MTSU faculty, students publish innovative science communication research with $10K in campus grants

By Stephanie Barrette, MTSU News

Biology professor Liz Barnes and her team of student and faculty biology education researchers at MTSU’s Social Perceptions of Science Lab recently published a novel study about undergraduate biology students’ ability to communicate effectively to their community about COVID-19.

“To start, we reviewed the literature about undergraduate biology students serving as science communicators about COVID,” Barnes said. “There was no real research documenting if they were doing this effectively, so that helped develop our project’s focus.”

Undergraduates Elizabeth Wybren, Mariana de Araujo Bryan, Thipphaphone Niravong and Chloe Bowen, recent doctoral graduate Brock Couch and associate professor Ying Jin made up the research team with Barnes.

The project began in fall 2020 with $2,000 in initial funding through the university’s Undergraduate Research Experience and Creative Activity, or URECA, grant.

To read the full story, please click HERE.
THE URC TEAM

YOU, our students and faculty, are our #1 priority. We are here to help however possible, whether it is getting you involved in undergraduate research, helping you find a faculty mentor, thinking through a research or creative activity project, hosting a workshop on a topic of need, or facilitating events. Meet our team!

Dr. Jamie Burriss
Program Manager, Office of Research and Sponsored Programs

Dr. Burriss oversees the URC, the Student Organization for the Advancement of Research (SOAR), our newly created SOAR Ambassador program, the URECA grant program, communications, Scholars Week, Posters at the Capitol, and all other activities related to the URC.

Prior to returning to MTSU, Dr. Burriss served as the Curriculum Administrator for the SELECT MD Program at the University of South Florida while pursuing her doctorate. After USF, she accepted a position at Vanderbilt University as the Assessment Analyst for the College of Medicine. But, her heart has always been TRUE BLUE and she is happy to once again serve her undergraduate alma mater.

Katie Medrano
Coordinator, Office of Research and Sponsored Programs

Katie is delighted to be the new Coordinator for ORSP! She was born and raised in Murfreesboro, TN. In 2019, Katie completed her bachelor’s degree in Organizational Communication with a minor in English here at MTSU. She plans to pursue her master’s degree in the near future. Katie is an artsy type with a love for painting, reading, and nature. She enjoys volunteering for local nonprofits and has found so much joy in using her life to help others. Katie is excited to start this new journey and to get to know all about the world of research and sponsored programs. She strives to be a life-long learner, and what better place to do that than at MTSU?

Jocelyn Rajkowski
Major: Community and Public Health

Jocelyn was born in Bay Shore, NY. She is well on her way to earning her bachelor’s in Community and Public Health in December 2022, and her MPH in December 2023. In Jocelyn’s free time, she enjoys running, cycling, lifting weights, reading, and hanging out with her cats.

Jacob Grones
Major: Biology

Jacob is a Biology major with a concentration in biotechnology and genetics. He expects to graduate in the Spring of 2024 and plans to pursue further education in biomedical engineering. He loves to exercise, hike, camp and do just about any hobby he can get his hands on. He has two siblings: a twin sister and a 9-year-old brother.
BUILDING A CURRICULUM VITAE WORKSHOP

SPONSORED BY: THE UNDERGRADUATE RESEARCH CENTER & THE CAREER DEVELOPMENT CENTER

LEARN THE PURPOSE, COMPONENTS OF CV, AND HOW TO STAND OUT IN JOB APPLICATIONS & GRADUATE SCHOOL ADMISSIONS

September 13th from 1:00-1:30pm
Student Union 220
Open to Undergraduate & Graduate Students
The Tennessee Girls in STEM (TGIS) Conference is seeking motivated MTSU students to volunteer as Group Leaders.

What is TGIS?
TGIS is an international one-day conference that is designed to increase girls’ interest in STEM (Science, Technology, Engineering, and Mathematics) through a series of hands-on workshops and guest speakers.

What are the Group Leader Qualifications?
Undergraduate and graduate students in any discipline are welcome to volunteer.

What role do Group Leaders play?
Group Leaders supervise and escort the girls to the assigned workshops at TGIS while encouraging girls to participate in the STEM workshops. They assist the Workshop Leaders, eat lunch with the girls and help with dismissal on TGIS day.

How can I become a Group Leader?
You can submit a volunteer application on our website, https://mtsu.edu/TGIS/group-leader.php.

Note: MTSU students wishing to graduate with the EXL Scholar Distinction may use your TGIS volunteerism to fulfill the service requirement.

For additional information regarding group leaders, email Carol.Swayze@mtsu.edu

When is TGIS?
Saturday, September 24, 2022 from 7:30 a.m. to 3:30 p.m.

For More Information
If you have questions regarding TGIS, contact the WISTEM Center at tgis@mtsu.edu.
Meet our 2022-23 SOAR Ambassadors!

FORAM PATEL
PEER MENTOR SCHOLAR

ROLES & RESPONSIBILITIES:
MENTOR STUDENTS INTERESTED IN GETTING INVOLVED WITH UNDERGRADUATE RESEARCH.
PROVIDE GUIDANCE RELATED TO URECA GRANTS (PROPOSAL, BUDGET, TIMELINE) AND THE DISSEMINATION PROCESS.

CASEY TOMLIN
SCHOLARS WEEK CHAIR

ROLES & RESPONSIBILITIES:
HELP ORGANIZE EVENTS FOR SCHOLARS WEEK, PRIMARILY FOCUSED ON THE RESEARCH AND CREATIVE ACTIVITY EXPOSITION. SERVE AS STUDENT LIAISON TO MTSU SCHOLARS WEEK COMMITTEE.

ERIKA ALLEN & MARZEA AKTER
URC COMMUNICATIONS & SOCIAL MEDIA

ROLES & RESPONSIBILITIES:
ASSIST WITH THE URC MONTHLY NEWSLETTER, SOCIAL MEDIA TAKEOVERS, FACEBOOK & INSTAGRAM POSTS, LAB DIRECTORY, AND MARKETING FOR EVENTS AND HAPPENINGS.
BROOKE BUSBEE & LESLIE GONZALEZ SALAZAR
READY TO SOAR COORDINATORS

ROLES & RESPONSIBILITIES:
OVERSEE THE "READY (RESEARCH EXPERIENCE ACTIVITY DESIGNED FOR YOUTH) TO SOAR PROGRAM. THIS NEW PROGRAM IS AN OPPORTUNITY FOR AREA HIGH SCHOOL STUDENTS TO VISIT MTSU’S CAMPUS FOR AN IMMERSIVE RESEARCH OR CREATIVE ACTIVITY EXPERIENCE DURING SCHOLARS WEEK.

SAMAN KITTANI & LUKE GORMSEN
RESEARCH ASSISTANTS

ROLES & RESPONSIBILITIES:
ASSISTS WITH RESEARCH PROJECTS, IDENTIFICATION OF EXTERNAL FUNDING OPPORTUNITIES FOR STUDENTS, DATA ANALYSIS, AND PRESENTATION OF RESULTS.
SOAR LUNCHEON & BUSINESS MEETING
AUGUST 29, 2022
Major: English

Faculty Mentor: Dr. Rhonda McDaniel

Current Research Focus:

Through a Different Eye: An Honors Creative Thesis Project

Project Description:

Through a Different Eye is a short story collection that allows the reader to immerse themselves in different perspectives, experiences different personas, and interact with the stories in different points-of-view. The project itself includes an academic component, and I have been conducting research on perspective, persona, and point-of-view within the context of short stories.

Why does this topic interest you?

I have always been an avid writer and a dream to publish creative works. I chose to study perspective, persona, and point-of-view in hopes of providing insight into the generally unseen matters of life.

What are your professional aspirations?

I plan to publish this short story collection upon its completion at the end of next semester. I will continue to write and publish my works while continuing to conduct research in my field until I graduate. I will continue writing on the side, but hope to work my way up to being a writer and editor for the United Nations.

Do you have any advice for future researchers?

I would advise that no matter what you think, you are completely capable of conducting a research project, a creative project, or both. It is intimidating at first, but worth taking a risk, because the benefits are worth every bit. I found out that I can research something that interests me, and it did not have to be a STEM field. I believe it is important to take the leap; find good people to surround yourself with for guidance, support, suggestions. Don't think you are a failure if something went wrong, but think of it as a learning experience. Thinking in that manner made me a better learner, researcher, and writer.

Check out more SOAR profiles here!

MTSU.EDU/URC/SOAR-PROFILE/
Thursday, November 3rd, from 11-1pm

SCI Building, 2nd floor, Atrium

The Open House is an informal poster session that showcases undergraduate student research and creative projects at MTSU. All students, particularly new students and transfer students, are invited to attend. Registration will open on October 3rd!
Exploring the prevalence of Bovine leukosis in the MTSU beef and dairy herds (Summer 2022)
The Effects of a Powdered Post Dip Compared to a Liquid Post Dip on Teat End Conditions in correlation to Somatic Cell Count During the Winter (Spring 2022)
Environmental temperature effects on milk production and daily activity of dairy cattle with respect to different breeds (Summer 2021)
Environmental temperature effects on milk production and daily activity of dairy cattle with respect to different breeds (Spring 2021)
Genetic improvement of Angus cows through genomic testing and EPDs (Spring 2020)
A bi-seasonal evaluation of the relationship between bedding bacterial levels and somatic cell counts of milk on cows housed in a compost bedded pack barn (Spring 2020)
Evaluation of breed, milk production, and udder characteristics on somatic cell count and udder pathogens in lactating Holstein and Jersey cows. (Spring 2019)
Effectiveness of Zinc Based Footbath Solutions over Industry Standard Copper Bath (Fall 2017)

Department: Agriculture

Research Interests:
Beef cattle management, genetics and reproduction, dairy cow health and production, meat science factors that affect quality and tenderness

Mentored URECA Projects:
- Exploring the prevalence of Bovine leukosis in the MTSU beef and dairy herds (Summer 2022)
- The Effects of a Powdered Post Dip Compared to a Liquid Post Dip on Teat End Conditions in correlation to Somatic Cell Count During the Winter (Spring 2022)
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- Effectiveness of Zinc Based Footbath Solutions over Industry Standard Copper Bath (Fall 2017)
UNDERGRADUATE RESEARCH GRADUATION DISTINCTION

LEVELS OF RECOGNITION

Distinction in Undergraduate Research
- Students must fulfill all requirements
  - Successful completion of an Assistant level URECA project - 50 hours of research or more.
  - Poster presentation or creative performance at one of the URC's signature events: Fall Open House, Scholars Week, or Summer Research Celebration.
  - Active participation for at least one academic year in the Student Organization for the Advancement of Research (SOAR).
  - Confirmation of support from URECA faculty mentor.

Scholar Distinction in Undergraduate Research
- Students must fulfill all requirements
  - Successful completion of a Scholar level URECA project - 100 hours of research or more.
  - Poster presentation or creative performance at one of the URC's signature events: Fall Open House, Scholars Week, or Summer Research Celebration.
  - Active participation for at least one academic year in the Student Organization for the Advancement of Research (SOAR).
  - Poster or presentation at the National Conference on Undergraduate Research or published in a peer-reviewed academic journal.
  - Confirmation of support from URECA faculty mentor.

DISTINCTION CRITERIA
INTERNSHIPS & RESEARCH OPPORTUNITIES

Check out the following opportunities for fall research!

- Various internships, U.S. Department of Energy | Deadline October 5, 2021
- Spring 2022 Science Undergraduate Laboratory Internships (SULI), US Dept of Energy | Deadline October 6, 2021
- Advanced Technological Education (ATE) | Deadline October 6, 2021
- Naval Research Enterprise Internship Program | Deadline November 1, 2021
- Various internships, US Environmental Protection Agency | Summer and fall deadlines
- Visiting Scientist Program, Counterterrorism, and Forensic Science Research Unit, FBI | Applications reviewed on a rolling basis
- Various Fall Internships, American Civil Liberties Union | Applications considered on a rolling basis

Virtual UR Presentation & Paper Opps

- Call for Papers, 12th National Conference on Earthquake Engineering | Deadline October 15, 2021
- Call for Proposals, “History Unmasked,” 2022 Virginia Forum | Deadline October 15, 2021
- Call for Proposals, International Academic Conference on the Sustainable Development Goals, Utah Valley University | Deadline November 1, 2021
- Call for Abstracts, April 2022 Technical Meeting, Rubber Division, American Chemical Society | Deadline November 6, 2021
- Call for Abstracts, 2022 Indigenous Borderlands in North America Symposium, University of New Mexico | Deadline November 10, 2021
- Call for Proposals: “Literary Geographies: Space, Place, and Environments,” Conference on Christianity and Literature, Biola University | Deadline November 15, 2021
- Call for Submissions, Second Railroads in Native America Gathering and Symposium | Deadline December 15, 2021
- Call for Papers, The Reed Undergraduate Journal of Existentialism, St. Olaf College | Deadline January 31, 2022
- Call for Papers, 2022 Virtual International Conference on Social Media and Society | Deadline January 31, 2022
- Call for Submissions, JOSHUA: Journal of Science and Health, University of Alabama | Deadline February 28, 2022
- Call for Papers, Young Journal of European Affairs, Ludwig-Maximilians-Universität Munich | Submissions accepted on a rolling basis
State of the Art MTSU Laboratories, all in one place.

The URC is proud to announce our new laboratory directory. This resource will allow students to learn about excellent MTSU labs across several disciplines. Both new and experienced student researchers can utilize this document to find research positions, set up collaborations with other labs, or to establish a specific thesis mentor.

This directory is also a resource for faculty members seeking student researchers. Each lab's accomplishments, publications, and goals are detailed within the pages of this directory.

This directory contains laboratory descriptions, the key skills necessary for each lab position, and semester openings for several labs, divided by specific college. To access the directory, click the button on the right or scan the QR code.

PDF copies of the directory are also available to print.

*Please send any additions or updates to our URC Communications & Social Media Ambassador, Marzea Akter: ma2ey@mtmail.mtsu.edu.
LOOKING TO START YOUR RESEARCH JOURNEY?

Then check out our STUDENT RESEARCH GUIDE

The URC’s guide for upcoming student researchers, Research Guide: How to Start your Student Research Journey, is a great resource for undergraduates seeking to enter the world of research! This guide covers when to start research, how to find a project, student experiences, helpful advice, URC resources, and SOAR resources at MTSU.

The next time you are asked how to get involved in research, direct that student to this resource!

This guide was initiated, compiled, and formatted by Dara Zwemer.

Stories were provided by SOAR students, including Cassandra Perrone, Leah Piccirillo, Javier Hernandez, Robert Conner, Charlotte Daigle, Madeline Aadnes, Maria Fernanda Clark, Kylie C. Moe, Miquellie Bonner, Merry Young, Kaitlyn Berry, Zachary Sanchez, Kap Paul, and Christopher Hall.

We hope you find it useful!