Welcome to Murray State's third annual Scholars Week celebration. For the last three years I have seen Scholars Week develop into a highly valued and visible campus event involving many faculty and students.

This academic year has again been a very productive one for our undergraduates, graduate students, and faculty. In January, twenty-nine Murray State undergraduates joined 139 undergraduates from Kentucky's other seven public universities at Posters-at-the-Capitol, an event in Frankfort that helps ensure that our legislators understand the importance of research, scholarly, and creative work to the education of our students. Throughout the year, our undergraduates received support for faculty-mentored projects through our URSA grants program and now they will be able to publish their work in Murray State's new undergraduate academic journal. Finally, there is Scholars Week, the end-of-the-year event

that will celebrate and recognize the creative and scholarly accomplishments of hundreds of our undergraduate and graduate students.

As you review the Scholars Week program and various abstracts, you will find an outstanding array of undergraduate and graduate student projects, presentations, and performances. By attending Scholars Week events and activities, you provide support and encouragement to our young student scholars and artists. I also would like to encourage members of the Murray community to attend Scholars Week activities to witness how Murray State University is opening our students' minds to new ideas and impacting the social and economic development of our community, state, and nation.



As an institution, we are grateful to our students, and especially our faculty, for making this another outstanding year of undergraduate and graduate student scholarly accomplishment at Murray State University.

F. King Alexander, Ph.D. President, Murray State University

Welcome to the third annual *Scholars Week* at Murray State University! Please join me in this university-wide celebration of undergraduate and graduate research, scholarship, and creative activity. As you view the contents of this program, you will note the many student accomplishments in a variety of academic disciplines. During the week, students will have the opportunity to showcase their scholarship efforts through oral presentations, poster sessions, exhibits, and performances.



I applaud the efforts of our Office of Undergraduate Research and Scholarly Activity in organizing and coordinating this *Scholars Week.* I believe research, scholarship, and teaching go hand-inhand and provide one of the very best learning environments for students. Through the efforts of our dedicated faculty, Murray State University is developing into one of Kentucky's institutions of choice for students who want to engage in the process of discovery and do significant research and creative work as undergraduates.

I encourage all of you to take advantage of the activities this week and enjoy!

Gary Brockway, Ph.D Provost, Murray State University



On behalf of the College of Business and Public Affairs, may I offer our congratulations for your dedicated hard work and participation in this year's *Scholars Week*. I believe this will truly be one of the highlights of your academic career at Murray State University. As you venture through life, I would offer this advice from Napoleon Hill: "Cherish your visions and your dreams as they are the children of your soul, the blueprints of your ultimate achievements."

Best wishes and continued success.

Dannie E. Harrison, Ph.D. Dean, College of Business and Public Affairs

The College of Education is once again excited to support and participate in *Scholars Week*. As the entire campus of Murray State University joins to celebrate undergraduate and graduate scholarship, research, and creative activity, the accomplishments of Murray State students will be held high for all to see. These student efforts are reflections of the contributions of our faculty in focusing on preparing students to become exemplary professionals who will continue their creative and research activities. As you visit the various exhibits and presentations, I hope your appreciation for the exciting learning environment the university is fostering will be enhanced.



Scholars Week demonstrates that Murray State University is preparing students to make significant contributions to a global and technological society. I encourage you to enjoy this event and to congratulate the participants on their accomplishments.

Russell Wall, Ed.D. Interim Dean, College of Education



Murray State University's Scholars Week provides an exciting opportunity to recognize and celebrate the academic achievements of our undergraduate and graduate students, showcasing the results of their research. scholarly, and creative projects. **Research.** fundamental and applied, is an essential component of our curricula. Throughout history, major discoveries and new knowledge were essential to human progress. Through active research agendas and creative endeavors, our faculty and students explore the boundaries of their disciplines and expand our realm of possibilities. Discovery though research encourages a sense of relevance and excitement in the classroom as new knowledge is applied to society, industry, and beyond. The faculty in the College of Humanities and Fine Arts work together with their students on research and creative projects in the

classroom, clinics, and studios. In this way they become partners in the exploration of disciplines and the acquisition of new knowledge. This partnership expands the potential of our students to think independently, creatively, and critically. As one of the top universities in the nation, this is our ultimate mission.

Sandra Jordan, Ph.D. Dean, College of Humanities and Fine Arts

Scholars week is a celebration of the unique relationship between students and faculty as they join together to address problems in creative and scientific ways. Faculty student collaboration in the research process provides an opportunity for personal and professional growth for both students and faculty that few other activities afford. The College of Health Sciences and Human Services along with the rest of Murray State is committed to continued exploration and to the importance of including undergraduates as well as graduate students in this exciting process. This event celebrates the product of these collaborations as well as the process. As you examine these exhibits, join us in appreciation of the diversity of intellectual and creative activity going on at Murray State University.



Elizabeth Blodgett, Ph.D. Dean, College of Health Sciences and Human Service



On behalf of the College of Science, Engineering and Technology, it is my honor and privilege to recognize all the gifted and dedicated students participating in this week's activities. Central to the mission statement of Murray State is a strong commitment to recruit and retain highly credentialed professionals, deeply involved in the intellectual development of students. During MSU *Scholars Week*, we celebrate the research, scholarship, and creative accomplishments of our students – testimony of the strength and dedication of students and faculty toward the enterprise of learning. May this week bring an image of an even greater commitment to a lifetime of scholarly contribution to society.

Neil V. Weber, Ph.D. Dean, College of Science, Engineering, and Technology

On behalf of the School of Agriculture, I would like to welcome you to this unique opportunity to celebrate research, scholarly, and creative activity. It is also a time to showcase our dedicated faculty who are devoted to personal and professional growth.

Life is a journey with many avenues. As you participate in this event, you will view the numerous ways the University is committed to academic excellence as well as providing the opportunity to explore these avenues.



I would like to commend all participants in this event.

James A. Rudolph, Ed.D. Director, School of Agriculture

A WELCOME FROM THE SCHOLARS WEEK ORGANIZING COMMITTEE

On behalf of the URSA Office and the URSA faculty Advisory Board, welcome to Murray State University's third annual *Scholars Week*, a celebration of our students' scholarly, creative, and research accomplishments.

The work displayed in this program booklet represents thousands of hours of effort on behalf of the students and faculty of Murray State University. We commend you for your efforts and your dedication. As a student you should always remember that you are investing in yourself and this investment will pay significant dividends when you apply to graduate or professional school or look for that first job. Your *Scholars Week* project will help make you stand out from your peers when your application is reviewed by an employer or graduate admissions officer. As faculty, we are investing in our students. By going the extra mile and working with your students to develop a *Scholars Week* project, you are helping your students succeed and that is among the greatest rewards of our profession. The members of the URSA Advisory Board and the URSA staff are gratified to see that ever increasing numbers of Murray State faculty are recognizing the importance of engaging students in research, scholarly, and creative work and committing the time it takes to ensure that we are giving our students the best education we possibly can.

Please join us in celebrating the accomplishments of our students and academic excellence at Murray State University by attending as many of the *Scholars Week* activities as you can. Our young scholars need your continued support. Show them you are behind them by making attendance at *Scholars Week* a priority for yourself and your students.

Scholars Week Organizing Committee

Pictured L to R: (Back Row) David Ferguson, Jim McCoy, Mark Masthay, John Mateja, and Tom Lough. (Front Row) Laura Ewald, Paula Waddill, and Tracey Bernard. (Not pictured:Kenneth Bowman, Marcia Hobbs, Fred Miller, Janis Murphy, Howard Whiteman, and Zbynek Smetana).



Undergraduate Research and Scholarly Activity (URSA) Advisory Board

Howard Whiteman, PhD. Biological Science

Tom Lough, PhD. Education

Fred Miller, PhD. Business Administration

Kenneth Bowman, PhD. Agriculture

Laura Ewald, M.L.S. Library **Tracey Bernard, PhD.** Occupational Safety and Health

Janis Murphy, PhD. Education

Jim McCoy, PhD. Economics and Finance

Marcia Hobbs, R.N., D.S.N. Nursing **Zbynek Smetana, PhD.** Art

Paula Waddill, PhD. Psychology

David Ferguson, PhD. Agriculture

Mark Masthay, PhD. Chemistry

John Mateja, PhD. Director, URSA / McNair





- A Barkley Room
- **B** Ohio Room
- C Mississippi Room
- **D** Cumberland Room
- **S** Center Stairs
- NC North Concourse

- **E** Elevator
- F Tennessee Room
- N Crow's Nest
- **PR Public Restrooms**
- **ES** Emergency Stairs
- WC West Concourse