



WRIGHT STATE  
UNIVERSITY

CHANGING LIVES

**CELEBRATION OF  
RESEARCH, SCHOLARSHIP, AND  
CREATIVE ACTIVITIES**

**Friday, April 12, 2013**

**SCHEDULE OF  
EVENTS**

RESEARCH

SCHOLARSHIP

CREATIVE  
ACTIVITIES

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## *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—3:45pm  
*Student Union, E156 A*

**Session 1: E156A**  
**COLA Dean's Colloquium**

Session Chair: Linda Caron

<i>Student</i>	<i>Faculty Mentor</i>	<i>Department</i>
9	Crystal Whetstone December Green	Political Science
<i>Title: Is the Motherist Approach More Helpful in Obtaining Women (s Rights than a Feminist Approach? A Comparative Study of Lebanon and Liberia</i>		
9:20	Ambreen Hasan and Langdon Sanders Myron Levine	Urban Affairs and Geography
<i>Title: Three Times a Week: Mapping the Transportation of Dialysis Patients in Dayton, Ohio</i>		
9:40	Rebecca Cantrell Karen Lahm	Sociology and Anthropology
<i>Title: Are Zero-Tolerance Policies Enough? A synthetic meta-analysis of bully prevention programs</i>		
10	Lisa Marie Ewing Andrea Harris	Master of Humanities Program
<i>Title: Dangerous Feminine Sexuality: Biblical Metaphors and Sexual Violence Against Women</i>		
10:20		
10:40		

## Session 2: E156B

Moderator: Steve Angle

	<i>Student</i>	<i>Faculty Mentor</i>	<i>Department</i>
9	Christen Johnson	Romena Holbert	Teach Education
	<i>Title: Student Leadership Identity Development: Narratives from Women as Leaders</i>		
9:20	Jody Hayes	Romena Holbert	Teacher Education
	<i>Title: Career Identity Development: How Teacher Candidates Develop Core Structures</i>		
9:40	Ellen Gilbert	Tracey Kramer	Teacher Education
	<i>Title: Creating Guidelines to Encourage Sustained Silent Reading</i>		
10	Daniel Long	Richele O'Connor	Teacher Education
	<i>Title: GO - Graphic Organizers in Education</i>		
10:20	Jessica Herrmann	Richele O'Connor	Teacher Education
	<i>Title: Going Digital: Learning to Write by Reading Digital Mentor Texts</i>		
10:40	Kelsey Cordonnier	Nimisha Patel	Teacher Education
	<i>Title: Effective Grouping in Middle Level Classrooms</i>		
11:00	Amanda Roddy	Timothy Boester	Mathematics and Statistics and Teacher Education
	<i>Title: Nonexistence of Two Circulant Weighing Matrices of Weight 81</i>		

### Session 3: E156C

Moderator: Gary Burns

<i>Student</i>	<i>Faculty Mentors</i>	<i>Department</i>
9 Thomas Knickerbocker <i>Title: Entre las líneas: Meditaciones y Reflexiones</i>	Damaris Serrano	Modern Languages
9:20 Larissa Swartz <i>Title: Pobre la María - A look at poverty and inequality in Latin America</i>	Damaris Serrano	Modern Languages
9:40 Kaitlyn Williams <i>Title: El poder mágico del español: Una perspectiva mundial</i>	Damaris Serrano	Modern Languages
10 Brenda Jones <i>Title: El Amuleto de Pelo</i>	Damaris Serrano	Modern Languages
10:20 Joy Hyatt <i>Title: Digital Curation and Information Management: Technological Changes in Art History</i>	Karla Huebner	Art and Art History
10:40 Megan Hague and Kyle Wilkinson <i>Title: Emmet Gowin: A Documentary Short</i>	Tracy Longley-Cook	Art and Art History
11:00 Orly Leiva <i>Title: The Characterization of Prolyl Carboxypeptidase In Renal Pathologies</i>	Mariana Morris	Pharmacology and Toxicology

## Session 4: E163A

Moderators: Katherine Excoffon and Lynn Hartzler

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<i>Student</i>	<i>Faculty Mentor</i>	<i>Department</i>
9 Trisha Brockman	Katherine Excoffon	Biological Sciences
<i>Title: Src-family kinases alter the apical expression of the coxsackie and adenovirus receptor in polarized epithelial cells</i>		
9:20 Poornina Kotha Lakshmi Narayan	Katherine Excoffon	Biological Sciences
<i>Title: Interleukin-8 regulates the expression of the eight-exon isoform of the Cxsackievirus and adenovirus receptor in airway epithelial cells.</i>		
9:40 James Readler	Katherine Excoffon	Biological Sciences
<i>Title: Peptide Mediated Regulation of Adenoviral Infection</i>		
10 Ran Yan	Katherine Excoffon	Biological Sciences
<i>Title: Mechanism of MAGI-1-mediated degradation of the eight-exon encoded coxsackievirus and adenovirus receptor isoform (CAREx8)</i>		
10:20 Joseph Santin	Lynn Hartzler	Biological Sciences
<i>Title: Temperature influences CO<sub>2</sub>/pH-sensitivity in locus coeruleus neurons of the bullfrog, <i>Lithobates catesbeianus</i></i>		
10:40 Amanda Sherwood	Lynn Hartzler	Biological Sciences
<i>Title: Stroke to Breath Ratio Impacts Swimming Performance</i>		
11:00 Natalie Orndorf	Lynn Hartzler	Biological Sciences
<i>Title: Serving Size Contributes to Obesity</i>		

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## Session 5: E163B

Moderator: Chad Hammerschmidt

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

## Session 6: E157

Moderator: Kera Watkins

	<i>Student</i>	<i>Faculty Mentor</i>	<i>Department</i>
9	Isiah Kendall and Anthony Vicini	Tarun Goswami	Biomedical, Industrial and Human Factors Engineering (BIE)
	<i>Title: Evaluation of Forces in Helmet Collision and Concussion Risk</i>		
9:20	Brenna Gi-acherio	Nasser Kashou	BIE
	<i>Title: Functional Near-Infrared Spectroscopy (fNIRS) for Visual Cortical Testing</i>		
9:40	Irfaan Dar	Nasser Kashou	BIE
	<i>Title: Near Infrared Spectroscopy for Functional Study of Brain Activity in Infants</i>		
10	Kevin Hatcher	Nasser Kashou	BIE
	<i>Title: DTI for Quantification and Analysis in Neuroimaging Data</i>		
10:20	Ali Kadhim	Nasser Kashou	BIE
	<i>Title: Concepts for Designing and Engineering Left Ventricular Assistance Devices (LVADs)</i>		
10:40	Murad Althobaiti	Nasser Kashou	BIE
	<i>Title: Near Infrared Photon Propagation in Human Brain Based on Magnetic Resonance Imaging</i>		
11:00	Haielom Milash	Phani Kidambi	BIE
	<i>Students drinking coffee and level of studying</i>		



## Session 8: E157

Moderator: Ioana Pavel Sizemore

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<i>Student</i>	<i>Faculty Mentor</i>	<i>Department</i>
1:45 Remah Ali	Steven Berberich	Biochemistry and Molecular Biology
<i>Title: Down Regulation of YPEL3 in MCF-7 Breast Cancer Cell Line Involves Histone Deacetylation</i>		
2:05 Brooke Johnson	Courtney Sulentic	Pharmacology and Toxicology
<i>Title: TCDD Alters IgM and IgG Secretion in a Human B Cell Line</i>		
2:25 Erica Carey	Thomas L. Brown	NCBP
<i>Title: AMPK Knockdown in Labyrinthine Trophoblast Cells Results in Altered Morphology and Function</i>		
2:45 Genesis Hines	Heather Hostetler	Biochemistry and Molecular Biology
<i>Title: Fatty Acids and their Thioester Derivatives as Potential Endogenous Ligands of LXR<math>\alpha</math></i>		
3:05		

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## Session 9: E156B

Moderator: Yuqing Chen

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

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# 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)<sub>n</sub> · (CAG)<sub>n</sub> Repeat Instability***

Graduate student in Undecided  
Mentor: Michael Leffak, *BMB*

Natasha Hill

Title: ***Differential dose effects of 1 $\alpha$ 25-dihydroxyvitamin D3 on keratinocyte proliferation and  $\Delta$ Np63 $\alpha$  stabiliza-***

*tion*

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 Science*

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: Jeffrey 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*

Fadwa Constandinidis  
Title: ***Effect of Fluorine Position on the Electrophilic Halogenation of Difluorodiphenyl sulfone Isomers***

Graduate student in Chemistry  
Mentor: Eric Fossum, *Chemistry*

Huong Hoang  
Title: ***Hydroquinone-based poly(arylene ether)s with pendant benzothiazole and 3-sulfonated phenyl sulfonate groups***

Graduate student in Chemistry  
Mentor: Eric Fossum, *Chemistry*

Carly Jordan  
Title: ***Benylidene Oxindoles for PET Imaging***

Undergraduate Student in Chemistry  
Mentor: Daniel Ketcha, *Chemistry*

Michael Krol  
Title: ***Synthesis of N-Methyl-N-Alkylpiperidinium***

Graduate student in Chemistry  
Mentor: William Feld, *Chemistry*

Jeremy Lear  
Title: ***Main Chain Alkoxy/Hydroxy Substituted PPV***

Graduate student in Chemistry

Mentor: William Feld, *Department of 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*

Triet Truong  
Title: ***Establishing a global DNA barcode for *Ozobranchus* spp. in the Atlantic and Pacific Oceans***

Graduate student in Chemistry  
Mentor: Audrey McGowin, *Chemistry*

Kristy Wickman  
Title: ***Novel Oxyalkylene Polyimides***

Graduate student in Chemistry  
Mentor: William Feld, *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 tobacco on the human brain: A biological illustration supporting the common pattern of dual substance use among East Afri-*

*can khat chewers.*

Participant in the GRAD-Prep Program

Post-Bacc Student

Mentor: Nikki Rogers, *Community Health*

### **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-1a) Leads to Placental Abnormalities**  
Graduate student in Microbiology and Immunology

Mentor: Thomas L. Brown, *NCBP*

Savannah Doliboa  
Title: **Lineage-Specific, Gene Targeting of the Trophoblast Giant Cells**  
Undergraduate student in Biological Sciences  
Mentor: Thomas L. Brown, *NCBP*

Siham Hourani  
Title: **The Effects of NSAIDs in Peripheral Leukocytes**  
Undergraduate student in Biological Sciences  
Mentor: Ashot Kozak, *NCBP*

J. Chika Morah  
Title: **The Importance of Cell Culture at Appropriate Ambient Oxygen Levels**  
Undergraduate student in Biological Sciences  
Mentor: Christopher Wyatt, *NCBP*

Cody Saylor  
Title: **Promoter-Specific, Tet-Inducible Gene Expression**  
Undergraduate student in Biological Sciences  
Mentor: Thomas L. Brown, *NCBP*

Danielle Lucas  
Title: **Cell Dispersion in the Somatosensory Cortex of two Guinea Pig Strains**  
Graduate student in Nursing  
Mentor: Gale Kleven, *NCBP*

Lauren Dixon  
Title: **Heparan Sulfate-Bound Dimeric IL-2: A Potential Mediator of Renal Ischemic Injury**  
Graduate student in Undecided

Mentor: Lucile Wrenshall, *Neuroscience, Cell Biology and*

### **Pharmacology & Toxicology**

Pharm/Tox and Neuroscience  
Neelima Sharma

Title: ***Factors affecting apelin regulation of potassium chloride cotransport (KCC) in vascular smooth muscle cells (VSMCs)***

Graduate student in Biological Sciences

Mentor: Norma Adragna, *Pharmacology & Toxicology, and Neuroscience*

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*

Romario Pacheco Andrade

Title: ***Western Blotting technique: The Experience of an undergraduate***

Undergraduate student in Biological Sciences

Mentor: Mauricio DiFulvio, *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*

### **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*

**Battelle**  
*The Business of Innovation*

**Heraeus**



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