

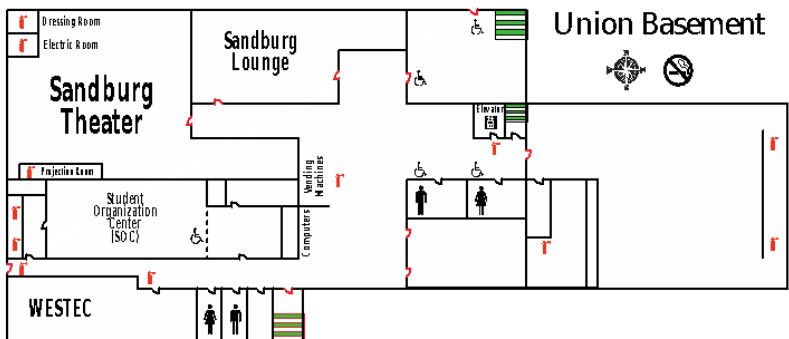
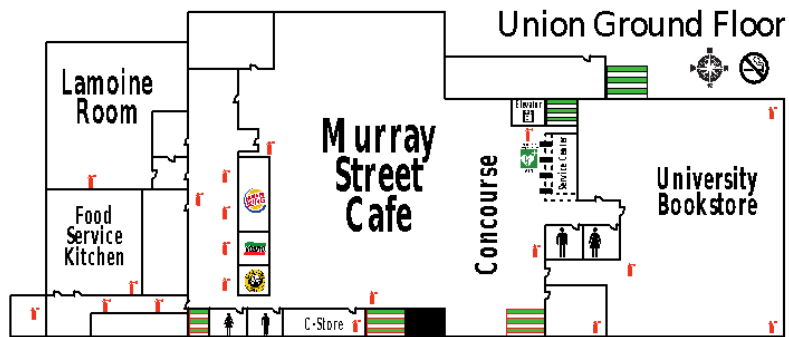
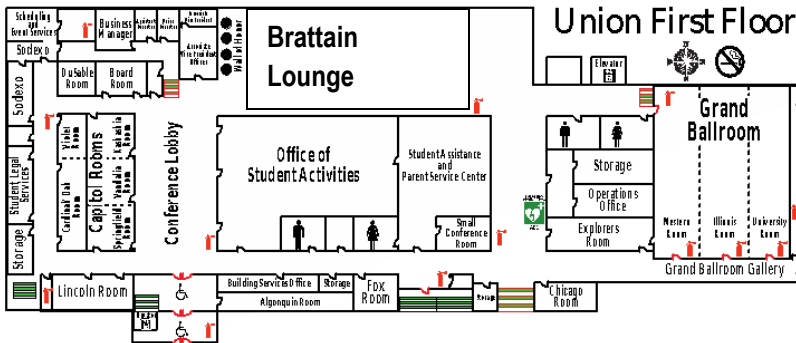
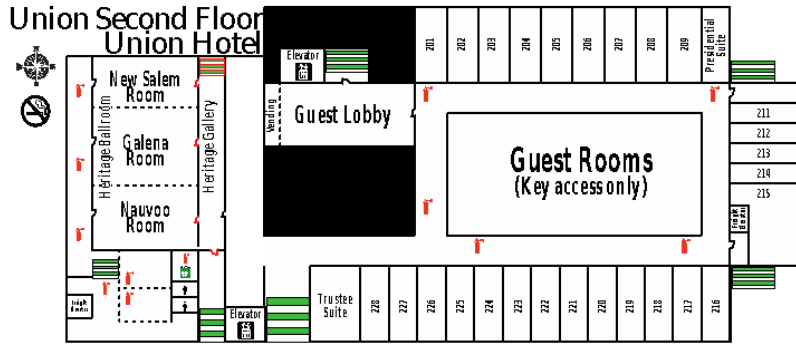
Western Illinois University

7th Annual

Graduate Research Conference

Friday, February 28, 2020

University Union



Schedule of Events

8:30am – 2:00pm	Check in (Union First Floor Conference Lobby)
9:30am – 10:30am	Concurrent Sessions (Board Room, Capitol Room, Cardinal/Oak Room)
9:30am – 10:30am	Performance Session (Sandburg Theater)
10:45am – 12:15pm	Concurrent Sessions (Board Room, Capitol Room, Cardinal/Oak Room, Fox Room)
12:30pm – 2:00pm	Poster Session (Heritage Room)
2:00pm – 3:00pm	Keynote: “Composing a Life of Projects”, Dr. James Romig, School of Music (Sandburg Theater)
3:15pm – 4:15pm	Concurrent Roundtables (Sandburg Lounge, Lincoln Room)
4:15pm – 5:15pm	Awards Reception (Heritage Ballroom)

Note: The Lincoln Room will be open 8:30am – 2:00pm with coffee, water, and donuts

9:30am – 10:30am Concurrent Sessions

Fish, Animals, and Their Habitats

Board Room

Moderator: Dr. Ranessa Cooper

Rajeev Roy (Biology) How Is Cannibalism in Spodoptera frugiperda Influenced by Plant-Induced Defenses?

Zachary Witzel (Biology) Size Selectivity of Gill Nets Used to Target Silver and Bighead Carp in the Upper Mississippi

Madeline Tomczak (Biology) The Age, Growth, and Emergence of Larval Fish in the Upper Mississippi River

Civic Engagement: Contemporary Challenges and Opportunities

Cardinal/Oak Room

Moderator: Dr. Anna Valeva

Katrina Vandeven (Political Science) Proactive Guerrilla Archiving

Rachael Aderoju (English) School as a Form of Ideological State

Apparatus (ISA) and Liberation: A Case Study of Paulo Freire’s “The Banking Concept of Education” and Tara Westover’s “Educated”

Fanbin Zeng (Communication) Social Media, Hashtag Hijacking and Public Relations: The Case Study of #AskChevron

Two Extreme Problems: Game Addiction and the Farthest Point

Capitol Room

Moderator: Dr. Amy Ekanayake

Belal Al-Madani (Mathematics) The Farthest Point Problem

Benjamin Kolaczkowski (Clinical & Community Mental Health) Video Game Ratings Study

9:30am – 10:30am Performance Session

Sandburg Theater

Moderator: Dr. Amy Mossman

Kaitlin Findley (Theatre – Design) A Journey Through the Scenic Design Process of “Stupid F#@king Bird”

Rebecca Rankin (MFA in Costume Design) Costume Design for Richard II

10:45am – 12:15pm Concurrent Sessions

Experimental Biology and Medicine

Board Room

Moderator: Dr. Victoria Baramidze

- Lindsey Weintraub (Biology) Antioxidant Activity and Antiproliferative Effects of *Acmella alba*, *Acmella oleracea*, and *Acmella calirrhiza*
- Kimberly Oldenburg (Chemistry) Antioxidant Activity and Phenolic Content of Chinese Balsam (*Impatiens chinensis*)
- Rebecca N. Bocian (Biology) Development of a Novel Calreticulin Plasmid Reporter for the Identification of Immunotherapeutic Drugs that Induce Immunogenic Cell Death
- Mallika Asar (Chemistry) Phage Display Selection, Identification, and Characterization of Novel Pancreatic Cancer Targeting Peptide Ligands
- April Franco (Biology) The Characterization of Pancreatic Cancer Targeting Peptides MCA1 and MCA2

Society, Literature, and Culture

Cardinal/Oak Room

Moderator: Dr. Timothy Helwig

- Lauren Cisna (Musicology) Behind the Iron Mask: Dmitri Shostakovich and *The Gadfly*
- Kendrick Keller (English) Devil-Bug's Dream: an American Nightmare
- Maureen Sullivan (English) Phrenological Framework and Physical Depiction: Disability and Depravity in Poe's "The Tell-Tale Heart"
- Alex Weidenhamer (English) The Morbid Muses of Antebellum America: Death, Gender, and Defiance in the Works of Edgar Allan Poe
- Alan Rocca (English) The West as Text: Poe's *The Journal of Julius Rodman* as Textual Exploration of Antebellum Reprint Culture Issues in Public Health

Health & Well-Being

Capitol Room

Moderator: Dr. Doug LaFountain

- Matthew R. Alwood (General Experimental Psychology) A Systems Level Analysis of Hippocampal Involvement in Second-Order Fear Conditioning
- Oluwasegun Austine Akinyemi (Health Sciences) Impact of Obesity on Academic Performance of College Students
- Ejura Yetunde Salihu (Sociology) Use and Attitude Towards Complementary and Alternative Medicine Among University Students
- Courtney Dalton (Political Science) Alternative Approaches for Ending the Opioid Epidemic in the United States
- Oluwasegun Austine Akinyemi (Health Sciences) Improving Pregnancy Outcome with Early Screening of Diabetes in Pregnancy

10:45am – 12:15pm Concurrent Sessions, Continued...

Systems of People

Fox Room

Moderator: Dr. Febe Pamonag

- Brianna Richmond (General Experimental Psychology) Comparing Whites and Minorities on Defense of the Status Quo
- Jordan Glad (General Experimental Psychology) Gender Differences in the Prediction of Gender System Justification
- Melissa Gaston (Psychology) Predicting General and Specific Religious System Justification
- Geoffrey Dejanvier, Lauren Hoover, Jenissa Niño, and Breanna Williams (College Student Personnel) Examining Perceptions of Campus Climate: Opportunities for Inclusive Environments

12:30pm – 2:00pm Poster Session (Heritage Room)

1. Brittany Erickson (Applied Statistics and Decision Analytics) "A Survey and Implementation of Image Processing Techniques in Chest Radiographs for Tuberculosis Diagnosis"
2. Emmanuel Sanchez-Tovar (Applied Statistics and Decision Analytics) "Spectral Line Survey of Ionized Jet Candidates from Broadband VLA Observations"
3. Cassidy Miles (Biology) "Gear Evaluation and Aquatic Macroinvertebrate Composition in the Upper Mississippi River"
4. Zachary Witzel (Biology) "Population Demographics of Silver Carp, Bighead Carp, and Four Native Species in Pools 16 through 19 of the Mississippi River"
5. Adaugo Anyanwu (Biology) "Binding of Peptides MCA1 and MCA2 to Panc 10.05, CFPAC-1, and HPAF-II Pancreatic Cancer Cell Lines"
6. Olakunbi Folake Olawuni (Biology) "Phage Quantitative Polymerase Chain Reaction (pqPCR) for Detection of Pancreatic Cancer Cells"
7. Tyler A. Parr (Chemistry) "HPLC Analysis of Flavonoids from Grafted Heirloom Tomatoes in Hydroponic Culture"
8. Damilola Lawore (Chemistry) "Anti-Proliferative Effects of Chinese Balsam (*Impatiens chinensis*)"
9. Allison Anderson (Chemistry) "Total Antioxidant Capacity of Tea (FRAP Method)"
10. Elijah Openiyi (Chemistry) "Comparison of Organic Carbon Contents of Conventional, Vertical and No-Till Soybean Fields in Illinois"
11. Matthew Klyman (Chemistry) "Solid State Synthesis of Cobalt-Antimony-Q Crystals"
12. Alexandra Brisbin (Chemistry) "Quantitative Analysis of Limonene Content in Citrus Oil by Gas Chromatography Using Chlorobenzene as the Internal Standard"
13. Madison Chao (Chemistry) "Quantification of Flunixin in Equine Plasma by Ultra-High-Performance Liquid Chromatography Electrospray Ionization Tandem Mass Spectrometry (UHPLC-ESI/MS/MS)"
14. Abdullah Rubayyi (Chemistry) "Quantitative Analysis of Limonene Content in Citrus Oil by Gas Chromatography using o-Xylene as the Internal Standard"
15. Ifeanyi Francis Offor (Chemistry) "Quantitative Analysis of the Organic Explosive Tetryl in Water by High Performance Liquid Chromatography with Ultraviolet Detection"

12:30pm – 2:00pm Poster Session, Continued...

16. Adeola Adesoro (Chemistry) "Carboxylic Acids Protected as 1,1-Diphenylmethyl Esters for the Development of a Practical and Oxidative Deprotection Sequence"
17. Bishnu Prasad Neupane (Chemistry) "Studies towards Developing a Practical and an Oxidatively Cleavable Protecting Group for Alcohols with Concomitant Oxidation of the Alcohol in the Deprotection Step"
18. Jayasree Keerthi (Chemistry) "Synthesis of Organoselenenyl Azide by Click Chemistry"
19. Alyssa Detrick (Health Sciences) "Non-Communicable Diseases and HIV: A Look into the Health of Villagers of Kishapu District"
20. Queen Esekhalu, Ejura Salihu (Health Sciences) "Trend Analysis of Drug-Overdose-Related Deaths in Illinois from 2013 to 2018"
21. Darice Brooks (Kinesiology) "Adherence, Self-Motivation, and Exercise Enjoyment in Novice Exercisers after Four Weeks of Exercise Protocol"
22. Jason Taylor (Kinesiology) "Comparing the Effects of a Hip Strengthening Program and a Lateral Plyometric Program on Lateral Change of Direction Performance"
23. Kylie Gerhardt (Kinesiology) "NCAA Division III Athletes' Use of Mental Skills and Strategies to Cope with Mental Barriers during the Injury and Rehabilitation Process "
24. Mason Reed (Kinesiology) "Examining Sprint Speed Changes over the Course of an Ultra-Endurance Event, The Ultimate Suck"
25. Pramanand Joshi (Physics) "Geometrical Ray Tracing in Uniaxial Crystals Using Electromagnetic Method"
26. Mazharul Islam Mondal (Physics) "Optical Band Gap of Bismuth Vanadium Borate Glasses"
27. Samson A. Akinpade (Physics) "Optical Properties of Samarium (Sm)-Doped Bismuth Telluro-Borate Glasses"
28. Suman Gautam (Physics) "Study of Fluorescence Properties of Praseodymium (Pr³⁺) ions Doped Lead Boro-Germanate Glasses"
29. Taylor Brooks (Recreation, Park & Tourism Administration) "Narrative Analysis of the Leisure Behavior of Black Individuals and Families in Rural Illinois"
30. Chima Anyanwu (Sociology) "Air Pollution and Racial Health Disparities"

2:00pm Keynote (Sandburg Theater)

“Composing a Life of Projects”

Dr. James Romig, School of Music

Welcome Dr. Kishor Kapale, Interim Chair, Department of Physics

Remarks and Introduction Dr. Mark Mossman, Associate Provost and Director of Graduate Studies

Keynote Dr. James Romig, School of Music

Critics have described his music as “rapturous, slow-moving beauty” (*San Francisco Chronicle*), “developing with the naturalness of breathing” (*The New Yorker*), and “profoundly meditative... haunting” (*The Wire*). His *Still*, for solo piano, was a finalist for the 2019 Pulitzer Prize in Music. Dr. Romig's works have been performed — in 49 states and 34 countries — by such notables as the Quad City Symphony, Talujon, Duo Harpverk, Iktus, JACK, Khasma Duo, Ensemble Chronophonie, Altered Sound, Suono Mobile, Cadillac Moon, Due East, Collide-O-Scope, flutists John McMurtery and Harvey Sollberger, percussionists Tom Kolor and Doug Perkins, and pianists Louis Goldstein, Taka Kigawa, and Ashlee Mack. Recordings have been released by New World, Navona, Blue Griffin, and Perspectives of New Music. Guest-composer visits include Eastman, Buffalo, Cincinnati, Bowling Green, Illinois, Northwestern, and the American Academy in Rome. Artist residencies include Copland House, Centrum, and Everglades, Grand Canyon, and Petrified Forest National Parks. His music is published exclusively by Parallax Music Press (ASCAP).

Dr. Romig holds degrees from the University of Iowa (BM, MM) and Rutgers University (PhD). He has been on faculty at Western Illinois University since 2002. He is the 2019 recipient of the Provost's Award for Excellence in Scholarly/Creative/ Performance/Professional Activities.

3:15pm – 4:15pm Concurrent Roundtables

Environmental Challenges & Sustainability Roundtable (Lincoln Room)

STEAM Education Roundtable (Sandburg Lounge)

4:15pm – 5:15pm Awards Reception (Sandburg Lounge)

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
Department of Biological Sciences
Department of Chemistry
Department of Mathematics & Philosophy
Department of Physics
University Technology

Graduate Research Conference Planning Committee

Dinesh Ekanayake (Chair), Anita Hardeman, Hoyet Hemphill, Kishor Kapale, James McQuillan, Amy Patrick Mossman, Amanda Schulz, and Mei Wen

Conference Day Volunteers

Akintunde Samson Akinpade, Daniel Alao, Faisal Alayed, Hai Deo, Suman Gautam, Richard Jake Lambert, Mai Tharyar Linn, Mayumi Mcaninch, Mazharul Islam Mondal, Madusha De Silva

Judges

Marcus Buker, Jongnam Choi, Clifton Ealy, Amy Ekanayake, Dinesh Ekanayake, Shankar Ghimire, Eun Go, Jonathan Hammersley, Anita Hardeman, Timothy Helwig, Christopher Jacques, Jin Jin, Kishor Kapale, Kristine Kelly, Doug LaFountain, Brian Locke, Todd Lough, Kyle Mayborn, Kat Myers, Lorette Oden, Christopher Pynes, Jeremy Robinett, Mette Soendergaard, Feridun Tasdan, Roger Viadero, Jr., Mei Wen

Moderators

Victoria Baramidze, Ranessa Cooper, Amy Ekanayake, Timothy Helwig, Doug LaFountain, Amy Mossman, Febe Pamonag, Anna Valeva

Thank You!