



Western Illinois University

**SCHOOL OF
GRADUATE STUDIES**

11th Annual

Graduate Research Conference

Friday, March 29, 2024

University Union

Schedule of Events

9:00am – 2:00pm	Check in (<i>Union First Floor Hallway</i>)
9:30am – 10:45am	Concurrent Sessions (<i>Board Room, Fox Room, Cardinal/Oak Room, Capitol Rooms, Sandburg Theatre</i>)
10:45am – 11:00am	Break (<i>Lincoln Room</i>)
11:00am – 12:30pm	Poster Session (<i>Grand Ballroom</i>)
12:30pm – 1:00pm	Break (<i>Lincoln Room</i>)
1:00pm – 2:45pm	Concurrent Sessions (<i>Board Room, Fox Room, Cardinal/Oak Room, Brattain Lounge</i>)
2:45pm – 3:00pm	Break (<i>Lincoln Room</i>)
3:00pm – 4:00pm	Keynote: “Characteristics of Good Researchers: Topic Selection and Literature Review” by Dr. In Lee, School of Computer Sciences (<i>Heritage Room</i>)
4:00pm – 5:00pm	Awards Reception (<i>Lincoln Room</i>)

9:30am-10:45am Concurrent Sessions

International Relations and Political Impact Studies

Board Room

Moderator: Dr. David Lane

Tarannum Rashid (Political Science), “The influence of international non-governmental organizations (INGOs) “Naming & Shaming” on states for their environmental Compliance.”

Yinka Ogunlana (Political Science), “Impact of US Military Training on Recipients States Military Expenditure.”

Purushottam Subedi (Political Science), “Indian Blocked and Its Impact on Nepal-China Relationship.”

Maame Esi Assafuah (Psychology), “Understanding Academic Resilience in International Students.”

Making Numbers Dance

Fox Room

Moderator: Dr. Feridun Tasdan

Maral Tajova (Mathematics), “Root finding algorithms with higher computational efficiency.”

Ekene Adim (Computer Science), “Comparative Analysis of Classical and Quantum Cryptography: Assessing Performance and Adaptability in a Simulated Environment.”

Md Nazmul Haque Nihad (Physics), “Quantum Zeros and Ones: Leveraging Quantum Entanglement for Game Strategy Optimization.”

Environments and Advocacy

Cardinal/Oak Room

Moderator: Dr. Megan Owens

Grace Keziah Dadala (Public Health), “Assessing Access and Use of Oral Healthcare in LGBTQ+ and Undocumented Immigrants in the United States.”

Nathaniel Hines (Master of Science: Recreation Administration), “Beyond the Field: Making the Case for Teenage Employment.”

Taiwo Agbaje (GIS), “GIS Based Accessibility Analysis for Neighborhood Parks, The Case of McDonough County, Illinois.”

Md Zobayer Bin Amir (Mathematics), “Modeling CO₂ Emission in South Asian Countries.”

Session continues on the next page ...

9:30pm – 10:45pm Concurrent Sessions, Continued...

Perspectives on Gender and Sexuality

Capitol Rooms

Moderator: Dr. Anita Hardeman

Madalyn Pridemore (Musicology), “It's a Femininomenon: Chappell Roan and the Creation of Sapphic Genre.”

Selina Mannion (MBA), “Our Tax Code is Misogynist.”

Ebenezer Kojo Gyasi Mensah (Sociology), “Women’s Rights in Africa: The Cedaw and Achpr in the 21st Century.”

Stage Performances

Sandburg Theatre

Moderator: Hadley Kamminga-Peck

Sara Benbella (MFA Acting), “Waiting for Godot: A Purgatory of the Self.”

Wesley Tilford (Theatre - Acting) “Scab for Hire.”

11:00am – 12:30pm Poster Session (Grand Ballroom)

1. Thomas Chu (Physics), “1R-1C WBO Circuit: Theory and Measurement.”
2. Punya Paudel (Physics), “Radio Continuum Consistency and Modeling of Molecular Lines in High-Mass Star-Forming Region.”
3. Tinuade Dawotola (Applied Mathematics), “A Comparative Analysis of Link Functions in Binomial Regression Models with Applications to Bioassay Data.”
4. Amy Aung (Physics), “Analysis Of Structural Properties of Bismuth Boro-Tellurite Glasses by Raman Spectroscopy.”
5. Olivia Brinker (Chemistry), “Antioxidants in Hot-Brewed and Cold-Brewed Teas.”
6. Prince Kwaku Asamoah (Applied Statistics & Decision Analytics), “Assessing the Socioeconomic Impacts of Flooding in Ghana.”
7. Chiemeka Emeribe (Biology), “Biodegradation of Chlorpyrifos Insecticide by Bacillus Cereus ST06 and Chryseobacterium sp 6024 Isolated from Agricultural Soil in Nigeria.”
8. Alaric Evans (Physics), “Broadband Spectral Line Survey toward Ultracompact and Hypercompact HII Regions.”
9. Hamza Rabi (Communication), “Consequences of Binge Eating Episodes or ‘Pigging Out.’”
10. Hamza Rabi (Communication), “How Well Self-Regulated Learning Strategies Work to Improve Student Grades in College Courses.”
11. Mehbuba Rashid Mouri (Physics), “Density Measurements of Borate Glasses.”

11:00am – 12:30pm Poster Session, Continued...

12. Cloud Chang (Clinical/Community Mental Health), “Discover PTSD Diagnosis Intricacies by Evaluating Widely Used Tools: CAPS-5, PCL-5, C-Mississippi, and PSSI-5.”
13. Oluwaseyi Omodiminiyi (Biology), “Effect of Clove Oil on *Escherichia Coli*.”
14. Jefferson Ikediuba (GIScience And Geoenvironment), “A Hotspot Analysis of Disaster Risk, Social Vulnerability and Resilience in Iowa.”
15. Hollan Wright (School Psychology), “Evaluating Commonly Used Interventions to Inform MTSS in Rural Districts.”
16. Destiny Odah (Public Health), “Gender and Belief about Menstruation and Academic Performance.”
17. Md Khokon Miah (Physics), “Glass Sample Preparation and Refractive Index Study of Borate Glasses Doped with Rare Earth Ions.”
18. Katie Hernandez (School Psychology), “Growth Trajectory of Religiosity from Adolescence to Adulthood.”
19. Afeez A Adedayo (Biology), “Culture-Dependent Analysis of Microbial Diversity in the Rhizosphere of Healthy and Diseased *Solanum Lycopersicum*.”
20. Mary Olorunkosebi (Biology), “Identification of Probiotic Lactic Acid Bacteria Isolated from Goat Milk.”
21. Nana Ama Aduma Amankwah (Masters of Public Health), “Knowledge, Attitudes, Practices and Behaviour of Type II Diabetes Mellitus in Ghana.”
22. Amisha Jagdish Rane (Physics), “Methanol and Ammonia Lines Detected in via Broadband Continuum Observations Towards Ionized-Jet Candidates.”
23. Sarah Obregon (Biology), “Habitat type Determines Patterns of Divergence and Migration among Chicago Raccoon Populations.”
24. Ebby Ayaegbunam (Biology), “Patterns of Tick Infestation on Illinois White-Footed Mice.”
25. Emily Jovanovich (Chemistry), “Quantification of Cannabichromene among Nineteen Cannabinoids in Key Lime Pie Hemp Flowers by Liquid Chromatography Ultraviolet Detection.”
26. Jake Provis (Chemistry), “Quantification of Cannabicitran Among Nineteen Cannabinoids in Lucky Leaf Hemp Cigarettes by Liquid Chromatography Ultraviolet Detection.”
27. Lindsey LeBlanc (Chemistry), “Quantification of Cannabidiol Among Nineteen Cannabinoids in Hemp Infused Water by Liquid Chromatography Ultraviolet Detection.”
28. Keszia Fabien (Chemistry), “Quantification of Cannabidiol Among Nineteen Cannabinoids in Key Lime Pie Hemp Flowers by Liquid Chromatography Ultraviolet Detection.”
29. Olalekan Ogunsola (Chemistry), “Quantification of Cannabigerol (CBG) Among 19 Cannabinoids in Δ 8-THC (Tetrahydrocannabinol) Fortified White Whale CBG Hemp Flowers by Liquid Chromatography Ultraviolet Detection.”
30. Ayowole Owolabi (Chemistry), “Quantification of Δ 9-Tetrahydrocannabinol (THC) Among Nineteen Cannabinoids in Lucky Leaf Hemp Cigarettes by Liquid Chromatography Ultraviolet Detection.”
31. Ammar Al-Bataineh (Chemistry), “Quantification of Δ 9-Tetrahydrocannabinol (THC) Among 19 Cannabinoids in Δ 8-THC Fortified White Whale CBG (Cannabigerol) Hemp Flowers by Liquid Chromatography Ultraviolet Detection.”
32. Joshua Oyeboade (Biology), “Relationship between Relative Gape Size and Body Condition in Four Piscivorous Fishes.”
33. Egzona Tahiri (Chemistry), “Synthesis and Application of Macrocyclic Aromatic Tellurides.”
34. Marlena Gabriel (Organic Chemistry), “Synthesis and Study of Novel Macrocycles Containing S/Se and Si.”
35. Amariah Seely (General Experimental Psychology), “The Association of Mood States & Personality Traits with Attentional Difficulties.”
36. Calyn Dupuis (Biology), “The Effect of Neem and Clove Oils on *Escherichia Coli*.”
37. Abdual Latif Penddah (Biology), “The Effectiveness of Cryptolepine and Xylopic Acid in The Treatment of Malaria In Diabetes-Malaria Co-Morbidity in Sprague-Dawley Rats.”
38. Ahamed Ismail Hossain (MBA), “Transforming a Third-Party Delivery Service Provider’s Warehouse into a Smart Fulfillment Center: Adapting Strategies for E-Commerce Business Leverage.”
39. Richie Imafidon (Computer Science) “Advancements in Deep Learning: Implications in Cybersecurity.”

1:00pm – 2:45pm Concurrent Sessions

Art and Culture

Board Room

Moderator: Dr. Kristine Kelly

Sarah Tapper (Museum Studies), “Etruscans in Museums-Ethics, Looting, and The Protection of Cultural Heritage.”

Juan Ramirez (Psychology), “Individual Differences in Enjoyment of Horror Experiences.”

Kaylin Vos (Master of Music in Choral Conducting), “Monophonic Harmony: Analysis of Plainchant through the Harmonic Series.”

Ethan Schuller (Master of Music, Musicology), “Facing Forward, Looking Back: The Transmission of Chinese Culture in Singapore through Music.”

Session continues on the next page ...

1:00pm – 2:45pm Concurrent Sessions, Continued...

Scientific Frontiers

Fox Room

Moderator: Dr. Tahir Khan

Tolulope Bolarinwa (Chemistry), “Anti-Cancer Activity of Novel Cobalt, Copper, Manganese, Iron, and Silver Benzothiazole and Benzoimidazole Complexes.”

Christiaan Masucci (Computer Science), “Persistence of Resident Data Record in Master File Table.

Kushal Dahal (Physics), “Raman Study of Binay Bismuth Borate Glasses Doped with Praseodymium Ions.”

Femi Egbeleke (Biology), “The Anti-Cancer Effect of Eyeball Plant (*Acmella Spp*) Extracts in Ovarian Cancer.”

Organizational Strategies

Cardinal/Oak Room

Moderator: Dr. Christopher Bitner

Leo Ofili (General Experimental Psychology), “An Exploration of Self-Determined Motivation, Diversity Climate, and Organizational Commitment.”

Zaynab Yusuf (Communication), “Channel Preference in the Workplace in a Post Covid-19 Era: Face-to-Face or Email.”

Zaynab Yusuf (Communication), “Integrating Artificial Intelligence in Managing Communication Apprehension: Best Practices Moving Forward.”

Md Shahedur Rahman (Communication), “Replication of Ironic Message Production: How and Why We Produce Ironic Messages.”

William Paveleck (Public Safety Administration), “Work-Climate and its Relationship with Officer Performance.”

Amariah Seely (General Experimental Psychology), “Working Memory Capacity and Task-Demand: Spontaneous Mind-Wandering Revisited.”

Musical Performances

Brattain Lounge

Moderator: Dr. Anita Hardeman

Madalyn Pridemore (Musicology), “Madalyn Pridemore (Musicology), Sociability, Connection, and Communication in Clara Schumann's Piano Trio in G minor”

Ethan Schuller (Master of Music, Musicology), “Cultivating the Sound of New China: the 20th Century Evolution of the Erhu.”

Program continues on the next page ...

3:00pm Keynote (Heritage Room)

“Characteristics of Good Researchers: Topic Selection and Literature Review”

Dr. In Lee, School of Computer Sciences

Welcome Dr. Kishor T. Kapale, Chair and Professor Physics, Chair of the Graduate Research Conference Planning Committee, and Interim Coordinator of Graduate Studies

Keynote Dr. In Lee, School of Computer Sciences

Description The keynote will focus on some characteristics of a good researcher and tools and methods for topic selection and literature review.

In Lee is a Professor in the School of Computer Sciences at the College of Business and Technology at Western Illinois University. He is a two-time recipient (2013 and 2023) of the Provost's Award for Academic Excellence in Scholarly Activities and a five-time winner of the Research Excellence Award in the College of Business and Technology at WIU. He has served as a Keimyung Global Scholar in Korea and a Research Fellow of INTI International University, Malaysia. He has published his research in such journals as Communications of the ACM, IEEE Transactions on Systems, Man, and Cybernetics, Computers & Security, Internet of Things Journal, IEEE Transactions on Engineering Management, and others. His research interests include cybersecurity, cloud computing, metaverse, and big data analytics. He received an MBA from the University of Texas at Austin and a Ph.D. in Business Administration from the University of Illinois at Urbana-Champaign. He has received more than 12,600 Google citations.

4:00pm – 5:00pm Awards Reception (Lincoln Room)

Remarks and Award Distribution Dr. Mark Mossman, Interim Provost and Academic Vice President

Sponsored by

The College of Arts and Sciences,
Department of Biological Sciences,
Department of Chemistry,
Department of Physics,
Department of Mathematics and Philosophy,
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and
Department of Communication.

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:

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Dr. Mark Mossman, Interim Provost and Academic Vice President

Graduate Research Conference Planning Committee

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

Conference Day Volunteers

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Judges

Andrea Baker, Maureen Bezold, Davison Bideshi, Krista Bowers Sharpe,
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Megan Owens, Steve Radlo, Anjum Razaaque, Amanda Silberer, Ligu Song,
Seyfi Turkelli, Mei Wen, and Shaozhong Zhang

Moderators

Christopher Bitner, Hadley Kamminga-Peck, Tahir Khan, Kristine Kelly, Anita
Hardeman, Feridun Tasdan, David Lane, and Megan Owens.

Thank You!

