Graduate Student Research Conference

April 1st & 2nd 2016
University of Louisville
Health Sciences and Belknap Campuses
Sponsored and hosted by the UofL Graduate Student Council
Co-sponsored by the Student Activities Board

Events:
- Reception & Awards Galas
- Professional Development Career Fair and Workshop
- 3-Minute Thesis Competition
- 60+ presentations
- Keynote Addresses by Dr. Gregory Semenza and Dr. Dave McIntosh
- Community Engagement Symposium
Graduate Student Regional Research Conference Program

Table of Contents

Useful Conference Information ................................................................. 1-2
3-Minute-Thesis Competition ................................................................. 3
Community Engagement Symposium ....................................................... 3-4
Poster Sessions ..................................................................................... 4-7
Paper Sessions ..................................................................................... 7-9

Useful Information

BUILDING LOCATIONS

Friday, April 1st, 2016
George J. Howe Red Barn
_University of Louisville – Belknap Campus_

Kornhauser Auditorium
_University of Louisville – Health Sciences Campus_

Saturday, April 2nd, 2016
Chao Auditorium, Ekstrom Library
_University of Louisville – Belknap Campus_

Lutz, Bingham, & Strickler
_University of Louisville – Belknap Campus_

PARKING

Parking for Belknap Campus events on Friday, April 1st, 2016 can be obtained in the Floyd Street Garage or any other pay lot noted on the parking map, or with a student parking pass.

Parking at the Health Sciences Campus on Saturday, April 2nd, 2016 is available on Muhammad Ali Blvd., Floyd St., and other surrounding streets.

Parking on Saturday, April 2nd, 2016 is available in any red, green, or blue surface lot on the Belknap Campus.
MAPS

Campus Maps
Parking Maps/Visitor Parking

CONTACT INFORMATION

Graduate Student Research Conference Co-Chairs:

GSC Director of Information - Neha Angal
Email: neha.angal@louisville.edu

GSC External Vice President - Brandon McReynolds
Email: brandon.mcreynolds@louisville.edu

GSC President - Femmy Rose
Email: femmaeve.macqueen.rose@gmail.com
Friday, April 1st, 2016

<table>
<thead>
<tr>
<th>1:00PM – 3:00PM</th>
<th>3-Minute Thesis Competition</th>
<th>RED BARN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elaheh Arabmakki</td>
<td>Harish Irrinkgi</td>
<td></td>
</tr>
<tr>
<td>Ian Boggero</td>
<td>Mahshid Jessri</td>
<td></td>
</tr>
<tr>
<td>Francisco Javier Bonilla</td>
<td>Sujita Khanal</td>
<td></td>
</tr>
<tr>
<td>Adam Booth</td>
<td>Hossein Mirinejad</td>
<td></td>
</tr>
<tr>
<td>Jessica Cresseveur</td>
<td>Mohammad Mohebbi</td>
<td></td>
</tr>
<tr>
<td>Alexsis Keen Crook</td>
<td>Apurva Tadimir Prabhakar</td>
<td></td>
</tr>
<tr>
<td>Megan DeVries</td>
<td>Campbell Rightmyer</td>
<td></td>
</tr>
<tr>
<td>Milad Ebrahimi</td>
<td>Mohammad Nasser Saadatzi</td>
<td></td>
</tr>
<tr>
<td>Elizabeth Gordon</td>
<td>Mehdi Sabraouie</td>
<td></td>
</tr>
<tr>
<td>Jaspreet Grewal</td>
<td>Anju Panicker Madhusoodh anan Sathik</td>
<td></td>
</tr>
<tr>
<td>Nicholas Holt</td>
<td>Tyler Short</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4:00PM – 6:00PM</th>
<th>Community Engagement Symposium</th>
<th>RED BARN</th>
</tr>
</thead>
</table>

**POSTERS**

ASSESSING THE EFFECTIVENESS OF DUI DIVERSION PROGRAMS IN LOUISVILLE, KY.

* Shemika Hopson *

AUTOMATIC VISUAL ASSESSMENT FOR PARKINSON'S DISEASE.

* Faeze Fajazoli *

A FULLY AUTOMATED NON-INVASIVE FRAMEWORK FOR EARLY DETECTION OF ACUTE RENAL REJECATION USING DIFFUSION-WEIGHTED MRI.

* Mohamed Shehata *

**PAPERS**

CHANGES IN END-OF-LIFE EDUCATION FOR CRITICAL CARE HEALTHCARE PROFESSIONALS.

* Adam Booth *

EXPLORING IMPACT IN UNIVERSITY-COMMUNITY PARTNERSHIPS: COMMUNITY PARTNER DEFINITIONS, PERSPECTIVES, AND IMPLEMENTATION STRATEGIES.

* Amanda Bowers and Dr. Meera Alagaraja *

CHRONIC PAIN IS ASSOCIATED WITH LONELINESS AND REDUCED SOCIAL FUNCTIONING.

* Ian Boggero *
GROWING TRAUMA-INFORMED RESETTLEMENT SERVICES: A MIXED-METHODS STUDY OF THE BARRIERS AND OPPORTUNITIES AROUND IMPLEMENTATION.

Jennifer Ballard-Kang

ASSESSING THE POTENTIAL OF PHOSPHORUS REMOVAL STRATEGIES BY ENVIRONMENTAL AND COST LIFE CYCLE ASSESSMENT (CASE STUDY: FLOYDS FORK WATER QUALITY TREATMENT CENTER).

Milad Ebrahimi

SMART BRIEF MONITORING SYSTEM FOR ASSISTED LIVING.

Mohammad Mohebbi

"LA MINGA IS MY LIFE:" A THESIS ON THE MOTIVATIONS OF IMMIGRANT AND NATIVE-CITIZEN GARDENERS AT LA MINGA COOPERATIVE FARM.

Tyler Short

Saturday, April 2^{nd}, 2016

<table>
<thead>
<tr>
<th>12:00PM – 1:00PM</th>
<th>Poster Session A</th>
<th>LUTZ HALL FOYER</th>
</tr>
</thead>
</table>

1. MORAL DISTRESS: CONCEPT ANALYSIS.
   
   Adam Booth

2. PURIFICATION AND INITIAL CHARACTERIZATION OF SELECTED PROTEINS SECRETED VIA TYPE IX SECRETION SYSTEM (T9SS) FROM PORPHYROMONAS GINGIVALIS.
   
   Apoorv Goel

3. CARGO PROTEINS OF TYPE 9 SECRETION SYSTEM.
   
   Apurva Tadimari Prabhakar

4. EXPLAINABLE MATRIX FACTORIZATION FOR COLLABORATIVE FILTERING.
   
   Behnoush Abdollahi

5. PHOTOGRAMMETRY AT LAPA DO PICAREIRO: INNOVATIVE TECHNIQUES FOR RECORDING SPATIAL INFORMATION AT A PALEOLITHIC SITE.
   
   Brandon Zinsious

6. GENDER IN REAL-WORLD SPATIAL DOMAINS.
   
   Campbell Rightmyer
7. THE EFFECT OF VICTIM RELIGION ON JUROR PERCEPTIONS OF HATE CRIMES.
   
   Casey Magyarics

8. LEARNING ABOUT ECONOMIC SYSTEMS: DEVELOPING CONCEPTS OF FUNGIBILITY.
   
   Catherine Mcdermott

9. THE HEPATIC AND PULMONARY “MATRISOMES” RESPOND DYNAMICALLY TO INFLAMMATORY INJURY: PROTEOMIC CHARACTERIZATION OF TRANSITIONAL ECM CHANGES IN THE LIVER AND LUNG.
   
   Christine Dolin

10. DEVELOPING A MORE CLINICALLY RELEVANT MOUSE MODEL OF CISPLATIN NEPHROTOXICITY.
   
   Cierra Sharp

11. SYMPTOM INTERFERENCE AND ACADEMIC FUNCTIONING IN COLLEGE-AGED STUDENTS WITH OBSESSIVE-COMPULSIVE SYMPTOMS.
   
   Darlene Davis

12. A CLASSIFICATION FRAMEWORK FOR IMBALANCED DATA STREAM WITH CONCEPT DRIFT.
   
   Elaheh Arabmaki

13. AUTOMATIC VISUAL ASSESSMENT FOR PARKINSON'S DISEASE.
   
   Faezeh Tafazzoli

14. MODIFICATIONS OF CO /PD SUPERLATTICES WITH PERPENDICULAR MAGNETIC ANISOTROPY UNDER EXCITATION BY AN ULTRAFAST LIGHT FIELD.
   
   Farzaneh Hoveyda

15. OPTIMAL DRUG ADMINISTRATION IN THE TREATMENT OF RENAL ANEMIA USING A RADIAL BASIS FUNCTION METHOD.
   
   Hossein Mirinejad

| 3:00PM – 4:00PM | Poster Session B | LUTZ HALL FOYER |

1. 6-PHOSPHOFRUCTO-2-KINASE/FRUCTOSE-2,6-BIPHOSPHATASE 3 (PFKFB3) IS NECESSARY FOR HUMAN MELANOMA MDSC DIFFERENTIATION AND FUNCTION.
   
   Jaspreet Grewal

2. AIR POLLUTION, PULMONARY OXIDATIVE STRESS, AND THE ENDOTHELIN SYSTEM IN THE DEVELOPMENT OF CARDIOVASCULAR DISEASE.
   
   Jordan Finch
3. MIROLYSIN- A NOVEL MEMBER OF KLIKK FAMILY OF PROTEASES AND POTENTIAL VIRULENCE FACTOR OF TANNERELLA FORSYTHIA.
   Lahari Koneru

4. ALCOHOL ENHANCES ENDOTOXEMIA-INDUCED ACUTE LUNG INJURY: ROLE OF PLASMINOGEN ACTIVATOR INHIBITOR-1.
   Lauren Poole

5. THE SCIENCE OF SOCIAL WORK DEBATE.

6. CORPORATE EMPLOYEE TRADE-OFFS IN THEIR DECISION TO PARTICIPATE IN CORPORATE VENTURES: A SELF-EFFICACY PERSPECTIVE.
   Mahshid Jessri & Vasiliki Kosmidou

7. FORMAL METHODS FOR ICS SECURITY.
   Mehdi Sabraoui

8. LATE MAGDALENIAN LITHIC TECHNOLOGICAL ORGANIZATION: NEW DATA FROM LAPA DO PICAREIRO.
   Melissa Holst

   Meysam Akhtar

10. A FULLY AUTOMATED NON-INVASIVE FRAMEWORK FOR EARLY DETECTION OF ACUTE RENAL REJECTION USING DIFFUSION-WEIGHTED MRI.
    Mohamed Shehata

11. PEDAGOGICAL AGENT FOR INDIVIDUALS WITH AUTISM SPECTRUM DISORDERS.
    Mohammad Nasser Saadatzi

12. BIOFEEDBACK EYEGGLASSES FOR UNOBTRUSIVE COMMUNICATION AND LOGGING OF AUTONOMIC ACTIVITY.
    Mohammad Nasser Saadatzi

13. DOES MOTOR DEVELOPMENT PREDICT WHAT INFANTS LEARN ABOUT OBJECTS FROM MANUAL EXPLORATION EXPERIENCE?
    Nicholas A. Holt

14. ASSESSING THE EFFECTIVENESS OF DUI DIVERSION PROGRAMS IN LOUISVILLE, KY.
    Shemika Hopson

15. MARITAL CONFLICT AND PROBLEM DRINKING: THE ROLE OF DRINKING MOTIVATIONS.
    Taylor Elsey
16. SENTIMENTAL ANALYSIS ON SOCIAL NETWORKS BY COMBINING LEXICAL KNOWLEDGE AND AUGMENTED LABELING.
   Wenlong Sun

17. ASSOCIATIONS BETWEEN CUMULATIVE TRAUMA EXPOSURE AND EMOTION FOLLOWING ACUTE STRESS.
   Yvette Szabo

18. DNA METHYLATION PROFILING OF VERY SMALL EMBRYONIC-LIKE STEM CELLS (VSELS) AND HUMAN EMBRYONAL CARCINOMA NTERA2: INSIGHT INTO METHODS OF UNLOCKING THE QUIESCENT GENOME.
   Zach Sellers

| 1:00PM – 2:00PM | Paper Session A1 | BINGHAM 300 |

OPTICS BEYOND THE RED.
   Elijah Jensen

SEMI-EMPIRICAL STUDY OF LOW DIMENSIONAL BORON NANOSTRUCTURES BUILT BY THE ICOSAHEDRAL BORON B12 CLUSTERS.
   Cherno Baba Kah

FIRST-PRINCIPLE STUDY OF THE ENERGY BARRIER AND DIFFUSIVITY OF A LI ATOM ON PHOSPHORENE.
   Congyan Zhang

FAULT DETECTION FOR LINEAR VAPOR COMPRESSOR USING RISE OBSERVER.
   Mohammad Mohebbi

| 1:00PM – 2:00PM | Paper Session A2 | STRICKLER 139 |

FROM PENS TO THE PRESS: TEXTUAL PRODUCTION AND GENERIC CHANGE IN 18TH-CENTURY EPISTOLARY CULTURE.
   Keri Mathis

INTERPRETING LIGETI'S "LE GRANDE MACABRE" AS A SURREALIST COLLAGE.
   Trevor DeJarnett
ENVIRONMENTAL HISTORY OF THE PANAMA CANAL ZONE.

Francisco Javier Bonilla

THE QUEER CHILD AND HAUT BOURGEOIS DOMESTICITY: BERTHE MORISOT AND MARY CASSATT.

Jessica Cresseveur

<table>
<thead>
<tr>
<th>2:00PM – 3:00PM</th>
<th>Paper Session B1</th>
<th>BINGHAM 300</th>
</tr>
</thead>
</table>

GROWING TRAUMA-INFORMED RESETTLEMENT SERVICES: A MIXED-METHODS STUDY OF THE BARRIERS AND OPPORTUNITIES AROUND IMPLEMENTATION.

Jennifer Ballard-Kang

"LA MINGA IS MY LIFE:" A THESIS ON THE MOTIVATIONS OF IMMIGRANT AND NATIVE-CITIZEN GARDENERS AT LA MINGA COOPERATIVE FARM.

Tyler Short

CULTURAL COMPETENCY IN MENTAL HEALTH OUTPATIENT FACILITIES.

Alexis Keen Crook

INVISIBLE ILLNESS... VISIBLE ME: DEVELOPING PATIENT AGENCY IN FIBROMYALGIA BLOGS.

Caitlin Ray

<table>
<thead>
<tr>
<th>2:00PM – 3:00PM</th>
<th>Paper Session B2</th>
<th>STRICKLER 139</th>
</tr>
</thead>
</table>

EFFECTS OF POWDER ATTRIBUTES AND LASER POWDER BED FUSION (L-PBF) PROCESS CONDITIONS ON THE DENSIFICATION AND MECHNAICAL PROPERTIES OF 17-4PH STAINLESS STEEL.

Harish Irrinki

CARDIO-PULMONARY RESUSCITATION (CPR) SCENE RETRIEVAL FROM MEDICAL SIMULATION VIDEOS.

Anju Panicker Madhusoodh anan Sathik

AN OPTIMIZED BIOLOGICAL APPROACH FOR TREATMENT OF PETROLEUM REFINERY WASTEWATER.

Milad Ebrahimi

PEDAGOGICAL AGENT FOR INDIVIDUALS WITH AUTISM SPECTRUM DISORDERS.

Mohammad Nasser Saadatzi
THE ROLES OF NUTRIENT AVAILABILITY AND PHYSICAL STRUCTURE IN SHAPING AQUATIC COMMUNITIES IN AGUAJE PHYTOTELMATA.

Ethan Staats

CHANGES IN END-OF-LIFE EDUCATION FOR CRITICAL CARE HEALTHCARE PROFESSIONALS.

Adam Booth

HISTOLOGIC VARIATION IN HIGH GRADE ORAL EPITHELIAL DYSPLASIA (OED) WHEN ASSOCIATED WITH HIGH-RISK HUMAN PAPILLOMAVIRUS (HPV).

Sujita Khanal

NOVEL REGULATION OF IGF1R BY UBIQUILIN1.

Zimple Kurawala

SOCIAL BELONGING AND FIRST-YEAR ENGINEERING MATHEMATICS: A COOPERATIVE LEARNING INTERVENTION.

Joanna Weaver

CHRONIC PAIN IS ASSOCIATED WITH LONELINESS AND REDUCED SOCIAL FUNCTIONING.

Ian Boggero

EXPLORING IMPACT IN UNIVERSITY-COMMUNITY PARTNERSHIPS: COMMUNITY PARTNER DEFINITIONS, PERSPECTIVES, AND IMPLEMENTATION STRATEGIES.

Amanda Bowers, Dr. Meera Alagaraja

CONJOINT ANALYSIS AND COMPLEX DECISIONS.

Shaun Paul Digan, Mahshid Jessri