

SPRING 2023

SPECIAL AREA COMPETITIONS

The main objective of the Undergraduate Research Symposium (URS) is to allow students to showcase and share their research. In addition, students have the option to participate in Special Area Competitions hosted by various departments and organizations across campus. Judging for most Special Area Competitions will take place during the main symposium event and winning projects will be awarded.

Special Area Competitions for the Spring 2023 URS are detailed below. Eligibility for participation in each Special Area Competition is based on the subject matter of your project. **Note: Some Special Area Competitions require that students provide details about the relevance of their research to its theme, when completing the abstract submission form, to be considered for inclusion.**

Students may be contacted by Special Area Competitions hosts regarding rules and procedures for participation after the abstract submission deadline.

SPRING 2023 URS SPECIAL AREA COMPETITIONS

3Minute Research Pitch

The 3Minute Research Pitch is a competition that challenges undergraduate students to present a compelling verbal presentation of their research topic and its significance in just three minutes. Modeled after the Three Minutes Thesis (3MT) graduate competition, the goal of this program is to practice academic, presentation, and research communication skills and support the development of undergraduate students' capacity to describe their research in language appropriate to a public audience. Students compete by presenting their research topic in three minutes or less with only one slide. Competitions are judged by a panel comprised of a diverse group of professionals (academic and non-academic) with a wide range of expertise.

To enter this Special Area Competition, please respond to the supplemental question on the abstract submission form.

Bagley College Undergraduate Research Award

Projects completed under the supervision of a faculty member in the Bagley College of Engineering are eligible to receive a Bagley College Engineering Undergraduate Research Award. Projects will be judged on the following criteria:

- Importance of work to society. Is this work that may ultimately impact many people, either directly or indirectly, or is it a project with important, but limited impact?

- Originality of work. Is this work approaching a problem from an original perspective or using tools, methods, and techniques in an original manner?
- Presentation clarity. How clearly is the work presented from the design and content of the presentation board to the discussion of the work by the researcher(s).

A team of judges will review all projects entered in this sub-category and select the winning projects. Winning projects will receive a monetary award and have their work discussed in college publications.

Biomedical Research

This competition is for students in the life sciences and/or engineering who have conducted research related to preventing, diagnosing, or treating a human medical condition (i.e. illness, injury, or disease). The project should have clear biomedical relevance. Poster presentations by each student will be evaluated by at least three judges, including representatives of biomedical and engineering sciences. Winners will understand and be able to discuss:

- The project's proper medical context
- The project's purpose/goal
- Applicable laboratory and engineering techniques used to approach the problem
- The project's results and their significance
- Conclusions that are supported by experimental data
- The scope of the project and time involved will also be taken into consideration

To enter this Special Area Competition, please respond to the supplemental question on the abstract submission form.

CALS/MAFES Undergraduate Research Scholars Program (URSP)

The Mississippi Agricultural and Forestry Experiment Station along with the College of Agriculture and Life Sciences will host an awards program for all students in the 2022-2023 CALS/MAFES Undergraduate Research Scholars Program. The award program will be judged by faculty from across the College and Experiment Station. Honor and Merit awards will be given to students who show excellence in research through the Program.

College of Education Special Area Competition

Any undergraduate student submitting a research project under the primary guidance of a College of Education faculty or staff member will be considered for this competition. This may include submissions from the Departments of Curriculum, Instruction, and Special Education (CISE), Counseling, Educational Psychology, and Foundations (CEPF), Kinesiology, Music, Instructional Systems and Workforce Development (ISWD), and Educational Leadership, as well as The T.K. Martin Center for Technology and Disabilities and the National Research and Training Center for Blindness and Low Vision.

Community-Engaged Research Track

Community-engaged research has an impact on the ability of individuals, groups, or organizations—either public or private—to achieve their intellectual, economic, and/or social goals. Community-engaged research projects also include activities that contribute to the development of a community, governmental initiative, and/or society-at-large within or outside of Mississippi.

To enter this Special Area Competition, please answer the appropriate question on the abstract submission form

Data Science Program Special Area Competition

The MSU Data Science Program Undergraduate Research Symposium Special Area Competition recognizes excellence in undergraduate research relevant to data science. The field of data science focuses on the advancement of methods and techniques to 1) represent the world with virtual data objects through a process of datafication; 2) extract insights and facilitate new discoveries about the world by studying these data objects; 3) create smart systems to perform tasks that have ordinarily required human intelligence; and 4) increase the scale, scope, and speed of the production and delivery of virtual and tangible goods and services. The data science Special Area Competition will recognize projects, from any academic discipline, that excel in one of three categories: basic research that deepens human knowledge of the underlying methods or techniques central to the field of data science, use-inspired research that advances the field of data science based upon a clear potential use case, and applied research that addresses a well-defined problem by applying data science methods and principles. The panel of judges will consist of faculty members who will categorize and score projects based upon an evaluation rubric designed by the faculty of the University Data Science Committee. Up to four awards will be given:

- Outstanding Basic Data Science Research Project
- Outstanding Use-Inspired Data Science Research Project
- Outstanding Applied Data Science Research Project
- Data Science Innovation Award, recognizing the best overall project chosen from among the category awardees.

Honorable mentions may be given for meritorious projects that do not receive one of the overall or category awards. All student data science projects eligible for judging will be listed, with permission, on the MSU Data Science Program student research page, and awardees will be highlighted.

Movement Sciences and Health

Movement Sciences and Health is multidisciplinary studies on human movement that discusses and applies the dimensions of wellness related to personal and public health. Dimensions of wellness include physical, emotional, social, financial, intellectual, environmental, spiritual, and occupational. Thus, any interested undergraduate students from a variety of backgrounds, including injury prevention and rehabilitation, sport medicine, biomechanics, exercise physiology, health promotion and fitness,

psychology and sociology of physical activity, motor control and development and/or sport administration are welcomed. Judges will be selected for the Symposium at Mississippi State University. All poster presentations will be judged for creativity, organization of content, technical (experimental) procedures employed (when applicable), oral delivery, knowledge of material, clarity of artwork (charts, graphs, images), and overall presentation. Three awards and several outstanding papers will be selected based on judges' evaluation. Many of the problems we face today require a multifaceted approach. Therefore, this sub-committee provides a good opportunity to challenge students to look at research questions and societal issues from a broader and interdisciplinary perspective.

Public Health Research Competition

In celebration of National Public Health Week, the Public Health Research Competition component of the Undergraduate Research Symposium is designed to highlight the important work that undergraduate students at MSU are doing in public health. Public health research can be any research related to promoting and protecting the health of people and communities (see the American Public Health Association for more information). To be considered for entry into the Public Health Research Competition as part of the symposium, indicate your interest on the registration form and include a brief (100- to 150-word) statement regarding the implications of your research for public health. Entries will be evaluated on the overall quality and clarity of the abstract and implications statement, the relevance of the research to public health, and the significance of the contribution to public health.

To enter this Special Area Competition, please respond to the supplemental question on the abstract submission form.

Public Humanities Special Area Competition

The Public Humanities competition recognizes outstanding student work that aims to bring the insights and values of humanities scholarship to a public audience. Projects may summarize work with a community partner on a humanities project (e.g., a public history exhibit for a local organization) or translate humanities scholarship conducted in class for a layperson audience. Any student may use humanities research conducted in class or under the supervision of a faculty mentor, provided their poster aims to present the research in a publicly accessible way and explain its relevance to a public audience. The posters will be judged by humanities faculty associated with the MSU Institute for the Humanities and the top submission will receive an award.