistry

Daniel Greene
Title: *Synthesis of Crown Ether-Lithium Phthalocyanine Complexes*
Undergraduate Student in Chemistry
Mentor: William Feld, Chemistry

Michael Krol
Title: *Alkoxyammonium Lithium Phthalocyanines*
GR Student in Chemistry
Mentor: William Feld, Chemistry

Jeremy Lear
Title: *Main Chain Alkoxy Substituted PPV*
Undergraduate Student in Chemistry
Mentor: William Feld, Chemistry

Allie Meyerhoefer
Title: *A Study of the Transport of Different Size Silver Nanoparticles in Saturated Porous Media*
Undergraduate Student in Chemistry
Mentor: Ioana Pavel-Sizemore, Chemistry

Ryan Oostendorp
Title: *Bis(alkoxyphenyl)cyclopentadienones*
GR Student in Chemistry
Mentor: William Feld, Chemistry

Courtney Sutherland
Title: *Poly(arylene ether) prepared from functionalized 3,5-difluorotriphenylphosphine oxide*
Undergraduate Student in Chemistry
Mentor: William Feld, Chemistry

Graduate Student in Chemistry
Mentor: Eric Fossum, Chemistry

Mehmet Tatli
Title: *Facile Synthesis of Functionalized Poly (Arylene Ether Sulphonate)*
Graduate Student in Chemistry
Mentor: Eric Fossum, Chemistry

Triet Truong
Title: *Monitoring the health of Glen Helen Nature Preserve: Can I drink the water?*
Graduate Student in Chemistry
Mentor: Audrey McGowin, Chemistry

Triet Truong
Title: *Identifying new haplotypes and potential cryptic species for marine leeches (Ozobranchus spp.) from Hawaiian and Florida sea turtles based on molecular data*
Graduate Student in Chemistry
Mentor: Audrey McGowin, Chemistry

Kristy Wickman
Title: *Exchange Reaction using 1, 3-bis(1-adamantyl)imidazolium tetrafluoroborate and dilithium phthalocyanine*
Graduate Student in Chemistry
Mentor: William Feld, Chemistry
Austin Williams
Title: Synthesis, characterization and “green” manipulation of un-functionalized silver nanoparticles for SERS-based sensing applications
Undergraduate Student in Biological Sciences
Mentor: Ioana Pavel-Sizemore, Chemistry

**COLLEGE OF NURSING AND HEALTH**

Laura Churchman, Stacey Sherman¹, Brittany Fouts²
Title: Project SMARTCare: Interdisciplinary Collaboration for Development of a Virtual Environment for Bleeding Disorder Education
Undergraduate Student in Nursing, ¹ Undergraduate student in Biomedical Engineering at OSU and AFRL, ² Undergraduate student in Biomedical Engineering at WSU and AFRL
Mentor: Detrice Barry, College of Nursing and Health

Jennifer Schueler
Title: End-Of-Life Care Education for the Intensive Care Nurse
Graduate Student in Nursing
Mentor: Yi-Hui Lee, College of Nursing and Health

**COMMUNITY HEALTH**

Elizabeth Alvarez Paradise
Title: Physical and demographic influences on health related quality of life
Graduate Student
Mentor: Miryoung Lee, Community Health

**COMPUTER SCIENCE**

Pramod Anantharam
Title: Trust Issues in Social and Sensor Networks
Graduate Student in Computer Science
Mentor: Amit Sheth, Computer Science

**EARTH AND ENVIRONMENTAL SCIENCES**

Mohamad Reza Soltanian Pereshkafti
Title: Which Scale of Stratal Architecture are Relevant to Hyporheic-Zone Processes?
Graduate Student in Earth and Environmental Science
Mentor: Robert Ritzi, Earth and Environmental Sciences

Daniel Blake
Title: MASW Determination of Surface Layer Thickness and VS Reconciled with Microtremor
Resonance Analysis—Grenne County, Ohio
Graduate Student in Earth and Environmental Science
Mentor: Ernest Hauser, Earth and Environmental Sciences

Ke Qin
Title: Sustained Aerobic Degradation of Trichloroethylene by Ammonia-Oxidizing Bacteria Naturally Associated with Wetland Plant Roots
Graduate Student in Earth and Environmental Science
Mentor: Abinash Agrawal, Environmental Science

Marcia White
Title: Comparison of Earth Weather and other
Undergraduate Student in Middle Childhood Education
Mentor: Rebecca Teed, Earth and Environmental Sciences

EES LAKE CAMPUS
Leigh Deuter
Title: A review of the Chondrichthyans from the Mississippi System of Northern Alabama, USA
Undergraduate Student in Earth and Environmental Science
Mentor: Chuck Ciampaglio, EES Lake Campus

EMERGENCY MEDICINE
Melissa Bradshaw
Title: Purinergic receptors are critical for cell volume recovery after exposure to hypotonic environments.
Graduate Student
Mentor: James Olson, Emergency Medicine

MARKETING
Heather Boyd
Title: An empirical investigation of the students’ attitudes and opinions toward texting while driving
Undergraduate Student in Marketing
Mentor: Pola Gupta, Marketing

MECHANICAL ENGINEERING
Matthew Finke
Title: Alkaline Fuel Cells
Undergraduate Student in Mechanical Engineering
Mentor: Andrew Hsu, Mechanical Engineering

MODERN LANGUAGES
Francisco Cronin
Title: Fin del Mundo
Undergraduate Student in Spanish
Mentor: Damaris Serrano, Modern Languages
NEUROSCIENCE, CELL BIOLOGY
AND PATHOLOGY (NCBP)

Renee Albers
Title: **Lentiviral Gene Targeting**
Graduate Student in Biological Sciences
Mentor: *Thomas L. Brown, NCBP*

Renee Albers
Title: **Placental, Lineage-Specific Lentiviral Gene Transfer**
Graduate Student in Biological Sciences
Mentor: *Thomas L. Brown, NCBP*

Rebecca Bricker
Title: **Generation of a Labyrinthine-Committed, Placental Progenitor Cell Line**
Graduate Student in Biological Sciences
Mentor: *Thomas Brown, NCBP*

Erica Carey
Title: **Cell-Specific Knockdown of AMPK Alpha Subunits**
Graduate Student in Biological Sciences
Mentor: *Thomas L. Brown, NCBP*

Siham Hourani
Title: **Induced expression of human store-operated calcium channel components: Orai1, Orai3 and STIM1 in stable Drosophila S2 Cell Lines?**
Undergraduate Student in Biological Sciences
Mentor: *Ashot Kozak, NCBP*

J. Chika Morah
Title: **Normoxia Influences Cell Growth and Total Mitochondrial Volume in Cell Culture**
Undergraduate Student in Biological Sciences
Mentor: *Christopher Wyatt, NCBP*

Saif Ahmed
Title: **HCN1 Immunoreactivity of α-motoneurons Following Peripheral Nerve Injury**
Graduate Student in Biological Sciences
Mentor: *Robert Fyffe, NCBP*

Savannah Doliboa
Title: **Lentiviral, Invasive Trophoblast-Specific Gene Targeting**
Undergraduate Student in Biological Sciences
Mentor: *Thomas Brown, NCBP*

Jon Harvey
Title: **Development of Ia Sensory Afferents**
Graduate Student
Mentor: *David Ladle, NCBP*

Angela Krupka
Title: **Lentiviral, Placental Giant Cell-Specific Gene Targeting**
Undergraduate Student in Biological Sciences
Mentor: *Thomas Brown, NCBP*
**PHARMACOLOGY AND TOXICOLOGY**

Theresa Fennell  
**Title:** *ETI-385 as a Novel Anti-emetic Against DrUndergraduate Induced Emesis*  
Undergraduate Student in Biological Sciences  
Mentor: James Lucot, Pharmacology & Toxicology

Emily Smith  
**Title:** *Measurement of Urinary Catecholamines*  
Undergraduate Student in Psychology  
Mentor: James Lucot, Pharmacology & Toxicology

Brooke Johnson  
**Title:** *Hs3A/hs1,2 or Hs3B/hs4 is Sufficient to Mediate TCDD-Induced Inhibition Of the 3'IgH In A Transgenic B-Cell Line*  
Undergraduate Student in Biological Sciences  
Mentor: Courtney Sulentic, Pharmacology and Toxicology

Samantha Spitak  
**Title:** *ETI-415 as a novel anti-emetic against motion and chemical stimuli*  
Undergraduate Student in Biological Sciences  
Mentor: James Lucot, Pharmacology & Toxicology

**PHYSICS**

Devin Todd  
**Title:** *The Mechanisms of Luminescence from ZnO under Electron Irradiation*  
Graduate Student in Physics  
Mentor: Gary Farlow, Physics

James Trame  
**Title:** *Remote Vital Signs Instrument*  
Undergraduate Student in Engineering Physics  
Mentor: Douglas Petkie, Physics

Matthew Bischoff  
**Title:** *Characterization of Composite Materials using Millimeter-wave Techniques*  
Graduate Student in Physics  
Mentor: Doug Petkie, Physics / Electrical Engineering

**POLITICAL SCIENCE**

Rana Odeh  
**Title:** *The Impact of U.S. Media Bias on the Palestinian Israeli Conflict*  
Graduate Student in Political Science  
Mentor: Vaughn Shannon, Political Science
Seanceray Bellinger  
Title: *Bio-Behavioral Analysis of a Dual-Exposure Pesticide Model and its Implications in a Silent Vulnerability to Parkinson’s Disease*  
Graduate Student in Psychology  
Mentor: Gale Kleven, Psychology

Christina Estrada  
Title: *Maternal behavior impacts during development of the PITX3 Parkinson’s mouse*  
Graduate Student in Psychology  
Mentor: Gale Kleven, Psychology

Ashley Ford  
Title: *Improving vigilance: Binaural beat technology and vigilance task performance*  
Undergraduate Student in Psychology  
Mentor: Gary Burns, Psychology

Michael Hoepf  
Title: *A job is what you craft it: A critical review of popular self-help*  
Graduate Student in Psychology  
Mentor: Nathan Bowling, Psychology

Sarah Jackson  
Title: *Assessment of Implicit Attitudes toward Women Faculty in STEM*  
Graduate Student in Psychology  
Mentor: Tamera Schneider, Psychology

Lindsey Keene  
Title: *Transient Prenatal and Postnatal Behavioral Deficits after Low-Dose Prenatal Toxin Exposure*  
Graduate Student  
Mentor: Gale Kleven, Psychology

Steven Khazon  
Title: *Emotional Intelligence as a moderator for self-reported questionnaires*  
Graduate Student in Psychology  
Mentor: Nathan Bowling, Psychology

Leah Miller  
Title: *Perceptions of Masculinity and Femininity from Resumes*  
Undergraduate Student in Psychology  
Mentor: Gary Burns, Psychology

Emily Polander  
Title: *“We’re Bringing Bio Back”: Putting Biomedical Back into Lay Mental Models of Alcoholism*  
Graduate Student in Psychology  
Mentor: Valerie Shalin, Psychology
Zachary Vallandingham  
Title: *Effects of elevated glucocorticoids on dentate gyrus development*  
Graduate Student  
Mentor: Dragana Claflin, Psychology

Sarah Wood  
Title: *One Week Retention of Classical Eyeblink Conditioning in Pre-Weanling and Weanling Rats*  
Graduate Student in Psychology  
Mentor: Dragana Claflin, Psychology

**SOCIAL WORK**

Caitlin McGee  
Title: *Horticultural Therapy with Juvenile Offenders and Their Families*  
Undergraduate Student in Social Work  
Mentor: Sarah Twill, Social Work

Rebecca Holtkamp  
Title: *Integrating Schools With Mental Health Systems*  
Undergraduate Student in Social Work  
Mentor: Carl Brun, Social Work
SAVE THE DATE

Fourth Annual Research Celebration
Friday, April 12, 2013

Fifth Annual Research Celebration
Friday, April 11, 2014