CELEBRATION OF RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITIES
Friday, April 12, 2013

PREMIER SPONSOR

RESEARCH SPONSOR

SCHEDULE OF EVENTS

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

Conference Check-In and Registration: 7:30 am—11:30 am
Student Union Atrium

Oral Presentation, Morning Session: 9 am—11:20 am
Student Union, E156, E157, E163
COLA Dean’s Colloquium, E156B

Poster Presentations and Lunch: 11:40 am—1:30 pm
Apollo Room, Student Union

Oral Presentations, Afternoon Session: 1:45—3:45 pm
Student Union, E156 A
### Session 1: E156A
**COLA Dean’s Colloquium**  
Session Chair: Linda Caron

<table>
<thead>
<tr>
<th>Time</th>
<th>Student</th>
<th>Faculty Mentor</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Crystal Whetstone</td>
<td>December Green</td>
<td>Political Science</td>
</tr>
<tr>
<td>9:20</td>
<td>Ambreen Hasan and Langdon Sanders</td>
<td>Myron Levine</td>
<td>Urban Affairs and Geography</td>
</tr>
<tr>
<td>9:40</td>
<td>Rebecca Cantrell</td>
<td>Karen Lahm</td>
<td>Sociology and Anthropology</td>
</tr>
<tr>
<td>10</td>
<td>Lisa Marie Ewing</td>
<td>Andrea Harris</td>
<td>Master of Humanities Program</td>
</tr>
</tbody>
</table>

**Title: Is the Motherist Approach More Helpful in Obtaining Women’s Rights than a Feminist Approach? A Comparative Study of Lebanon and Liberia**

**Title: Three Times a Week: Mapping the Transportation of Dialysis Patients in Dayton, Ohio**

**Title: Are Zero-Tolerance Policies Enough? A synthetic meta-analysis of bully prevention programs**

**Title: Dangerous Feminine Sexuality: Biblical Metaphors and Sexual Violence Against Women**
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Presenter(s)</th>
<th>Faculty Mentor</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td><strong>Student Leadership Identity Development: Narratives from Women as Leaders</strong></td>
<td>Christen Johnson</td>
<td>Romena Holbert</td>
<td>Teach Education</td>
</tr>
<tr>
<td>9:20</td>
<td><strong>Career Identity Development: How Teacher Candidates Develop Core Structures</strong></td>
<td>Jody Hayes</td>
<td>Romena Holbert</td>
<td>Teacher Education</td>
</tr>
<tr>
<td>9:40</td>
<td><strong>Creating Guidelines to Encourage Sustained Silent Reading</strong></td>
<td>Ellen Gilbert</td>
<td>Tracey Kramer</td>
<td>Teacher Education</td>
</tr>
<tr>
<td>10:00</td>
<td><strong>GO - Graphic Organizers in Education</strong></td>
<td>Daniel Long</td>
<td>Richele O'Connor</td>
<td>Teacher Education</td>
</tr>
<tr>
<td>10:20</td>
<td><strong>Going Digital: Learning to Write by Reading Digital Mentor Texts</strong></td>
<td>Jessica Herrmann</td>
<td>Richele O'Connor</td>
<td>Teacher Education</td>
</tr>
<tr>
<td>10:40</td>
<td><strong>Effective Grouping in Middle Level Classrooms</strong></td>
<td>Kelsey Cordonnier</td>
<td>Nimisha Patel</td>
<td>Teacher Education</td>
</tr>
<tr>
<td>11:00</td>
<td><strong>Nonexistence of Two Circulant Weighing Matrices of Weight 81</strong></td>
<td>Amanda Roddy</td>
<td>Timothy Boester</td>
<td>Mathematics and Statistics and Teacher Education</td>
</tr>
<tr>
<td>Time</td>
<td>Name</td>
<td>Mentors</td>
<td>Department</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>---------------------</td>
<td>----------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>9:20</td>
<td>Larissa Swartz</td>
<td>Damaris Serrano</td>
<td>Modern Languages</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Title:</em> <em>Pobre la María</em> - <em>A look at poverty and inequality in Latin America</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:40</td>
<td>Kaitlyn Williams</td>
<td>Damaris Serrano</td>
<td>Modern Languages</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Title:</em> <em>El poder mágico del español: Une perspectiva mundial</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:20</td>
<td>Joy Hyatt</td>
<td>Karla Huebner</td>
<td>Art and Art History</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Title:</em> <em>Digital Curation and Information Management: Technological Changes in Art History</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:40</td>
<td>Megan Hague and Kyle Wilkinson</td>
<td>Tracy Longley-Cook</td>
<td>Art and Art History</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Title:</em> <em>Emmet Gowin: A Documentary Short</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td>Orly Leiva</td>
<td>Mariana Morris</td>
<td>Pharmacology and Toxicology</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Title:</em> <em>The Characterization of Prolyl Carboxypeptidase In Renal Pathologies</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Session 4: E163A
Moderators: Katherine Excoffon and Lynn Hartzler

<table>
<thead>
<tr>
<th>Student</th>
<th>Faculty Mentor</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trisha Brockman</td>
<td>Katherine Excoffon</td>
<td>Biological Sciences</td>
</tr>
<tr>
<td><strong>9</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poornina Kotha</td>
<td>Katherine Excoffon</td>
<td>Biological Sciences</td>
</tr>
<tr>
<td>Lakshmi Narayan</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>9:20</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>James Readler</td>
<td>Katherine Excoffon</td>
<td>Biological Sciences</td>
</tr>
<tr>
<td><strong>9:40</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ran Yan</td>
<td>Katherine Excoffon</td>
<td>Biological Sciences</td>
</tr>
<tr>
<td><strong>10</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joseph Santin</td>
<td>Lynn Hartzler</td>
<td>Biological Sciences</td>
</tr>
<tr>
<td><strong>10:20</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amanda Sherwood</td>
<td>Lynn Hartzler</td>
<td>Biological Sciences</td>
</tr>
<tr>
<td><strong>10:40</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natalie Orndorf</td>
<td>Lynn Hartzler</td>
<td>Biological Sciences</td>
</tr>
<tr>
<td><strong>11:00</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Title:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Src-family kinases alter the apical expression of the coxsackie and adenovirus receptor in polarized epithelial cells</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Title:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interleukin-8 regulates the expression of the eight-exon isoform of the Coxsackievirus and adenovirus receptor in airway epithelial cells.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Title:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Peptide Mediated Regulation of Adenoviral Infection</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Title:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mechanism of MAGI-1-mediated degradation of the eight-exon encoded coxsackievirus and adenovirus receptor isoform (CAREx8)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Title:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Temperature influences CO2/pH-sensitivity in locus coeruleus neurons of the bullfrog, Lithobates catesbeianus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Title:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stroke to Breath Ratio Impacts Swimming Performance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Title:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Serving Size Contributes to Obesity</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


# Session 5: E163B
Moderator: Chad Hammerschmidt

<table>
<thead>
<tr>
<th>Time</th>
<th>Student</th>
<th>Faculty Mentor</th>
<th>Department</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Erin Best</td>
<td>Jason Deibel</td>
<td>Physics</td>
<td>Title: <em>Flexible Terahertz Metamaterials for Frequency Selective Surfaces</em></td>
</tr>
<tr>
<td>9:20</td>
<td>Ryan Shaver</td>
<td>Jason Deibel</td>
<td>Physics</td>
<td>Title: <em>Ceramic Protecting Coating Analysis Using Terahertz Imaging</em></td>
</tr>
<tr>
<td>9:40</td>
<td>Alyssa Fosnight</td>
<td>Ivan Medvedev</td>
<td>Physics</td>
<td>Title: <em>Diagnostic Chemical Analysis of Exhaled Human Breath using a Novel Terahertz (THz) Spectroscopic Approach</em></td>
</tr>
<tr>
<td>10</td>
<td>Laura Bailey</td>
<td>David Dolson</td>
<td>Chemistry</td>
<td>Title: <em>Kinetics of Collisonal E-V Energy Transfer from Cl</em> to CO2*</td>
</tr>
<tr>
<td>10:20</td>
<td>Ryan Selhorst</td>
<td>Eric Fossum</td>
<td>Chemistry</td>
<td>Title: <em>Introducing Chemical Diversity to Poly(Arylene ether)s via N-Phenyl-3,5-Difluorobenzene Sulfonamides</em></td>
</tr>
<tr>
<td>10:40</td>
<td>Deepthi Nalluri</td>
<td>Chad Hammerschmidt</td>
<td>Earth &amp; Environmental Science</td>
<td>Title: <em>The Speciation of Shark and Mercury in Commercially Prepared Shark Fin Soup</em></td>
</tr>
<tr>
<td>11:00</td>
<td>Pamela Cullen</td>
<td>Thomas Wischgoll</td>
<td>Engineering</td>
<td>Title: <em>Testing for Suitability of Display Devices in a Virtual Environment</em></td>
</tr>
</tbody>
</table>
### Session 6: E157
**Moderator:** Kera Watkins

<table>
<thead>
<tr>
<th>Time</th>
<th>Student</th>
<th>Faculty Mentor</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Isiah Kendall and Anthony Vicini</td>
<td>Tarun Goswami</td>
<td>Biomedical, Industrial and Human Factors Engineering (BIE)</td>
</tr>
<tr>
<td></td>
<td><strong>Title:</strong> <em>Evaluation of Forces in Helmet Collision and Concussion Risk</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:20</td>
<td>Brenna Giacherio</td>
<td>Nasser Kashou</td>
<td>BIE</td>
</tr>
<tr>
<td></td>
<td><strong>Title:</strong> <em>Functional Near-Infrared Spectroscopy (fNIRS) for Visual Cortical Testing</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:40</td>
<td>Irfan Dar</td>
<td>Nasser Kashou</td>
<td>BIE</td>
</tr>
<tr>
<td></td>
<td><strong>Title:</strong> <em>Near Infrared Spectroscopy for Functional Study of Brain Activity in Infants</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Kevin Hatcher</td>
<td>Nasser Kashou</td>
<td>BIE</td>
</tr>
<tr>
<td></td>
<td><strong>Title:</strong> <em>DTI for Quantification and Analysis in Neuroimaging Data</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:20</td>
<td>Ali Kadhim</td>
<td>Nasser Kashou</td>
<td>BIE</td>
</tr>
<tr>
<td></td>
<td><strong>Title:</strong> <em>Concepts for Designing and Engineering Left Ventricular Assistance Devices (LVADs)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:40</td>
<td>Murad Althobaiti</td>
<td>Nasser Kashou</td>
<td>BIE</td>
</tr>
<tr>
<td></td>
<td><strong>Title:</strong> <em>Near Infrared Photon Propagation in Human Brain Based on Magnetic Resonance Imaging</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td>Haelom Milash</td>
<td>Phani Kidambi</td>
<td>BIE</td>
</tr>
<tr>
<td></td>
<td><strong>Students drinking coffee and level of studying</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Student</td>
<td>Faculty Mentor</td>
<td>Department</td>
</tr>
<tr>
<td>-------</td>
<td>------------------</td>
<td>---------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>1:45</td>
<td>Remah Ali</td>
<td>Steven Berberich</td>
<td>Biochemistry and Molecular Biology</td>
</tr>
<tr>
<td></td>
<td><em>Title:</em> Down Regulation of YPEL3 in MCF-7 Breast Cancer Cell Line Involves Histone Deacetylation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:05</td>
<td>Brooke Johnson</td>
<td>Courtney Sulentic</td>
<td>Pharmacology and Toxicology</td>
</tr>
<tr>
<td></td>
<td><em>Title:</em> TCDD Alters IgM and IgG Secretion in a Human B Cell Line</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:25</td>
<td>Erica Carey</td>
<td>Thomas L. Brown</td>
<td>NCBP</td>
</tr>
<tr>
<td></td>
<td><em>Title:</em> AMPK Knockdown in Labyrinthine Trophoblast Cells Results in Altered Morphology and Function</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:45</td>
<td>Genesis Hines</td>
<td>Heather Hostetler</td>
<td>Biochemistry and Molecular Biology</td>
</tr>
<tr>
<td></td>
<td><em>Title:</em> Fatty Acids and their Thioester Derivatives as Potential Endogenous Ligands of LXRα</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:05</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Session 9: E156B
**Moderator:** Yuqing Chen

<table>
<thead>
<tr>
<th>Time</th>
<th>Student</th>
<th>Faculty Mentor</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:45</td>
<td>Hamza Abdel-Latif</td>
<td>KT. Arasu</td>
<td>Mathematics and Statistics</td>
</tr>
<tr>
<td></td>
<td><em>Title:</em> Updating Arasu-Gutman table on circulant weighing matrices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:05</td>
<td>Heather Smith</td>
<td>KT. Arasu</td>
<td>Mathematics and Statistics</td>
</tr>
<tr>
<td></td>
<td><em>Title:</em> A Survey of Hadamard Matrices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:25</td>
<td>Venkateswaran Hariharan</td>
<td>KT. Arasu</td>
<td>Mathematics and Statistics</td>
</tr>
<tr>
<td></td>
<td><em>Title:</em> The Constructions of Almost Binary Sequence Pairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:45</td>
<td>Kyle Bayes</td>
<td>KT. Arasu</td>
<td>Mathematics and Statistics</td>
</tr>
<tr>
<td></td>
<td><em>Title:</em> Teachers' Beliefs of Calculators in the Classroom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:05</td>
<td>Kiran Kumar Vaidyanathan</td>
<td>KT. Arasu</td>
<td>Mathematics and Statistics</td>
</tr>
<tr>
<td></td>
<td><em>Title:</em> Signal-To-Noise Ratio (SNR) Enhancement Using Digital Watermarking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Poster Presentations**

**Accountancy**

Daniel Shafer  
Title: *Federal Financial Whistleblower Acts*  
Undergraduate student in Accountancy  
Mentor: Kevin Brown, Accountancy

**AFRL**

Monica Leslie  
Title: *Discovery Lab*  
Undergraduate student in Biomedical Engineering  
Mentor: Robert Williams, AFRL Research Director

**Biochemistry and Molecular Biology (BMB)**

Khadijeh Alnajjar  
Title: *The Role of the N-Terminus of Subunit III in Protein Uptake in Cytochrome C Oxidase of Rhodobacter Sphaeroides*  
Graduate student in Biological Sciences  
Mentor: Lawrence Prochaska, BMB

Joanna Barthelemy  
Title: *Altered Replication in Human Cells Promotes DMPK (CTG)n -(CAG)n Repeat Instability*  
Graduate student in Undecided  
Mentor: Michael Leffak, BMB

Natasha Hill  
Title: *Differential dose effects of 1α25-dihydroxyvitamin D3 on keratinocyte proliferation and ΔNp63a stabilization*  
Graduate student in Undecided  
Mentor: Madhavi Kadakia, BMB

**Andrea Smith**  
Title: *Gel shift analysis of conditions influencing regulation of the human SREBP-1c gene by nuclear receptor proteins*  
Undergraduate student in Biological Sciences  
Mentor: Heather Hostetler, BMB

**Biological Science**

Jonathan Ali  
Title: *Effects of soil biota and rhizosphere extract from non-native Lonicera maackii on the native Impatiens capensis.*  
Undergraduate student in Biological Sciences  
Mentor: Don Cipollini, Biological Sciences

Elizabeth Coe  
Title: *Host-parasite associations in avian malaria: a model of coevolution*  
Undergraduate student in Biological Sciences  
Mentor: Jeffrey Peters, Biological Sciences

Uohna Foster  
Title: *Identification of Central CO2/pH Chemosensory Regions Involved in Respiratory Control in Poikilothermic Vertebrates*  
Graduate student in Biological Sciences
Education
Mentor: Lynn Hartzler, Biological Sciences

Emily King
Title: Co-evolution of Mitochondrial and Nuclear Genomes in Caenorhabditis
Graduate student in Biological Sciences
Mentor: Scott E. Baird, Biological Sciences

Sterling Martin
Title: The Coxsackievirus and adenovirus receptor interacts with PDZ3 of the cellular scaffolding protein MAGI-1
Graduate student in Biological Sciences
Mentor: Katherine Excoffon, Biological Sciences

Durval Rodrigues Castelo Branco Neto
Title: Site-directed mutagenesis: changing an amino acid in the JamL gene sequence
Undergraduate student in Biological Sciences
Mentor: Katherine Excoffon, Biological Sciences

Sara Seibert
Title: Assortative Fertilization in the Elegans-Group of Caenorhabditis
Graduate student in Biological Sciences
Mentor: Scott E. Baird, Biological Sciences

Leah Shurte
Title: Genetic Diversity and Differentiation in Egyptian Geese of Southern Africa
Undergraduate student in Biological Sciences
Mentor: Jeffery Peters, Biological Sciences

Kayla Watters
Title: Hypercapnic Acidosis Influences Action Potential Properties in Chemosensitive Locus Coeruleus Neurons in Bullfrogs (Lithobates catesbeianus)
Undergraduate student in Biological Sciences
Mentor: Lynn Hartzler, Biological Sciences

Biomedical, Industrial and Human Factors Engineering

Jacob Brewer
Title: The effects of psychological stress on learning and performance during a surgical skills training task
Graduate student in Psychology
Mentor: Caroline Cao, Engineering

Robert Myers
Title: Advanced Care Practitioner Staffing at Trauma Centers: A Simulation-Optimization Approach
Graduate student in Industrial and Systems Engineering
Mentor: Pratik J. Parikh, CECS/BIE

Chemistry

Mary Abraham
Title: Dual-stimuli Responsive Poly(ethyleneimine)s with a Tunable LCST for Gene Delivery
Graduate student in Chemistry
Mentor: Eric Fossum, Chemistry
Trevor Bobka
Title: Optimizing silver nanoparticle size and excitation wavelength for single-molecule SERRS-based detection
Undergraduate student in Chemistry
Mentor: Ioana Pavel Sizemore, Chemistry

Candra McDonald
Title: Quantifying the accumulation of silver nanoparticles in freshwater crayfish tissue by ICP-OES
Graduate student in Undecided
Mentor: Ioana Sizemore, Chemistry
Ryan Oostendorp
Title: Bis(alkoxyphenyl)cyclopentadienones

Graduate student in Chemistry
Mentor: William Feld, Chemistry
Triet Truong
Title: Monitoring the Health of Glen Helen Nature Preserve: Fall 2012 Sediment and Water
Graduate student in Chemistry
Mentor: Audrey McGowin, Chemistry

College of Nursing & Health
Krista Sheehan
Title: The Effects of Distraction by a Child Life Specialist on Pediatric Pain and Distress During Voiding Cystourethrogram
Undergraduate student in Nursing
Mentor: Donna Miles Curry, College of Nursing & Health
Karen Herzing
Title: Integration of Premature Infants into Family Life
Undergraduate student in Nursing
Mentor: Rosalie Mainous, College of Nursing and Health

Pratibha Nigam
Title: Development of an educational tool for low risk pregnant women attending Centering
Undergraduate student in Nursing
Mentor: Eustace, College of Nursing and Health

Janos Roper
Title: Compassion Fatigue-A Global Concern (When Caring Hurts)
Undergraduate student in Nursing
Mentor: Ann Bowling, College of Nursing and Health

Community Health
Athena Fannin
Title: Filling the gaps in general emergency shelters: Flow processes for functional needs service triage.
Graduate student in Pre-Med/Pre-professional health
Mentor: Sylvia Ellison, Community Health

Kelly Leach
Title: Mapping the effects of khat (Catha edulis) and tabacco on the human brain: A biological illustration supporting the common pattern of dual substance use among East Afri-

Earth & Environmental Science
Robin Richardson-Coy
Title: Diatom Identification Handbook for the Glen Helen Nature Preserve, Yellow Springs, Ohio
Undergraduate student in Earth and Environmental Science
Mentor: Rebecca Teed, Earth & Environmental Science

Paul Fleischman
Title: Phosphate Speciation of the Little Miami River
Undergraduate student in Earth and Environmental Science
Mentor: Songlin Cheng, Earth & Environmental Sciences

Elizabeth Freeman
Title: Crystal Lake Sediment Core: Loss on Ignition
Undergraduate student in Earth and Environmental Science
Mentor: Rebecca Teed, Earth and Environmental Sciences

Katelyn Runyon
Title: A Safer Alternative Method For Chemically Breaking Down Vertebrate Fossil Bearing Carbonates
Undergraduate student in Earth and Environmental Science
Mentor: Chuck Ciampaglio, Earth & Environmental Sciences – Lake Campus
Michael Taylor
Title: *Project Title: Exhumation, Preparation and Analysis of the Dentition and Oral Cavity of the Late Devonian Chondrichthyan Cladoselache*
Undergraduate student in Liberal Studies
Mentor: Charles Ciampaglio, *Earth & Environmental Sciences – Lake Campus*

**Electrical Engineering**
Kandarp Patel
Title: *Analysis of Human Echolocation Waveforms for Radar Target Recognition*
Graduate student in Electrical Engineering
Mentor: Arnab Shaw, *Electrical Engineering*

**Engineering**
Jacob Brewer
Title: *The effects of psychological stress on learning and performance during a surgical skills training task*
Graduate student in Psychology
Mentor: Caroline Cao, *Engineering*

**Neuroscience, Cell Biology and Physiology (NCBP)**
Renee Albers
Title: *Prolonged Expression of Hypoxia-Inducible Factor 1 alpha (HIF-1α) Leads to Placental Abnormalities*
Graduate student in Microbiology and Immunology

**Electrical Engineering**
Kandarp Patel
Title: *Analysis of Human Echolocation Waveforms for Radar Target Recognition*
Graduate student in Electrical Engineering
Mentor: Arnab Shaw, *Electrical Engineering*

**Engineering**
Jacob Brewer
Title: *The effects of psychological stress on learning and performance during a surgical skills training task*
Graduate student in Psychology
Mentor: Caroline Cao, *Engineering*

**Neuroscience, Cell Biology and Physiology (NCBP)**
Renee Albers
Title: *Prolonged Expression of Hypoxia-Inducible Factor 1 alpha (HIF-1α) Leads to Placental Abnormalities*
Graduate student in Microbiology and Immunology

**Electrical Engineering**
Kandarp Patel
Title: *Analysis of Human Echolocation Waveforms for Radar Target Recognition*
Graduate student in Electrical Engineering
Mentor: Arnab Shaw, *Electrical Engineering*

**Engineering**
Jacob Brewer
Title: *The effects of psychological stress on learning and performance during a surgical skills training task*
Graduate student in Psychology
Mentor: Caroline Cao, *Engineering*

**Neuroscience, Cell Biology and Physiology (NCBP)**
Renee Albers
Title: *Prolonged Expression of Hypoxia-Inducible Factor 1 alpha (HIF-1α) Leads to Placental Abnormalities*
Graduate student in Microbiology and Immunology

**Electrical Engineering**
Kandarp Patel
Title: *Analysis of Human Echolocation Waveforms for Radar Target Recognition*
Graduate student in Electrical Engineering
Mentor: Arnab Shaw, *Electrical Engineering*

**Engineering**
Jacob Brewer
Title: *The effects of psychological stress on learning and performance during a surgical skills training task*
Graduate student in Psychology
Mentor: Caroline Cao, *Engineering*

**Neuroscience, Cell Biology and Physiology (NCBP)**
Renee Albers
Title: *Prolonged Expression of Hypoxia-Inducible Factor 1 alpha (HIF-1α) Leads to Placental Abnormalities*
Graduate student in Microbiology and Immunology

**Electrical Engineering**
Kandarp Patel
Title: *Analysis of Human Echolocation Waveforms for Radar Target Recognition*
Graduate student in Electrical Engineering
Mentor: Arnab Shaw, *Electrical Engineering*

**Engineering**
Jacob Brewer
Title: *The effects of psychological stress on learning and performance during a surgical skills training task*
Graduate student in Psychology
Mentor: Caroline Cao, *Engineering*

**Neuroscience, Cell Biology and Physiology (NCBP)**
Renee Albers
Title: *Prolonged Expression of Hypoxia-Inducible Factor 1 alpha (HIF-1α) Leads to Placental Abnormalities*
Graduate student in Microbiology and Immunology

**Electrical Engineering**
Kandarp Patel
Title: *Analysis of Human Echolocation Waveforms for Radar Target Recognition*
Graduate student in Electrical Engineering
Mentor: Arnab Shaw, *Electrical Engineering*

**Engineering**
Jacob Brewer
Title: *The effects of psychological stress on learning and performance during a surgical skills training task*
Graduate student in Psychology
Mentor: Caroline Cao, *Engineering*

**Neuroscience, Cell Biology and Physiology (NCBP)**
Renee Albers
Title: *Prolonged Expression of Hypoxia-Inducible Factor 1 alpha (HIF-1α) Leads to Placental Abnormalities*
Graduate student in Microbiology and Immunology


**Pharmacology & Toxicology**

Romario Pacheco Andrade
Title: **Western Blotting technique: The Experience of an undergraduate**
Undergraduate student in Biological Sciences
Mentor: Mauricio DiFulvio, P Pharmacology & Toxicology

Mahmoud Alghamri
Title: **Myocardial Angiotensin Metabolism analysis Using Matrix-Assisted Laser Desorption Ionization (MALDI) Imaging**
Graduate student in Undecided
Mentor: Mariana Morris, Pharm-Tox

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

Abdullah Freiwan
Title: **TCDD-induced modulation of Ig expression in a human B lymphocyte cell line**
Graduate student in Biological Sciences
Mentor: Courtney Sulentic, Pharmacology & Toxicology

Nagendra Babu Ravilla
Title: **Physiological factors affecting Rb influx in K-Cl cotransporter 3 (KCC3)-transfected human embryonic kidney 293 (HEK293) cells**
Graduate student in Biological Sciences
Mentor: Norma Adragna, Pharmacology & Toxicology

**Political Science**

Keith McCarty
Title: **To Rebuild or Remove?: Assessing Intervention Successes in Failed States**
Graduate student in Political Science
Mentor: Vaughn Shannon, Political Science

**Psychology**

Leah Miller
Title: **Sexual Minority and Ally Brain Drain in Ohio: Survey Design and Pilot Study**
Undergraduate student in Psychology
Mentor: Gary Burns, Psychology

Megan Morris and Lesley Burdiss
Title: **Perceptions of Masculinity and Femininity of Alcoholic Beverages**
Undergraduate student in Psychology
Mentor: Gary Burns, Psychology
Megan Morris and Jennifer Deskins
Title: Beliefs about the Structure of Sexual Orientation
Graduate student in Psychology
Mentor: Gary Burns, Psychology

Emily Polander
Title: My doctor told me to….so I did: Linguistic indicators of agency and adherence in hypertension online discussion forums.
Graduate student in Psychology
Mentor: Valerie Shalin, Psychology

**Sociology**

Sociology Club
Title: Sociology Club Research
Undergraduate student in Liberal Studies
Mentor: Jonathan Varhola, Sociology

**Teacher Education**

Caitlin Bernard
Title: How does implementing games before or after a lesson affect students’ comprehension of the content and motivation in class?
Graduate student in Middle Childhood Education
Mentor: Lee Welz, Teacher Education
SCHEDULE OF EVENTS
CELEBRATION OF RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITIES
Friday, April 12, 2013

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