Western Illinois University

5th Annual

Graduate Research Conference

Friday, March 2, 2018

University Union

Schedule of Events

9:00am – 2:00pm	Check in (*Union First Floor Hallway*)
9:30am – 10:30am	Concurrent Sessions (*Board Room, Fox Room, Cardinal/Oak Room, Capitol Rooms*)
10:30am – 10:45am	Break (*Lincoln Room*)
10:45am – 12:15pm	Poster Session (*Heritage Rooms)*
12:15pm – 12:30pm	Break (*Lincoln Room*)
12:30pm – 2:00pm	Concurrent Sessions (*Board Room, Fox Room, Cardinal/Oak Room, Capitol Rooms*)
2:00pm – 2:15pm	Break (*Lincoln Room*)
2:15pm – 3:15pm	Performance Presentations (*Sandburg Theatre*)
3:15pm – 3:30pm	Break (*Lincoln Room*)
3:30pm – 4:30pm	Keynote: "Building a successful career through networking and mentoring" by Dr. Andrea Porras-Alfaro, Department of Biological Sciences (*Sandburg Theatre)*
4:30pm – 5:30pm	Awards Reception (*Sandburg Lounge*)

9:30am-10:30am Concurrent Sessions

Technology
Board Room
Moderator: Dr. Zheng Li

Chelsea Center (Biology) "Satellite GPS Telemetry of Asian Carp in the Upper Illinois River Waterway"
Dalo Chinkhwangwa (Computer Science) "Rocky Run - 2D Mobile Game"
Vamshi Krishna Katukuri (Computer Science) "A Data Retrieving Framework for stock data and product reviews"

Research in Music
Fox Room
Moderator: Dr. Amanda Silberer

Jonathan Snyder (Choral Conducting) "Why Do Choirs Continue to Sing about Two Men and a Bird?"
Robbie Segars (Musicology) "Watch Your Step!: A Ragtime Musical"

Gene Expression
Cardinal/Oak Room
Moderator: Dr. Mette Soendergaard

Mohammed Zobair Alam (Biology) "Comparative Analysis of Transcriptomic Alteration in Saliva, Gut, and Body Of Helicoverpa Zea 48 Hours Post Herbivore in Soybean"
Norah Alwuthaynani (Biology) "The Effect of Bioinoculants on the Growth and Gene Expression of Soybean in Response to Salt Stress"
Faisal Alsubaie (Biology) "Gene expression profile of the corn earworm after feeding on different types of corn plant tissues"

Economics, Politics, and Society
Capitol Rooms
Moderator: Dr. Tej Kaul

Sylvie Sanou (Economics), Financial development and domestic Investment: Case of West African Economic and Monetary Union (WAEMU) Countries?"
Olaniyi Ige (Economics) "The Effect of Political Stability on Economic Growth"
Heena Shahid (Economics & Decision Sciences) "Impact of FDI inflow on economic growth: Do economic policies matter?"

10:45am – 12:15pm Poster Session (Heritage Room)

1. Van Ha (Educational Studies) "The impacts of Vietnamese air traffic controllers' English language proficiency on radiotelephony communication"
2. Taylor Gunby (Chemistry) "Phage-Mediated Affinity Chromatography"
3. Samuel Klimas (Biology) "Food Selection of American Green-winged Teal During Spring Migration in Illinois"
4. Matthew Cash (Chemistry) "Sorption dynamics of Cadmium (II) and Chromium (II) onto montmorillionite from mixed solvent systems"
5. Amanda Hagen (Chemistry) "Adsorption of BSA into Montmorillonite in the presence of monovalent, divalent, and trivalent cations"
6. Wei Chean Chuah (Chemistry) "Forensic Analysis of Illicit Drugs by Nitrogen Direct Analysis in Real Time Mass Spectrometry (N2 DART/MS)"
7. Titilope Ayosanmi (Biology) "Effect of the association of Fusarium species and Bouteloua gracilis (Blue grama grass)"
8. Jade Mariman (Kinesiology) "Male Student-Athlete Perception of Sexual Objectification"
9. Olusola John Dahunsi (Chemistry) "Quantitative Analysis of Limonene Content in Citrus Oil by Gas Chromatography Using Anisole as the Internal Standard"
10. MD Nazmus Sakib (Physics) "Exploring the Astrometry and Flux Density Consistency of Interferometric Observations"
11. Jamie Greathouse (Chemistry) "Determination of Antioxidant Levels in Wild Tomato (Solanium Lycipersicum) Cultivars"
12. Michael Oni (Biology) "Modification of Peptide J18 For Enhanced Ovarian Cancer Cells Targeting"
13. Aimee Bertolli (Psychology) "Attitude Change via Implicit Learning: Gender Stereotypes in a STEM-Related Field"
14. Therin Bradshaw (Biology) "Marsh Bird Use of Wetlands Managed for Waterfowl in Illinois"
15. Andrew Gilbert (Biology) "Incorporating Aerial Imagery into Waterfowl Population Estimates"
16. Natasha Frig (Chemistry) "Quantification of phenylbutazone in equine plasma for doping control in horse racing by liquid chromatography with ultraviolet detection"
17. Michael Starzyk (Physics) "Infrared Characterization of a Sample of High-Mass Star Forming Regions"
18. María-José Romero-Jiménez (Biology) "Description of Darksidea, a Novel Genus within Pleosporales, and Evaluation of their Effects on Grasses"
19. Margaret Gross (Biology) "True Metabolizable Energy of Submersed Aquatic Vegetation for Dabbling Ducks"

Continued on the next page …

10:45am – 12:15pm Poster Session, Continued…

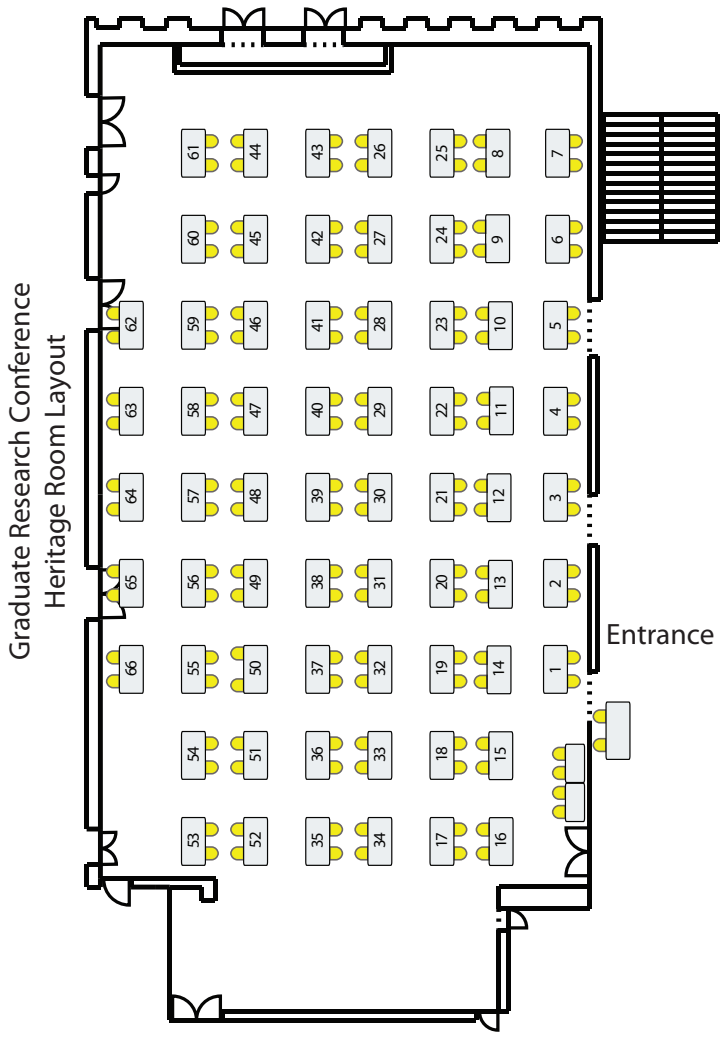
20. Jessi Edmiston (Biology) "Ground beetle diversity in sand prairies and restored tall grass prairies of west-central Illinois"
21. Shashi Bhushan Pathipaka (Chemistry) "Quantitative analysis of the explosive TNT in water by high performance liquid chromatography with ultraviolet detection"
22. Sumia Ehsan (Chemistry) "Synthesis and characterization of thiophene fused pyridine heterocycles"
23. Deji Adekanye (Biology) "The Gene Expression of Corn Earworm (Helicoverpa zea) when Infected with Bacteria: Serratia marcescens and Pseudomonas aeruginosa"
24. Jacob Torres (Biology) "The Effects of Urbanization on Bees' Microbiome in West-Central Illinois"
25. Kendall Torres (Biology) "Pollen Microbiome of Bee Species (Hymenoptera: Anthophila) of Western Illinois"
26. Shannon Wachter (Psychology) "Eyeblink Conditioning: A Pilot"
27. Bala Madhuri Yeruva (Chemistry) "Study of alkynyl chalcogenides and the potential application in organic electronics"
28. Nagajyothi Bhavanam (Chemistry) "C-H bond Functionalization of Indole"
29. Jilliann Biswell (Kinesiology) "Using a Balance Trainer for Improved Ankle Stability and Proprioception in Athletes"
30. Chaitanya Kondam (Chemistry) "Synthesis of novel derivatives of α-lipoic acid and evaluation of their anti-oxidant activity"
31. Olanrewaju Oni (Chemistry) "Phage Display Selection of Exosome Targeting Peptides for Detection of Pancreatic Cancer"
32. Kadidia Samassekou (Chemistry) "Evaluation of Cas9 Expression in Nocardia cholesterolicum NRRL 5767 Bearing a CRISPR/Cas9/sgRNA Construct by Western Blotting"
33. Roselind Brown (Health Sciences) "A Review of Flu Vaccination Policy and Acceptance in the United States"
34. Heather Lucke (Experimental Psychology) "Self-Control: Protection from Substance Abuse"
35. George Agyeah (Applied Statistics) "Modeling the Success of Kickstarter Projects"
36. Batla Alabdullatif (Biology) "Zika Virus Entry into Permissive Cells by AXL receptor"
37. John R Bannon (MBA) "An Economic and Demographic Analysis of Will County"
38. Adeyemi Adesanwo (Biology) "Gene expression in Spodoptera exigua caterpillar correlated to cannibalism rate on Methyl Jasmonate-induced tomato plants."
39. Jean-Marc Charles (Sport Psychology) "Developing Cultural Competence Among Sport Psychologists"

Continued on the next page …

10:45am – 12:15pm Poster Session, Continued…

40. Sierra Semel (Biology) "Can visual barriers reduce stereotypic pacing in polar bears (Ursus maritimus) and brown bears (U. arctos)?"
41. Nada Alzhrani (Biology) "Prevalence of Borrelia burgdorferi and blood meal identification in Culex Mosquitoes"
42. Olufunke Fadahunsi (Public Health) "Characteristics and Social Determinants of Cigarette Smoking among Adolescents in Nigeria"
43. Nasser Ben Qasem (Biology) "The Development and Analysis of Microsatellite DNA in Spiny and Smooth Soft-Shell Turtles"
44. Adam Morgan (Experimental Psychology) "Equality in the Classroom: Microaggressions toward Parents that are Gay and Lesbian"
45. Niva Kumari Jayswal (Physics) "Effect of CdSe Nanoparticles on the Optical Properties of Lead Borate Glasses"
46. Vishal Jayswal (Physics) "Optical Properties of Er-doped Lead Borate Glasses"
47. Edward D. Davis (Biology) "Evaluating Survival and Cause-Specific Mortality of Bobcats in West-Central Illinois"
48. Bala Bharathi Mannava (Chemistry) "Sonogashira and Suzuki coupling reactions of organic tellurium compounds"
49. Bashaier Alharbi (Biology) "Gene Expression of Tomato Fruitworm (Helicoverpa zea) That Fed on Tomato Plants Infected With The Entomopathogenic Fungus (Beauveria bassiana)"
50. Molly Cockerham (Health Sciences) "A Critical Review of Female Athlete Triad among Female College Athletes"
51. Munirah Alsaqer (Physics) "Nuclear Magnetic Resonance Signals in Nanopores with Different Surface Wettability"
52. Bayan Aljamal (Biology) "Soybean Secondary Compounds for Ovarian Cancer Prevention"
53. Shaikh Obaidullah (Mathematics) "Structured Population Dynamics"
54. Kisha Kucharek (Kinesiology) "The effect of asynchronous music on outdoor two mile run performance in untrained young adults"
55. Pratistha Maharjan (Kinesiology) "Self-Awareness and the Ability to Recognize Gait from Point-Light Videos?"
56. Deanna Castellon (Chemistry) "Analysis of Rubber vis SEM-EDS"
57. Rachel N. Crews (Chemistry) "Antioxidant Capacity in Brewed Teas"
58. Majed Almashnowi (Chemistry) "Solid State Synthesis of CoTe"
59. Mohammed Althuqbi (Chemistry) "Solid state synthesis of Advanced ceramic materials"
60. Terrence Petry (Chemistry) "Quantification of phenylbutazone in equine plasma for doping control in horse racing using molecularly imprinted polymer solid phase extraction followed by liquid chromatography with ultraviolet detection"
61. Shital Joshi (Kinesiology) "The Effects of Active and Passive Imagery on Learning a Novel, Self-Paced Motor Task"
62. James Rudy (Biology) "Determination of Transcriptional Changes Induced by an Ovarian Cancer Targeting Peptide"

Map of the poster-room layout on the next page



12:30pm – 2:00pm Concurrent Sessions

Individual Well-Being and Personal Growth
Board Room
Moderator: Dr. Jonathan Hammersley

Chukwuebuka Ogwo (Public Health) "Prevalence and correlates of dental anxiety among Western Illinois University students"
Emma Fullerton (Psychology) "Individual Differences Associated with Caffeine Use and Caffeine Motives"
Alisha Steiner (Psychology) "The Relationship between Openness to Experience, Personal Growth, and Purpose in Life"
Aneel Bhusal (Applied Statistics and Decision Analytics) "Impact of Information and Communication Technology on Individual Well-being: An Evidence from South Asia"

The Physics of Lead Boro-tellurite Glasses
Fox Room
Moderator: Dr. Saisudha Mallur

Tanjina Nasreen Ahmed (Physics) "Study of the Optical absorption, Fluorescence and Chromaticity of Sm3+ doped Lead Boro-tellurite Glasses"
Grija K. Thapa (Physics) "The effect of Semiconducting CdSe Nanoparticles on the Optical Properties of Sm3+ in Lead Boro-tellurite Glasses"
Arup Barua (Physics) "Investigation of the Physical and Optical Properties of Sm3+ doped Lead Boro-tellurite Glasses"

Animals, Plants, and Human Health
Cardinal/Oak Room
Moderator: Dr. P. K. Babu

Alison J. Brown (Biology) "Effect of Auditory Enrichment on African Lions"
Terri Billingsley Tobias (Environmental Studies) "Description of aquatic yeasts and their interactions with plants and Aedes mosquitoes"
Shruti Ojha (Biology) "Role of Fungal Volatiles Produced by Trichoderma on Plant Growth"

Session continues on the next page …

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

Economics and Society
Capitol Rooms
Moderator: Dr. Shankar Ghimire

Kuixi Du (Applied Statistics and Decision Analytics) "Impact of International Tourism on the International Trade: An evidence from BRICS and NAFTA countries"
Emmanuel Asante (Economics) "The Impact of Credit on Poverty: Does Inequality Significantly Accentuate the Effects of Poverty?"
Jamie Ali (Sports Management) "Lack of Leadership Roles for Women in Sport"
Frank Kalisik (History) "Sanctuary Chicago: Efforts of the Chicago Abolitionist Movement to Ensure the Safety of Fugitive Slaves, 1840-1860"

2:15pm – 3:15pm Performance Presentations

Viola Performance
Sandburg Theatre
Moderator: Dr. István Szabó

Giorgi Khatalev (Music Performance) "Suite N5: Differences of Interpretations"

Program continues on the next page …

3:30pm Keynote (Sandburg Theatre)

"Building a successful career through networking and mentoring"

Dr. Andrea Porras-Alfaro, Biological Sciences

Welcome Dr. Kishor T. Kapale, Professor and Graduate Coordinator of Physics, and Chair of the Graduate Research Conference Planning Committee (2015-2018)

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

Keynote Dr. Andrea Porras-Alfaro, Biological Sciences

Dr. Andrea Porras-Alfaro is an Associate Professor in the Department of Biological Sciences at Western Illinois University. She is currently the coordinator of the Research Inspiring Student Excellence (RISE) program of the College of Arts and Sciences, and she is the graduate coordinator in the Department of Biological Sciences. Her research focuses on the integrative study of plant-fungal symbiotic associations in agricultural and natural ecosystems. She has published more than 30 articles and received over $1,400,000 in funding. She has mentored more than 50 undergraduate and graduate students. Dr. Porras-Alfaro has been recognized by the College of Arts and Sciences with the Outstanding Faculty Award for Undergraduate Research, the Faculty Award for the Internationalization of Campus and the Faculty Award in Research and Scholarly Activity. In 2017, she received the WIU Provost's Award for Academic Excellence in Scholarly/Creative/Performing/Professional Activities.

4:30pm – 5:30pm Awards Reception (Sandburg Lounge)

Sponsored by
The College of Arts and Sciences,
Department of Biological Sciences,
Department of Psychology,
and
Department of Chemistry.

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

Graduate Research Conference Planning Committee

Davison Bideshi, Dinesh Ekanayake, Colin Harbke, Anita Hardeman, Hoyet Hemphill, Kishor T. Kapale (Chair), Jennifer McNabb, James McQuillan, Amy Patrick Mossman, Nancy Parsons, Amanda Schulz, and Mei Wen.

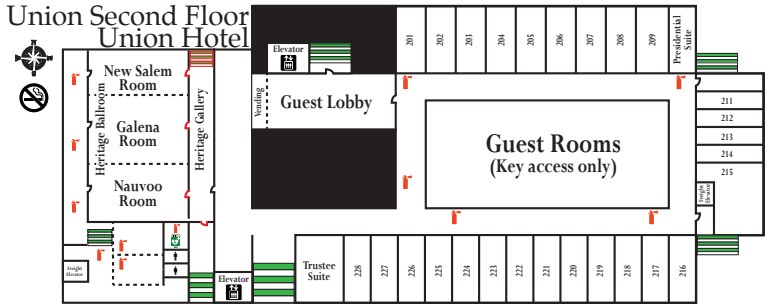
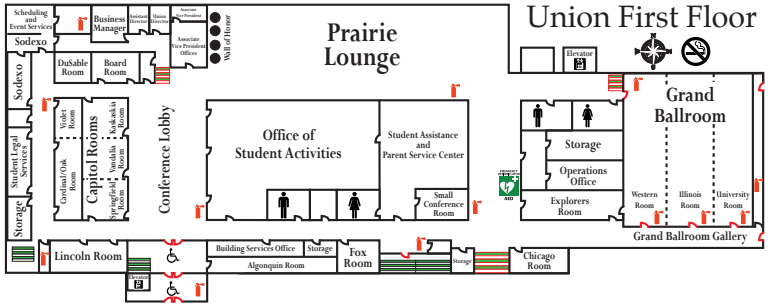
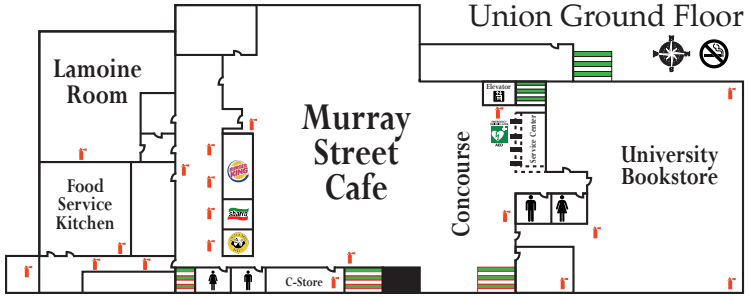
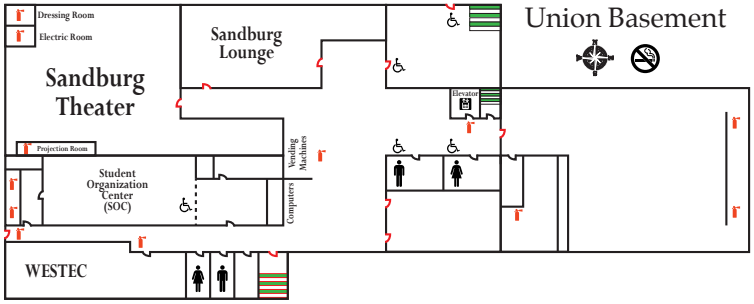
Conference Day Volunteers

Michael Adetunji, Tanjina Ahmed, Alok Kumar Bhattarai, Niva Kumari Jayswal, Aparna K. Kapale, Omer Mohamed, and Grija Kumar Thapa.

Judges

Esteban Araya, Marcus Buker, P. K. Babu, David Banash, Brian Bellott, Steven Bennett, Davison Bideshi, Mark Boley, Hoang Bui, Ute Chamberlin, Dennis DeVolder, Virginia Diehl, Justin Ehrlich, Dinesh Ekanayake, Sunita George, Jonathan Hammersley, Hoyet Hemphill, Leaunda Hemphill, Anita Hardeman, Garrett D. Hunter, Jin Jin, Kristine Kelly, Peppi Kenny, Douglas Lafountain, J. Scott McConnell, Sandra McFadden, Patrick McGinty, Kasing Man, George Mangalaraj, Kyle Mayborn, Sumesh Phillip, Jennifer Plos, Christopher Pynes, Steve Radlo, Timothy Roberts, Karen Sears, Amanda Silberer, Liguo Song, Sebastian Szyjka, Roger Viadero, Pengqian Wang, and Mei Wen.

Moderators

P. K. Babu, Shankar Ghimire, Jonathan Hammersley, Tej Kaul, Zheng Li, Saisudha Mallur, Amanda Silberer, Mette Soendergaard, and István Szabó

Thank You!