

2023

Undergraduate Scholars Showcase

April 14, 2023 • 9:00-12:00 p.m. • Morris University Center

Featuring:

Outstanding Senior Assignments

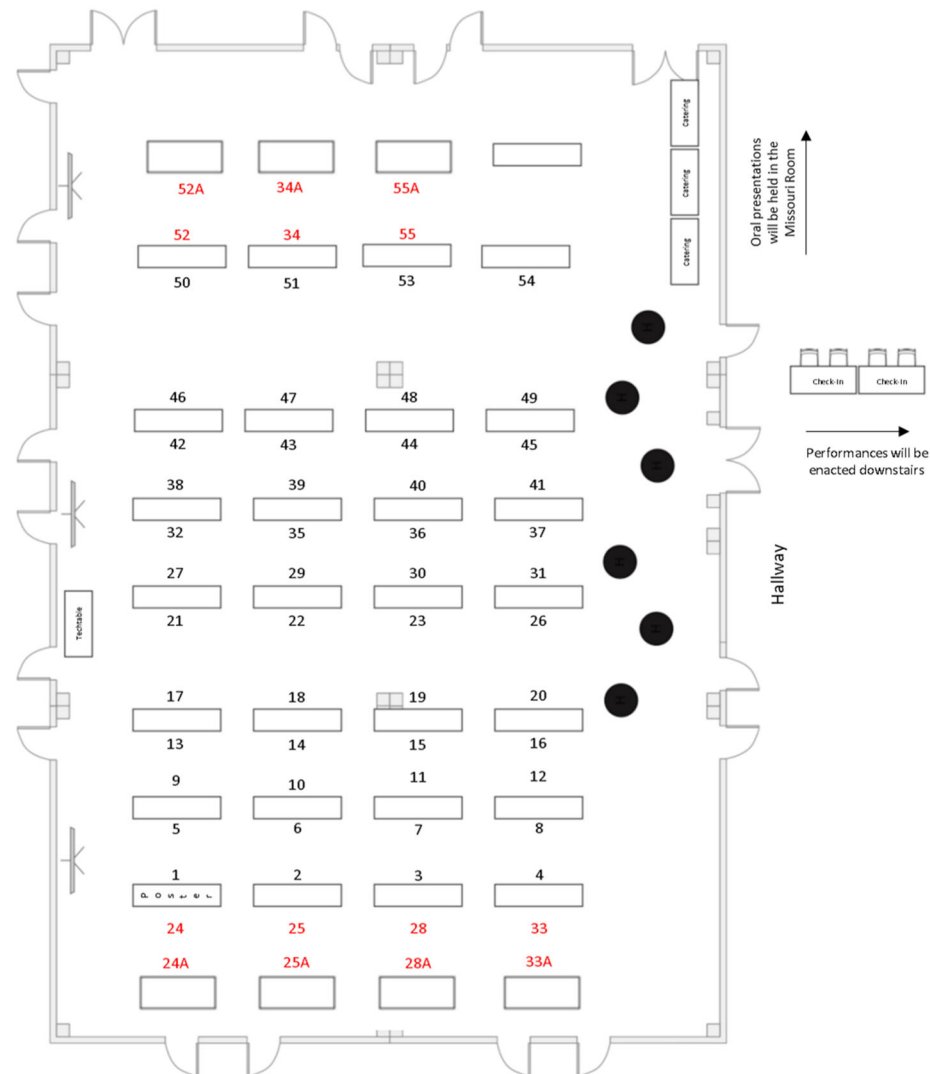
URCA Assistants

URCA Associates



Undergraduate Scholars Showcase

Poster Presentation Assignments • Conference Center



Schedule of Events

April 14, 2023 • Morris University Center (MUC)

Missouri Room (MUC Second Floor) - 9:00 - 11:45 a.m.

Oral and Multimedia Presentations

Conference Center (MUC Second Floor) - 10:00 - 12:00 p.m.

Poster Presentations and Displays
Demonstrations and Exhibits

Goshen Lounge (MUC First Floor) - 10:30 - 12:00 p.m.

Performances



Oral and Multimedia Presentations

Morris University Center, Missouri Room 9:00 - 11:45 a.m.

9:00 - 9:15 a.m. Hope Krisko, *Foreign Languages & Literature*^{URCA}

"An Analysis of the Effects of Decolonization on Tradition and Identity As Depicted in Four Senegalese Novels"

9:15 - 9:30 a.m. Nicholas Fowler, *Anthropology*^{URCA}

"Extraterritoriality in Chinese Port Cities Seen Through Missionary Travel Narratives, 1888-1928"

9:30 - 9:45 a.m. Lydia Wegel, *Anthropology*

"Analysis of entheses development and implications on labor in Late Medieval Poland"

9:45 - 10:00 a.m. Joseph A. King, *Historical Studies*

"Betty Boop: The Rise and Fall of the 'New Woman'"

10:00 - 10:15 a.m. Arkia Cannon, *International Studies*

"Human Trafficking on a Global Scale"

10:15 - 10:30 a.m. Dalton Hodge, *International Studies*

"Effects of Brexit on U.K. Economy and Policy"

10:30 - 10:45 p.m. Anne Fulgenzi, *Mass Communications*

"Anne Fulgenzi's Journalism Portfolio"

10:45 - 11:00 p.m. Jared Engelman, *Mass Communications*

"Excellence in Every Take"

11:15 - 11:30 p.m. Kenneth Yokem, *Mass Communications*

"Kenneth Yokem II Official Site"

11:30 - 11:45 a.m. Shawn Roddy, *Sociology*

"The Lived Experience of Black Faculty at a Predominantly White Institution"

11:45 - 12:00 a.m. Josephine Kanyi, *Foreign Language & Literature*^{URCA}

"Religion and narco-trafficking, in two films about Colombia; Maria Llena Eres de Gracia and Manos Sucias."

Performances

Morris University Center, Goshen Lounge 10:00 - 11:45 a.m.

- 10:00 - 10:15 a.m. Emery Reese, Music**
"Danza De La Mariposa for Solo Flute by Valerie Coleman"
- 10:15 - 10:30 a.m. Alex Hornsey, Music**
"Variations (after Vinalo) for Solo Marimba by Gene Koshinski"
- 10:30 - 10:45 a.m. Dominic Grasso, Theatre & Dance**
"MINDeSAPE"
- 10:45 - 11:00 a.m. Ali Hay, Theatre & Dance**
"Beautiful Minds"
- 11:00 - 11:15 a.m. Kaitlyn Hess, Theatre & Dance**
"Made of Strength and Struggle"
- 11:15 - 11:30 a.m. Victoria Lefler, Theatre & Dance**
"Tomorrow"
- 11:30 - 11:45 a.m. Leanna Lewis, Theatre & Dance**
"Affliction"



*URCA superscript denotes URCA program projects. Those without superscripts are Outstanding Senior Assignments.

Poster Presentations

Morris University Center, Conference Center 10:00 - 12:00 p.m.

1. **Hope Krisko, *Anthropology*^{URCA}**
"Decolonizing Senegalese Worldview and Identity: A Comparative Analysis of Senegalese Literature Through Time"
2. **Dana Smith, *Applied Health*^{URCA}**
"The Effects of Fructose on De Novo Lipogenesis During Weight-Loss"
3. **April Hornsey, *Applied Health*^{URCA}**
"Omega-3 Fatty Acids Prevent Peripheral Neuropathy in High-Fat Fed Mice"
4. **Paris Kinsley, Jacen King, *Applied Health*^{URCA}**
"Androgen and estrogen receptor protein concentrations in the rat brain regions treated with flutamide or exemestane"
5. **Allison Schwartz, *Art & Design*^{URCA}**
"Anti Police Corruption"
6. **Jenna Grabowski, *Biological Sciences*^{URCA}**
"Host immune defenses against bacterial infections in the amoeba-Paraburkholderia symbiosis system"
7. **Mackenzie Sievers, *Biological Sciences*^{URCA}**
"Repeated alcohol exposures' effect on Stat92E activity in adult *Drosophila melanogaster* brain"
8. **Trevor Rallo, *Biological Sciences*^{URCA}**
"Analyzing Decomposition in a Temperate Lotic System"
9. **Lucia Thompson, *Biological Sciences*^{URCA}**
"Validating Fecal Sampling as a Noninvasive Method of Measuring Thyroid Hormone Levels in Mice"
10. **Fabiola Perez, Keegan Alexis, *Biological Sciences*^{URCA}**
"Illinois High School Students' Perceptions and Relatability to Scientists before and after Authoring or Completing Scientist Spotlights"

Poster Presentations (cont.)

Morris University Center, Conference Center 10:00 - 12:00 p.m.

11. **Simon Harper, *Biological Sciences***^{URCA}
"Population Survey of *Ambystoma annulatum* in an Introduced Biotope"
12. **Mary-Margaret Benware, *Biological Sciences***^{URCA}
"Hydroxycinnamic acid concentrations in *Zea mays* across four fields with differing environmental conditions"
13. **Devin Moore, *Biological Sciences***
"The Ontogenetic Relationship between Morphology and Diet in Black Bullheads"
14. **Ifeoluwa Peace Osikoya, *Biological Sciences***^{URCA}
"Genetic Variability in Maize (*Zea mays* L.) Stress Resistance Traits"
15. **Stephanie Mullen, *Biological Sciences***
"Interactions between Tsp42Eg and PI(4,5)P2 at the synapse in *Drosophila* tsp42Eg mutants"
16. **Fatemah Barmeleki Lighvan, *Biological Sciences***
"The IRE1 inhibitor, STF-083010 decreases AB levels in *Drosophila* model of Alzheimer's disease at the neuromuscular junction"
17. **Corwin Sullivan, *Biological Sciences***^{URCA}
"Investigating a stress induced disease of a Mormon cricket population and identifying a bacterial pathogen"
18. **Gregory Nodoft, *Chemistry***^{URCA}
"Tracking the Photophysical Changes of a Prodrug in Cationic Micellas"
19. **Tyson Lobb, *Chemistry***^{URCA}
"Statin Effect on Earthworms"
20. **Ashley Chirchirillo, *Chemistry***^{URCA}
"Lipid Droplet Composition Evaluation in Gynecological Cancers Using MALDI-MSI and LC-MS/MS"

Poster Presentations (cont.)

Morris University Center, Conference Center 10:00 - 12:00 p.m.

21. **Ethan F. Bennett, Jake Finnel, Quentin Hodge, Brendan Huettenmeyer, Cara Levingston, *Civil Engineering***
"Link Bridge Design"
22. **Evan Bonhoff, Gage Booten, Ashley Chancy, Jessica Frisbee, Garrett Huff, *Civil Engineering***
"Old Collinsville Road and the Frontage Road/Salem Road—Fairview Heights, IL"
23. **Mikaylah Burris, William Sallenger, Brandon Buhs, *Construction Management***
"Fuller Dome Refurbishment"
24. **Chase Lemke, *Criminal Justice Studies***
"Missouri Probation and Parole"
25. **Brent Moss, *Criminal Justice Studies***
"Prosecutor's Discretion"
26. **Kelly Bunselmeyer, *School of Dental Medicine***
"Oxytalan fibers association with blood vessels in the periodontal ligament. A possible role regulating blood flow?"
27. **Sahar Rashid, *School of Dental Medicine***
"Does Cigarette Smoke or E-Cigarette Vapors Affect Growth and Biofilm Formation of *Aggregatibacter actinomycetemcomitans*?"
28. **Mickenzie Bass, *Economics & Finances***^{URCA}
"Did Initial COVID-19 Disparities Persist Across Latter Waves?"
29. **Emily Beiler, Autumn Belt, *Environmental Sciences***^{URCA}
"The determination of altered perfluorooctane sulfonic acid (PFOS) toxicity in male fruit flies following co-exposure of PFOS plus Ivermectin (IVM) and PFOS plus carbamazepine (CBZ)"
30. **Atwood Huff, *Mathematics & Statistics***^{URCA}
"Estimating Parameters of the Littlewood Model for System Reliability"

Poster Presentations (cont.)

Morris University Center, Conference Center 10:00 - 12:00 p.m.

31. **Kimberly Roskamp, Mechanical Engineering^{URCA}**
“Solar Panel Performance Enhancement: The Synergistic Effects of Water and Green Roofs for Cooling”
32. **Olivia Davila, School of Nursing^{URCA}**
“Infant Sleep Study”
33. **David Hilgers, School of Nursing**
“Sepsis Fluid Bolus Requiring Dual Registered Nurse Signoff”
34. **Lindsey Nakoff, Gabriella Marchiori, Kylee Myers, Nursing**
“Decreasing the incidence of aggressive behavior during activities of daily living in patients suffering from dementia through the implementation of music therapy.”
35. **Madyson Meiser, Mackenzie Liebman, Alyssa Neace, Annelise Nethery, School of Nursing**
“Reducing the Use of Opioids in Treatment of Neonatal Abstinence Syndrome in the NICU”
36. **Courtney Jenkins, Kendra Johnson, Macy Lovatto, Maira Fitzgerald, School of Nursing**
“Improving the New Graduate Nurse Response to Post Partum Hemorrhage”
37. **Brittany Holshauer, School of Pharmacy**
“Assessment of the Citation Frequency of Retracted Articles in Medical Literature”
38. **Gabriela Gonzalez, Physics^{URCA}**
“Study the effect of Silver Nanoparticles on the Holographic Grating formed in Zinc Tellurite Glasses”
39. **Wesley Green, Physics**
“Measuring the Rotational Velocity of the Milky Way’s Galactic Arms with a Low-Cost Horn Antenna: Proposal”

Poster Presentations (cont.)

Morris University Center, Conference Center 10:00 - 12:00 p.m.

40. **Lauren Harris, Political Science**
“Tweeting About the RFS: An Analysis of the Advocacy/Opposition Intensity of Tweets on Biofuels and the Renewable Fuel Standard for Various Speaker Groups and Issue Frames”
41. **Emma Seibert, Political Science^{URCA}**
“‘Why We Fight’: An Economic Analysis of the Military-Industrial Complex”
42. **Jana Hamade, Psychology^{URCA}**
“The Effects of Religious Struggle on Internalized Homophobia and Wellbeing in Lesbian, Gay, and Bisexual Individuals”
43. **Lindsay Miles, Psychology^{URCA}**
“Improving and Evaluating Brief Online Bias Education for College Students”
44. **Karlei Bingham, Taylor Ferguson, Halle Rickhoff, Psychology**
“Examining How Various Discipline Styles, Cohesion, and Expressiveness Predict Youth Rebellion”
45. **Kelly Cruise, Psychology^{URCA}**
“Age biases and technological mistakes in a virtual job interview”
46. **Ebonie Byrd, Sydney Lucas, Sara VanEsler, Peyton Williams, Jaydyn Zykan, Psychology^{URCA}**
“Does Socioeconomic Status Relate to Coping Styles in College Students?”
47. **Jafar Alkalaf, Teanna Cattani, Kaitlyn John, Kayla Myers, Kiya Rainey, Psychology^{URCA}**
“Path to Progress: A Validation Study for the P Factor”
48. **Jennifer Robards, Samantha Reynolds, Scott Santos, Kaylee Royer, Nursing**
“Improving nursing care plan adherence rates in a mental health facility”

Poster Presentations (cont.)

Morris University Center, Conference Center 10:00-12:00 p.m.

49. Clare Daiber, Sofia Hughes, Baran Tokgoz, Tessa Schwarzentraub, *Psychology*
"Big Five Personality Characteristics as a Predictor for Perceived Success of Online Dating"
50. Rebecca Creek, *Social Work*
"Crime Victim Center"
51. Tessa Bailon, *Social Work*
"Mind Map of Practicum Sites"
52. Abigail DeLaurencio, *Teaching & Learning*^{URCA}
"TPACK + Mathematics = Innovative Learning"
53. Victoria Lefler, *Theater & Dance*^{URCA}
"Echoing the Past"
54. Michael Arthur, *Mass Communications*
"Coolfire Studios"

Demonstrations

Morris University Center, Conference Center 10:00-12:00 p.m.

55. Emily Brooks, *Business Administration*
"Evaluating Technical Assessment Tools"

Thank you for joining us for the 2023 Undergraduate Scholars Showcase! This exciting event allows our undergraduate students to present their hard work and research to the campus community and beyond.

