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

	Student	Faculty Mentor	Department
9	Crystal Whetstone	e December Green	Political Science
	Title: Is the Mothe Rights than a Fem	rist Approach More Helpful in o inist Approach? A Comparativ	Obtaining Women (s e Study of Lebanon and
0.20	Ambreen Hasan and Langdon Sand	_L Myron Levine	Urban Affairs and Geography
9:20	Title: Three Times a Week: Mapping the Transportation of Dialysis Patients in Dayton, Ohio		
0.40			
9:40	Title:		
10			
10	Title:		
10.20			
10:20	Title:		
10.40			
10:40	Title:		

Session 2: E156B

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

Session 3: E156C

	Student	Faculty Mentors	Department		
9	Thomas Knickerbocker	Damaris Serrano	Modern Languages		
	Title: Entre las líneas: Meditacions y Reflexiones				
0.20	Brenda Jones	Damaris Serrano	Modern Languages		
9:20	Title: El Amuleto de Pelo				
	Larissa Swartz	Damaris Serrano	Modern Languages		
9:40	Title: Pobre la María - A look at poverty and inequality in Latin America				
10	Kaitlyn Williams	Damaris Serrano	Modern Languages		
10	Title: El poder mágico del español: Una perspectiva mundial				
	Joy Hyatt	Karla Huebner	Art and Art History		
10:20	Title: Digital Curation and Information Management: Technological Changes in Art History				
10:40	Megan Hague, Kyle Wil- kinson	Tracy Longley-Cook	Art and Art History		
	Title: Emmet Gowin: A Documentary Short				
	Rebecca Cantrell	Karen Lahm	Sociology and Antrhopology		
11:00	Title: Are Zero-Tolerance Policies Enough? A synthetic meta-analysis of bully prevention programs				

Session 4: E163A

	Student	Faculty/Research Men- tor	Department	
9	Trisha Brockman	Katherine Excoffon	Biological Sciences	
	• •	ases alter the apical expro ptor in polarized epitheli	•	
	Poornina Kotha Lak- shmi Narayan	Katherine Excoffon	Biological Sciences	
9:20	Title: Interleukin-8 regulates the expression of the eight-exon isoform of the Coxsackievirus and adenovirus receptor in airway epithelial cells.			
9:40	James Readler	Katherine Excoffon	Biological Sciences	
	Title: Peptide Mediated Regulation of Adenoviral Infection			
4.0	Ran Yan	Katherine Excoffon	Biological Sciences	
10	Title: Mechanism of MAGI-1-mediated degradation of the eight-exon encoded coxsackievirus and adenovirus receptor isoform (CAREx8)			
	Joseph Santin	Lynn Hartzler	Biological Sciences	
10:20	Title: Temperature influences CO2/pH-sensitivity in locus coeruleus neurons of the bullfrog, Lithobates catesbeianus			
10:40	Amanda Sherwood	Lynn Hartzler	Biological Sciences	
	Title: Stroke to Breath Ratio Impacts Swimming Performance			
44.60	Natalie Orndorf	Lynn Hartzler	Biological Sciences	
11:00		ontributes to Obesity		

Session 5: E163B

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

Session 6: E157

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

Session 8: E157

	Student	Faculty Mentor	Department	
1:45	Remah Ali	Steven Berberich	Biochemistry and Mo- lecular Biology	
		Title: Down Regulation of YPEL3 in MCF-7 Breast Cancer Cell Line Involves Histone Deacetylation		
2.05	Genesis Hines	Heather Hostetler	Biochemistry and Mo- lecular Biology	
2:05	Title: Fatty Acids and their Thioester Derivatives as Potential Endogenous Ligands of LXRα			
2:25	Natasha Hill	Madhavi Kadakia	Biochemistry and Mo- lecular Biology	
	Title: Differential dose effects of $1\alpha25$ -dihydroxyvitamin D3 on keratinocyte proliferation and $\Delta Np63\alpha$ stabilization			
2:45	Brooke Johnson	Courtney Sulentic	Pharmacology and Toxi- cology	
	Title: TCDD Alters IgM and IgG Secretion in a Human B Cell Line			
2.05	Orly Leiva	Mariana Morris	Pharmacology and Toxi- cology	
3:05	Title: The Characteriz gies	ation of Prolyl Carboxy	peptidase In Renal Patholo-	

Session 9: E156B

	Student	Faculty Mentor	Department	
1:45	Hamza Abdel-Latif	KT. Arasu	Mathematics and Statistics	
1.43	Title: Updating Arasu	ı-Gutman table on circu	lant weighing matrices	
2:05	Heather Smith	KT. Arasu	Mathematics and Statistics	
2.03	Title: A Survey of Hadamard Matrices			
2:25	Venkateswaran Hari- haran	KT. Arasu	Mathematics and Statistics	
	Title: The Constructions of Almost Binary Sequence Pairs			
2:45	Amanda Roddy	KT. Arasu	Mathematics and Statistics	
2.43	Title: Teachers' Beliefs of Calculators in the Classroom			
3:05	Kiran Kumar Vaid- yanathan	KT. Arasu	Mathematics and Statistics	
	· ·	Ratio (SNR) Enhanceme	ent Using Digital Water-	

Accountancy

Daniel Shafer

Title: Federal Financial Whistleblower Acts

Undergraduate student in Accountancy

Mentor: Kevin Brown, Accountancy

<u>AFRL</u>

Monica Leslie
Title: *Discovery Lab*

Undergraduate student in Biomedical

Engineering

Mentor: Robert Williams, AFRL Re-

search Director

Biochemistry and Molecular Biology (BMB)

Khadijeh Alnajjar

Title: THE ROLE OF THE N-TERMINUS
OF SUBUNIT III IN PROTON UPTAKE
IN CYTOCHROME C OXIDASE OF
RHODOBACTER SPHAEROIDES

Graduate student in Biological Sci-

ences

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 $1\alpha25$ -dihydroxyvitamin D3 on keratino-cyte proliferation and $\Delta Np63\alpha$ 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 Sci-

ence

Elizabeth Coe

Title: Host-parasite associations in avian malaria: a model of coevolu-

tion

Undergraduate student in Biological

Sciences

Mentor: Jeffrey Peters, Biological Sci-

ences

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 Sci-

ences

Accountancy

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Graduate student in Biological Sciences

Education

Mentor:,Lynn Hartzler Biological Sci-

ences

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 Sci-

ences

Mentor: Scott E. Baird, Biological Sci-

ences

Leah Shurte

Title: Genetic Diversity and Differentiation in Egyptian Geese of Southern Africa

Undergraduate student in Biological Sciences

Mentor: Jeffrey Peters, Biological Sci-

ences

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 Sci-

ences

Biomedical, Industrial and Human Factors 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*

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 Nurs- Title: A Safer Alternative Method For ing 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/Preprofessional health

Mentor: Sylvia Ellison, 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 & Envi-

ronmental Science

Paul Fleischman

Title: **Phosphate Speciation of the** Little Miami River

Undergraduate student in Earth and **Environmental Science**

Mentor: Songlin Cheng, Earth & Envi-

ronmental 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

Chemically Breaking Down Vertebrate Fossil Bearing Carbonates

Undergraduate student in Earth and

Environmental Science

Mentor: Chuck Ciampaglio, Earth & Environmental Sciences - Lake Cam-

pus

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 Cam-

pus

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 Biological Sci-

ences

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:

Undergraduate in Biology 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

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, *Neurosci*-

ence,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 Sci-

ences

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, Pharma-

cology & Toxicology

Nagendra Babu Ravilla

Title: **Physiological factors affecting** Rb influx in K-Cl cotransporter 3 (KCC3)-transfected human embryonic Title: Beliefs about the Structures of kidney 293 (HEK293) cells

Graduate student in Biological Sciences

Mentor: Norma Adragna, Pharmacol-

ogy & Toxicology

Romario Pacheco Andrade

Title: Western Blotting technique: The Experience of an undergraduate Undergraduate student in Biological

Sciences

Mentor: Mauricio DiFulvio, P Pharma-

cology & 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

Psychology

Science

Lesley Burdiss

Title: Perceptions of Masculinity and Femininity of Alcoholic Beverages Undergraduate student in Psychology Mentor: Gary Burns, Psychology

Jennifer Deskins

Sexual Orientation

Undergraduate student in Psychology Mentor: Megan Morris, 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

Title: Perceptions of Masculinity and Femininity of Alcoholic Beverages Graduate student in Psychology Mentor: Gary Burns, Psychology

Megan Morris

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

Gabrielle Lyles