Session Winners

52nd Annual
STUDENT RESEARCH CONFERENCE

SATURDAY, MARCH 26
DOWNING STUDENT UNION

Western Kentucky University • Bowling Green, KY
Explanation of Listings

The program includes details for each presentation in the following order: presenter, co-presenters (as applicable), co-authors (as applicable), the session title, and the mentor for a project. Each WKU student was permitted to serve as the primary presenter on one presentation at the conference. Up to three co-presenters and up to six co-authors could also be listed. The sample below illustrates the format.

Sample

**Presenter Last Name, First Name; Co-Presenter Last Name, First Name; Co-Author Last Name, First Name; “Title of a Great Presentation” (Mentor First Name Last Name)**
Session 1 Special Organized Session, "Applicable Applied Mathematics."

**Stewart, Logan; Crouch, Trey; Ozer, Ahmet Ozkan; Poynter, Matthew; Aydin, Ahmet** “Numeric Filtering Vs. Non-filtering: Boundary Control Of Vibrations On A AM String” (Ahmet Ozkan Ozer)

Session 2 Graduate Oral Presentations

**Davis, Shelby;** McDaniel, Adalin; Sorensen, Melissa; Kendrick, Mia; Hurt, Cora; Simmons, Molly “An Investigation Of Perceived Authenticity Of Diversity And Black Lives Matter Statements And Their Influence On Applicant Attractiveness” (Katrina Burch)

Session 3 Graduate Oral Presentations

**Harry, Trevor; Chloe Cooper;** Lawler, Trayson; Hourigan, Amy; Wisenden, Matthew; Strenecky, Bernie “Rotary And Rivers: Saving Our Rivers Through Service Learning In Riverside Communities Via Riverboat Based Education And Outreach” (Jason Polk)

Session 4 Graduate Oral Presentations

**Heard, Whitney;** King, Rodney “Identification Of Toxic Genes From Mycobacteriophage Moomoo” (Rodney King)

Session 5 Graduate Oral Presentations

**Apostolopoulos, A.S.** “Consequences of climate change in North American cave fauna” (Keith Philips)

Session 6 Graduate Oral Presentations

**Whalin, Symone** “Liquid Chromatography With Tandem Mass Spectrometry Method Development For The Determination Of β-defensins In Bovine Milk” (Eric Conte)

Session 7 Undergraduate Oral Presentations

**Dawson, Miriam** “Chinese Use Of Shaming Language On The Topic Of Covid-19 In The Sino-American Relationship” (Ashely Stinnett)

Session 8 Undergraduate Oral Presentations

**Abshire, Nicholas; Sledge, Dalton** “Safety Investigation Of Driver Behavior At Work Zones In Kentucky: A Driving Simulator Study” (Kirolos Haleem)

Session 9 Undergraduate Oral Presentations

**Kilgore, Albert; William Seymour** “Development Of Collaborative Robotics To Assist Healthcare Staff And Facilities” (Farhad Ashrafzadeh)

Session 10 Undergraduate Oral Presentations

**Wood, Jeffery** “Hurricane Irma (2017) Analysis During Initialization, Intensification, And Decay Using Satellite And Radar Data” (Joshua Durkee)
Session 11 Undergraduate Oral Presentations
Park, Andrew “Identifying The Transcription, Translation, And Functionality Of Circular Rnas Using High-throughput Sequencing Data” (Samuel Earls)

Session 12 Undergraduate Oral Presentations
Archey, Casey; Durkee, Joshua “The Role Of Emergency Management Disaster Science And Its Application To The December 11, 2021, Bowling Green Tornadoes.” (Joshua Durkee)

Session 13 Undergraduate Oral Presentations
Bennett, Cooper “White Squirrel Weather: Applied Learning Model Utilized During The December 11, 2021 Tornado Emergency And Operations At Wku” (Joshua Durkee)

Session 14 Undergraduate Oral Presentations

Session 15 Graduate Oral Presentations, Natural Sciences
Welch, Tess “An Informative Speech Regarding Christianity’s Theological Influence On The Social Construction Of Disability: Biblical Stories, Their Modern Impacts, And Implications” (Garner Newman)

Session 16 Graduate Poster Presentations
Hourigan, Amy “An Investigation Of Carbon Cycling In An Urban Karst Groundwater System” (Jason Polk)

Session 17 Graduate Poster Presentations
McCollum, Diamonde; Moskal, Katie; Teeters, Jenni “Lifetime Cannabis Use Is Associated With Suicidal Ideation And Non-suicidal Self Injury” (Jenni Teeters)

Session 18 Undergraduate Poster Presentations (tie)
Norman, Bella; Lohano, Sarisha; Vilt, Dexter; King, Rodney; Rinehart, Claire “Determining Functions of Genes in Mycobacteriophage MooMoo” (Rodney King)

Calhoon, Drake; King, Rodney “Discovery and Analysis of Mycobacteriophage Viridity” (Rodney King)

Session 19 Undergraduate Poster Presentations
Monroe, Lee; King, Rodney “An Analysis Of Bacteriophage Sunflower1121” (Rodney King)

Session 20 Undergraduate Poster Presentations
Brown, Gillian; King, Rodney “The Isolation And Characterization Of Bacteriophage Hasitha” (Rodney King)
Session 21 Graduate Poster Presentations
**Cole, Zoe;** Rowland, Naomi; King, Rodney “The Discovery and Sequencing of Bacteriophage” (Naomi Rowland)

Session 22 Undergraduate Poster Presentations
**Harness, Briana;** Hakimov, Somon; Neupane, Shreya; Er, Ali; Banga, Simran “Antibacterial Effectiveness of Methylene Blue and Silver Nanoparticles on Prosthetic Joint Infections” (Simran Banga)

Session 23 Undergraduate Poster Presentations
**Patterson, Kellen;** Schulte, Connor; Nee, Matthew “Polystyrene Beads” (Matthew Nee)

Session 24 Undergraduate Poster Presentations
**Norman, Katie;** Bledsoe, Lee Anne “Exploring Laboratory Techniques In Fluorescent Dye Tracing” (Lee Anne Bledsoe)

Session 25 Undergraduate Poster Presentations (tie)
**Llarena, Andy** “San Andres Eco Resort” (Shahnaz Aly)

**Mulzer, Kerragan** “The Art Of Revitalization” (Shahnaz Aly)

Session 26 Undergraduate Poster Presentations (tie)
**Hendrick, Colton** “Strategic Design For National Park Facilities” (Shahnaz Aly)

**Rashada, Mya** “Healing Through Architecture” (Shahnaz Aly)

Session 27 Undergraduate Poster Presentations
**White, Trevor** “Community Center” (Shahnaz Aly)

Session 28 Undergraduate Poster Presentations (tie)
**Herlad, Benjamin; Tobbe, Johnathan; Sharp, Ashton; Spargo, Will;** Seymour, Liam “Vibration Mitigation in Top-Loading Washing Machines” (Morteza Nurcheshmeh)

**Chetawatee, Apirada;** Galloway, J. Michael “Implementing Virtual Reality Into Footwear Design” (J. Michael Galloway)

Session 29 Undergraduate Poster Presentations
**Bradford, Lillian** “Skating Rink Days: An Oral History Of A Traveling Roller Skating Rink” (Kate Hudepohl)

Session 30 Undergraduate Poster Presentations
**Poynter, Matthew;** Aydin, Ahmet; Stewart, Logan “Wolfram Demonstration Projects To Simulate The Control Of Vibrations On A Three-layer Beam” (Ahmet Ozkan Ozer)
Session 31 Undergraduate Poster Presentations
Krishnani, Sahil; Gover, Harrison; Anekere, Nishu “Water Pollution Detection Using Autonomous Drone Hardware and Software” (Farhad Ashrafzadeh)

Session 32 Undergraduate Poster Presentations
Kendrick, Mia; Burch, Katrina “Examining Gender Differences In Academia Within A Pandemic: Exploring The Relationship Among Social Comparisons, Emotional Demands, And Just Saying No.” (Katrina Burch)

Session 33 Undergraduate Poster Presentations (tie)
Ash, Peyton; Naas, Alexa “Comparing Retrieval Strategies on Long-term Memory” (Jenni Redifer)

Rai, Armaan “Examining Men's Preferences in Psychotherapy” (Frederick Grieve)

Session 34 Undergraduate Poster Presentations
Kerrick, Chloe “Understanding The Mental And Emotional Impacts Of Being A Caregiver Of Socially Isolated Residents During The Covid-19 Pandemic In Kentucky.” (Gary English)