



12<sup>th</sup> Annual  
**Graduate Research  
and Professional  
Conference**

Friday, April 3, 2026,  
University Union

**\*\*\*draft \*\*\***

## 9:30am-10:50am Concurrent Sessions

### Artificial Intelligence, Computing, and the Digital World

#### Board Room

**Moderator: Dr. Tahir Khan**

- Minh Kha Tran (Computer Science), "EDUKAI: A Transparent, AI-Enabled Education Platform for the Traditional Classroom."  
Osondu Onwuegbuchi (Computer Science), "Student Perceptions of AI-Generated Content and Academic Integrity: A Reflective, Multi-Agent Perspective."  
Abiodun Adebajo (Computer Science), "AI-Based Framework for Intrusion Detection and Automated Prevention in Cloud Computing Environments."  
Olivia Brashear (Communication), "Instructor and Student Use of AI in the College Classroom: Best Practices."

### Culture, History, and Identity

#### Capitol Room

**Moderator: Dr. Anjum Razzaque**

- Paolo Gabriel Romero (History), "Entartete Kunst: International Reactions and Responses to Nazi Attacks on Modern Art."  
Samantha Adcock (English), "From Unpaved to Memorialized: One Mexican-American Community's Journey of Reclaiming Space for Cultural Recognition."  
Sumaiya Akter (Sociology), "Comparing Islamification in Iran and Bangladesh: State Power, Society, and Women's Rights."  
A S M Zaki Faisal (Political Science), "Adaptive Governance and Lean Approaches to Earthquake Preparedness: Evidence from Bangladesh."

### Communication and Media

#### Chicago Room

**Moderator: Dr. Roberta Di Carmine.**

- Yun Yupar Lwin (Communication), "Work-Life Balance as Communicative Boundary Work."  
Michael McNamara (Theatre (Directing)), "Directing with Care: The Morality of Contemporary Theatre."  
Sara BenBella (MFA Acting), "Shakespeare and the Supernatural: Magic and Transformation Through Puppetry."  
Athziri Garcia (English), "The Epidemic of the Vampire: A Shift in Narratives."

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## 11:00am – 12:30pm Poster Session (Heritage Room)

1. Adediran Adeyanju (Communication) Instructor Clarity and Student Cognitive Processing: A Cognitive Load Theory Perspective
2. Jacquelyn Herrera (Engineering Technology) Women's College Major Decisions: Influences Behind Pursuing or Avoiding STEM Fields
3. Emily Dawson (Chemistry) Development of a Low-Cost Cacao Bean Cutting Device
4. Thomas Chu (Physics) LRC circuit Plus Op Amp
5. Courtney Anderson (School Psychology) Healthy Children-Healthy Communities: Evaluating CloseGap and Counseling Supports in a Rural District
6. Jill Kirankumar Solanki (Public Health) Another day, another disaster. Life in rural Forgottonia.
7. Nusrat Sultana Mimi (Public Health) Knowledge, Attitude & Practice towards Second-hand Smoking Among Undergraduate Students in Bangladesh
8. Nadia Soraia Soares Indjai (MPH) Alzheimer's Disease Trends in The State of Illinois (2020-2025): Public Health Burden and Implications
9. Eniola Alaka (Communication) Message Design Logics: Examining the Influence of Relational Maintenance Goals on Responses to Mental Health Disclosures Among Close Friends
10. Michelle Daniel (Biology- Thesis) Quantifying the Half-Maximal Inhibitory Concentration (IC50) of Novel Synthetic Compounds in Ovarian Cancer Cells
11. Md Mahmud Alam (Chemistry) Potency Testing of Synthetic THC Isomers-based Products by Liquid Chromatography Ultraviolet Detection: Quantification of  $\Delta^9$ -THC in  $\Delta^8$ -THC Fortified Gummies
12. Md Mahmud Alam (Chemistry) Potency Testing of Synthetic THC Isomers-based Products by Liquid Chromatography Ultraviolet Detection: Quantification of  $\Delta^8$ -THC in  $\Delta^8$ -THC Fortified Gummies
13. Mst Azmary Khatun (Physics) Group Velocity of Light in Biaxial Crystals
14. Nishesh K C (Physics) Birefringence of Calcium Oxalate Crystals in Human Urine
15. Richard Brown (Chemistry) Catalyst-Free Cross-Coupling of Diorganyl Ditellurides and Organosilanes: A General Procedure for the Synthesis of Unsymmetrical Diorganyl Tellurides

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

16. Maggie Schoener Schoener (Chemistry) UHPLC-ESI-MS/MS Method for Accurate Quantification of Flunixin in Equine Plasma

17. Emma Joens (Chemistry) Quantification of 9(R)-hexahydrocannabinol (HHc) in vaping oil using liquid chromatography ultraviolet detection and electrospray ionization time-of-flight mass spectrometry.

18. Emma Joens (Chemistry) Quantification of 9(R)-hexahydrocannabinol-O-acetate in vaping oil using liquid chromatography ultraviolet detection and electrospray ionization time-of-flight mass spectrometry.

19. Moriah Howard (Biology) Antimicrobial Activity of Novel Cobalt, Nickel, Copper, Diphenyl Carbonate and Copper (III)-Periodate Complexes.

20. Naima Jannath Rimi (Chemistry) Quantification of Cannabigerol in Delta 8-THC Fortified Tinctures by Ultrahigh-Performance Liquid Chromatography with Ultraviolet Detection.

21. Jayla Carle (General Experimental Psychology) Credibility Perceptions of Child Sexual Abuse Victims: Individual Differences

22. Peter Olusesan (Biological Science) Anti-Cancer Effect of Novel Metal-Ligand Complexes on Ovarian Cancer

23. Md Imon Hossain (Chemistry) Quantification of Cannabidiol in Hemp-infused Face Cream by Ultrahigh-performance Liquid Chromatography with Ultraviolet Detection

24. Md Imon Hossain (Chemistry) Quantification of  $\Delta^8$ -Tetrahydrocannabinol (THC)-O-Acetate in Vaping Oil Using Liquid Chromatography Ultraviolet Detection and Electrospray Ionization Time-of-Flight Mass Spectrometry

25. Tamanna Bonny (Public Health) Prenatal Opioid and Polysubstance Exposure and Risk of Autism Spectrum Disorder in Children

27. Ananya Sharma Proma (Sociology), An Exploratory Study of the Impact of Father's Presence upon Childhood Sexual Abuse (CSA) Experience and Mental Health Outcomes

28. Rachael Adebisi (Master of Public Health) Shifting from Coverage to Elimination: Changes in Nigeria's Hepatitis B Vaccination Policy and Implementation (2015–2021)

29. Rachael Adebisi (Master of Public Health) Chemobiology of Obesity and Advances in Bariatrics - A Systematic Review

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

30. Gunter Nusbaumer (Biology) Taxonomic and Functional Changes of Fish Assemblages in the Spoon River Basin Over Five Decades

31. Olivia Salrin (Biology) Grass Carp Trophic Ecology in Two Large Rivers: Impact on Resource Competition with Other Invasive Carps in the Absence of Aquatic Vegetation

32. Elizabeth Oyeniyi (Public Health) The Impact of Aerobic Exercises on Dementia in Older Adults

33. Rachael Adebisi (Master of Public Health) Exploring the Influence of Healthcare Providers on HPV Vaccine Acceptance Among Women of Reproductive Age Group in Nigeria.

### 1:00pm – 2:30pm Concurrent Sessions

#### Mathematical and Physical Sciences

##### Board Room

Moderator: Dr. Feridun Tasdan

Kahawathugoda Senadeera (Mathematics), "A High-Order Two-Point Algorithm for Robust Root Finding."

Kiara Hunte (Mathematics), "Optimal Control Strategies for a Cancer System Treated with Chemotherapy."

Philip Ambe Omiah (Physics), "Fluorescence Properties of Dysprosium and Praseodymium ( $Dy^{3+}$  /  $Pr^{3+}$ ) Co-doped Bismuth Boro-Tellurite Glasses."

Angelica Strack (Physics), "Physical and Optical Properties of Europium ( $Eu^{3+}$ ) and Neodymium ( $Nd^{3+}$ ) Co-Doped Bismuth Boro-Tellurite Glasses."

#### Environment, Ecology, and Community Resilience

##### Fox Room

Moderator: Dr. Andrew Kerr

Sorin Hilsabeck (Biology), "Seasonal Changes in Diet Composition of Blue Catfish across five western Illinois lakes."

Arup Ratan Devnath (GIScience and Geoenvironment), "Socio-Economic Impacts of Flooding on the Livelihoods of the Affected Population of Mahmudpur Union in Dohar Sub-District, Dhaka."

Benjamin Incoom (MA Community and Economic Development), "Preventing Local Business Closures in Moline, IL, through attraction, retention and expansion strategies."

Session continues on the next page ...

## 1:00pm – 2:30pm Concurrent Sessions, Continued...

### Human Behavior, Health, and Well-Being

#### Chicago Room

Moderator: Dr. Jonathan Hammersley

Daniela Quiroga (General Experimental Psychology), "The Curious and the Impulsive: Motivational Pathways to Caffeine Use."

Daniela Quiroga (General Experimental Psychology), "A Life History Perspective: Stress and Aggression Identification."

Douglas Mang'anda (PUBLIC HEALTH), "VaxConnect WIU: A Campus-Based Vaccine Education and Navigation Initiative to Improve Immunization Access Among University Students."

Gbeminiyi Ogunwale (Community and Economic Development), "Demand Analysis of Household Nutrient Intakes."

### Online/Remote

Capitol Room and Zoom Meeting ID: 998 1127 5158 Passcode: 261996

Join Zoom Meeting

<https://wiu.zoom.us/j/99811275158?pwd=2POINNUUJVeJZGM35iO54Hq5qdMPin.1>

Moderator: Dr. TBA

Jiliane Johnson (MAT Program in Secondary Science), "Reconstruction of a Bald Eagle Nest."

Zoie Wsll (MAT: Chemistry), "Efficiency of Solar Power Cells for Charging Mobile Devices."

Evan Murray (Alternative Teacher Licensure), "Adding Smart Functionality to Garage Door Openers."

Eric Rahn (Education - Secondary Science), "Synthetic Textile Waste Insulation Experiment."

## 1:15pm – 1:40pm Performance Presentation Session

### Performances 1:15 pm

#### Sandburg Theatre

Moderator: Dr. Gina Yi

Michael McNamara (Theatre (Directing)), "The Gallery Players presents 'Mixed Media: An Improvised Play'."

## 3:00pm Keynote (Capitol rooms)

### "The Scholar's Craft: Navigating the Struggles and Successes of Impactful Research"

Dr. Tae Yang, School of Accounting and Business Administration

**Keynote:** Dr. Tae Yang, School of Accounting and Business Administration

**Description:** What does it truly take to move from an initial idea to a published contribution? In this keynote, Dr. Tae Seok Yang provides a transparent look at the researcher's journey, peeling back the curtain on the "grind" that exists behind every finished paper. While the academic path is often celebrated through milestones like the Provost's Award, the reality is built on a foundation of persistence through the peer-review cycle and the quiet struggles of the writing process. Dr. Yang will share cross-disciplinary strategies for building a resilient research identity, finding one's unique voice, and bridging the gap between theoretical inquiry and practical impact. By demystifying the hurdles of publishing and emphasizing the power of professional networking, this session offers a roadmap for graduate students across all disciplines to navigate their own paths with clarity, purpose, and professional excellence.

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

Program continues on the next page ...

## Graduate Research Conference Planning Committee

Roberta Di Carmine, Dinesh Ekanayake, Jonathan Hammersley, Sheryl Harty,  
Kishor T. Kapale, Heidi Lung, James McQuillan (Chair), Mei Wen.

## Presentation Training for Presenters

Dr. Peter Jorgensen

## Conference Contributors and Conference Day Volunteers

Megan Whyte

## Judges

Dr. Gregory Baramidze, Dr. Maureen Bezold, Dr. Roberta Di Carmine, Dr.  
Dinesh Ekanayake, Dr. Joel Gruver, Dr. Hadley Kamminga-Peck, Dr. Heidi  
Lung, Dr. Saisudha Mallur, Dr. George Mangalaraj, Dr. Kimberley McClure,  
Dr. Anjum Razzaque, Dr. Timothy Roberts, Dr. Mei Wen, Dr. Gina Yi, Dr.  
Shaozhong Zhang, Dr. Danyang Zhao

## Moderators

Dr. Roberta Di Carmine, Dr. Tahir Khan, Dr. Jonathan Hammersley, Dr.  
Andrew Kerr, Dr. Anjum Razzaque, Dr. Feridun Tasdan, Dr. Gina Yi

# Thank You!

Online map of the WIU University Union:

[https://www.wiu.edu/student\\_success/university\\_union/pdf/UniversityUnionMap.pdf](https://www.wiu.edu/student_success/university_union/pdf/UniversityUnionMap.pdf)

