3rd Annual Graduate Research Conference

Friday, March 4, 2016
University Union

Schedule of Events

9:00am – 2:00pm  Check in (Union First Floor Hallway)
9:30am – 10:45am  Concurrent Sessions (Board Room, Fox Room, Cardinal/Oak Room, Algonquin Room)
10:45am – 11:00am  Break (DuSable Room)
11:00am – 12:30pm  Poster Session (Heritage Rooms)
12:30pm – 2:00pm  Concurrent Sessions (Board Room, Fox Room, Cardinal/Oak Room, Algonquin Room)
2:00pm – 2:15pm  Break (DuSable Room)
2:15pm – 3:15pm  Concurrent Sessions (Board Room, Fox Room, Cardinal/Oak Room, Algonquin Room)
3:15pm – 3:30pm  Break (DuSable Room)
3:30pm – 4:30pm  Keynote: “Dream, Validate, Execute,” by Professor Rafael Obregon, Engineering Technology (Sandburg Theatre)
4:30pm – 5:30pm  Awards Reception (Sandburg Lounge)
9:30am-10:45am Concurrent Sessions

**College Students: Health, Psychology, and Political Participation**

**Board Room**

**Moderator:** Dr. Ruth Kelly

Kyle E. Davis (Political Science) “The Future Generation: A look at College Students’ Political Activity”
Natalia Kazakova (Psychology) “Correlates of Inhalant Use in a Sample of College Students”
Madison Cirks (Psychology) “Perceived Use Compared to Actual Use of Alcohol and Marijuana on College Campuses and Associated Mental Health and Academic Difficulties”
Ryan Van Fossen (Psychology) “Substance Use and Mental Health Symptoms Associated with ADHD Treatment in College Students”

**Animals: Habitat and Diseases**

**Fox Room**

**Moderator:** Dr. Kim McClure

Emma Trone (Biology) “Gene Expression in Chronic Wasting Disease Infected White-Tailed Deer”
Shanna E Pikora (Biology) “Habitat Preferences of Den Locations for the North American River Otter (Lontra Canadensis)”
Paris Hamm (Biology) “Natural Bat Biota from the West May Fight the Spread of White-Nose Syndrome”

**Perceived Cultural Identity and Stereotypes**

**Cardinal/Oak Room**

**Moderator:** Dr. Kristy Keefe

Brian Johnson (Political Science) “Realism and Constructivism in the Middle East”
Jonathan Counce (Psychology) “White Identity Development Differences in White Privilege Attitudes Following Dissonance Intervention”

Continued on the next page …

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9:30am-10:45am Concurrent Sessions Continued

**Pests and their Interaction with the Environment**

**Algonguin Room**

**Moderator:** Dr. Kenneth McCravy

Jason R Hunt (Environmental Studies) “Biotic and Abiotic Properties Lower Illinois Subregion of the Mississippi River Watershed that Impact the Survival and Disease Carriage of the Invasive Mosquito Aedes Japonicus in Western Illinois”
Donald A Bath (Biology) “Comparative Analysis of Helicoverpa Zea Gene Expression and Growth Based on the Host Plant”
Sarah Warren (Biology) “Evaluating the Effects of Prescribed Forest Burnings in Relation to Tick Species Diversity”
Kayleigh R. Diveley (Biology) “Gene Expression Observed from the Interaction Between Corn Earworm (Helicoverpa Zea) Caterpillars and Corn (Zea Mays) Tissues”

Program continues on the next page …
**11:00am – 12:30pm Poster Session (Heritage Room)**

2. Victoria Livingston (Biology) “A Habitat Analysis of Illinois’ Imperiled Turtles in the Upper Mississippi River Basin”
3. Wei Siang Tan (Physics) “Adapting the IDL Arcweb Library to the Open Source GDL Compiler for Data Reduction of Radio Astronomical Observations”
6. Olanike O. Idowu (Health Sciences) “Improving Contraceptive Use in Sierra Leone Using the Health Belief Model”
7. Matt Winter (Psychology) “Attention During Emotional Cueing Associated with Mood and Personality Factors”
8. Al-Mohammed Baqer Osamah (Chemistry) “C-H bond Chalcogenation of N-Containing Heterocycles”
10. Ryan Krzyzowski (Kinesiology) “Changes to Injured Student-Athletes’ Academic and Athletic Identities During the Injury Experience: A Case Study”
12. Donald A Bath (Biology) “Comparative Analysis of Helicoverpa Zea Gene Expression and Growth Based on the Host Plant”
13. Adeyemi Olanrewaju (Biolog) “Detection of Thermophilic Fungi in Corn Fields and their Potential Role in Mycotoxin Production”
15. Nicholas Hesford (LEJA) “Discrimination During The Hiring Process in Law Enforcement”
16. Kelsie Schoonover (Health Sciences) “Do We Need It? - A Look into the Influenza Vaccination”
17. Bradley Aleshire (Psychology) “Drug Use and Mental Health Related to Emotional Abuse”
18. Ammar Al-Furaiji (Biology) “Effects of Elevated Peroxidase Levels and Corn Earworm Feeding on Gene Expression in Tomato Fruit”

*Continued on the next page …*
11:00am – 12:30pm Poster Session, Continued…

41. Alaina Di Giorgio (Sports Management) “Race and Gender In Collegiate Sport: Carla Wilson's Leadership Journey”
42. Alex Rogers (LEJA) “Self-Control as a Predictor of Cell Phone Addiction and Deviance”
43. Riyal Das (Public Health) “Study of Antidepressants and it's Increasing Risk to Obesity”
44. Changshu Yen (Chemistry) “Suzuki Coupling of Diaryl Tellurides for the Synthesis of Unsymmetrical Biaryl Compounds”
45. Trey Bruton (Physics) “Temperature Control of Tunnel Diode Resonator Experiment (Low Temperature)"
46. Ryan Ricketts (Business Administration) “The Decision to Store Corn or Market Out of the Field”
47. Chelsea Davis (Kinesiology) “The Effectiveness of a Closed Baset Weave Ankle Taping With Neutral Heel Locks vs. Eversion Heel Locks in Limiting the Amount and Rate of Inversion”
48. Andrea Hauk (Zoology) “The Effects of Fire Disturbance on Terrestrial Gastropod Distribution and Species Composition"
49. Ming Zhu Wang (Mathematics) “Tight and Efficient Geodesics in the Curve Complex”
50. Dillon E Huff (Chemistry) “Trace Detection of Isoeugenol in Local Water Samples via GC Analysis”
51. Anton Lebed (Psychology) “Unconscious Solution”
52. Mark Tyler Smith (Physics) “Water Masers in the Star Forming Region G23.71-0.20”
53. Michele Rehbein (Biology) “West Nile Virus Surveillance in Rural Western Illinois”
54. Dakota Horn (Communication) “What's in your school? A content analysis of school persona creation using online messages.”
55. Ife Olusegun Oyebode (Health Sciences) “Application of the Health Belief Model in the Prevention and Control of HIV Infection among Nigerian Adolescents Through Increased Condom Use”
56. Victoria Bailey and Anna Nieto (LEJA) “Raising Prison Babies: A Look At Mother-Infant Bonding Programs”
57. Soumya Saha (Biology) “Identification of Leuconostoc Genes Involved in the Regulation and Metabolism of Sucrose”
58. Lalitha Deopri Kolluru (Chemistry) “Synthesis of Symmetrical Biaryl Compounds by Detelluration Reactions”

Map of the poster-room layout on the next page
12:30pm – 2:00pm Concurrent Sessions

Community Dynamics: Health, Psychology, and Forecasting
Board Room
Moderator: Dr. Kristine Kelly

Akinwale S. Akingbule and Chikodili Faith Obi (Health Science) “Community Health Needs Assessment: Pike County as a Case Study”
Jacob Tomlinson (Political Science) “Is Congress Still Regionally Divided?”
Gloria Nnabuike (Mathematics) “New Analytical Approach to Forecasting Models and Their Applications”
Marcus Hendrickson (Psychology) “The New Hierarchy of Relationships”
Alec Stinnett (Psychology) “Affectively Effective: Affect Regulation Motive Styles Predict Individual Differences”

Physics of the Nano-Bio World
Fox Room
Moderator: Dr. Saisudha Mallur

Manoj K. Jamarkattel (Physics) “Analysis of Fluorescence and Optical Absorption of Nd+3 Doped Lead Boro-Tellurite Glasses”
Hio Giap Ooi (Physics) “Effect of Host Glass and Nanoparticles on the Stimulated Emission Cross-Section of Dy3+ Ions in Lead Borate Glasses”
Ting Chean Khoo (Physics) “Fluorescence and Optical Absorption Studies of Sm3+ in Bismuth Telluro-Borate Glasses”
Onic Islam Shuvo (Physics) “Sensitivity Analysis of the Tetrapolar Electrical Impedance Measurement Systems Using COMSOL Multiphysics for the Non-uniform and In-homogeneous Medium”
Krishna D Joshi (Physics) “The Effect of CdSe Nanoparticles on Sm3+ Optical Absorption and Fluorescence in Lead Borate Glasses”

12:30pm – 2:00pm Concurrent Sessions, Continued…

Birds and their Interaction with the Environment
Algonquin Room
Moderator: Dr. Doug LaFountain

Andrew Gilbert (Biology) “Detection Rates and Disturbance of Waterfowl During Aerial Surveys”
Michael Mandru (Biology) “Egg Crypsis Within the Host Nest Environment by the Brood Parasitic Brown-Headed Cowbird (Molothrus Ater)”
Sara Schmuecker (Biology) “Telemetry to Determine Whether Weather Variables Can Predict Bald Eagle (Haliaeetus Leucocephalus) Movement onto and Use of the Upland Landscape”
Sarah E. Vanderhorst (Biology) “True Metabolizable Energy of Submersed Aquatic Vegetation for Dabbling Ducks”

Program continues on the next page …
2:15pm – 3:15pm Concurrent Sessions

Semantic Progression
Board Room
Moderator: Dr. Sunita George
Laura Winton (English) “Cut Piece: A Wunderkammer”
Jessica Marty (Educational Interdisciplinary Studies) “Vocabulary Instruction: The Effectiveness of the Frayer Model for Level 2 and 3 ELLs in First Through Third Grade”

Biology of Fungi
Algonquin Room
Moderator: Dr. Seyfi Turkelli
Terry Torres Cruz (Biology) “Characterization of a Novel Early Lineage in the Mucoromycotina”
Cedric Ndinga Muniania (Biology) “Seasonal Variation of Dark Septate Fungi in an Arid Grassland and their Potential Role on Plant Growth”
Terri Tobias (Environmental Studies) "The Effects of Farming Practices on Fungal Communities Associated with Glycine Max (soybeans)"

Program continues on the next page ...

3:30pm Keynote (Sandburg Theatre)
“Dream, Validate, Execute.”

Professor Rafael Obregón, Engineering Technology

Welcome Amy Patrick Mossman, Director, Liberal Arts and Sciences Program, and Chair of the inaugural Graduate Research Conference Planning Committee

Introduction Dr. Nancy Parsons, Associate Provost and Director of Graduate Studies

Professor RAFAEL OBREGÓN is currently an Associate Professor for the Department of Engineering Technology at Western Illinois University. He is an internationally recognized expert in Design and Manufacturing and has over 30 years of experience as an engineer, manager, and educator. Past work experiences include 10 years of service for the Monterrey Tec in Queretaro Mexico, some of which he chaired the Technological Development Center, five years as a Project Lead the Way instructor in the state of Illinois, and one year as interim chair for the Department of Engineering Technology at WIU.

Professor Obregón has been Principal Investigator for DoD sponsored projects, is a Certified Manufacturing Technologist by the Society of Manufacturing Engineers, serves as Engineering and Technology division chair for the Illinois State Academy of Sciences, and is member of the American Society of Engineering Educators and the Latin America and Caribbean Consortium of Engineering Institutions. He is the 2015 recipient of the Provost Award of Excellence in Scholarly/Creative/Performance Activity.

4:30pm – 5:30pm Awards Reception (Sandburg Lounge)
Sponsored by
The College of Arts and Sciences,
Department of Biological Sciences,
Department of Psychology,
and
The Phi Kappa Phi Honor Society.
The WIU Chapter of the Honor Society of Phi Kappa Phi, the nation's oldest, largest, and most selective all-discipline honor society, is a proud sponsor of the Third Annual Western Illinois University Graduate Research Conference. The chapter congratulates all student participants.

Admission to the Honor Society of Phi Kappa Phi is by invitation only to the top 10 percent of graduate students. Members are often preferred candidates for grants, scholarships, and fellowships, and membership is widely accepted by potential employers as an indicator of academic ability and motivation. The benefits of membership in this highly selective honor society include:

* Academic Recognition
* Career Assistance and the JobTarget Career Center
* Eligibility to Compete for Awards and Scholarships
* Advantages from Corporate Partnerships and Services
* Networking, Training, and Leadership Opportunities

For more information about the WIU Chapter of Phi Kappa Phi, find us online at http://www.wiu.edu/PhiKappaPhi/, on Facebook https://www.facebook.com/pages/Phi-Kappa-Phi-of-Western-Illinois-University/324696356029?ref=ts, or contact the current chapter President Dr. Dale Adkins: KD-Adkins1@wiu.edu

Graduate Research Conference Planning Committee
Davison Bideshi, Kimberly Dodson, Dinesh Ekanayake, Colin Harbke, Anita Hardeman, Hoyet Hemphill, Kishor Kapale (Chair), Jennifer McNabb, James McQuillan, Amy Patrick Mossman, Nancy Parsons, Amanda Schulz, Bhavneet Walia, and Mei Wen.

Conference Day Volunteers

Judges

Moderators

Thank You!
The Western Illinois University School of Graduate Studies would like to thank the following for their generous support of this year's Graduate Research Conference:

- College of Arts and Sciences
- College of Education and Human Services
- Department of Physics
- Department of Psychology
- Department of Biological Sciences
- Phi Kappa Phi Honor Society
- Dr. Nancy Parsons, Associate Provost and Director of Graduate Studies