

SOCIAL MEDIA

UR at MSU is represented on various social media sites and we want to connect with you and your students. Find us on Facebook, Twitter, and WordPress. We share information through these sites, including new opportunities in Venture, workshop reminders, and student spotlights. Be sure to connect with us to stay up to date on all the latest MSU UR news.

 [facebook.com/urmsu](https://www.facebook.com/urmsu)

 twitter.com/UR_at_MSU

 urmsu.wordpress.com

GERSTACKER UPDATES

The Gerstacker and Forest Akers Grant Programs for Student Innovation have partnered with Spartan Innovations (www.spartaninnovations.org), a unit of MSU that provides the educational and financial support to turn MSU research technologies into successful Michigan businesses – and spur entrepreneurship in the Michigan economy.

The Gerstacker and Forest Akers grants (www.gerstacker.msu.edu) represent opportunities for undergraduate students to compete for funding for a research concept with entrepreneurial potential. Students develop a concept, conduct the research, and present their findings with the intention of getting their concept into use or production. The goal is to provide support and resources to help students take their ideas into industry.

Spartan Innovations also houses The Hatch, a student business incubator. Students share a common workspace and have access to technology and equipment, such as a 3D printer to make prototypes, which can help turn students' ideas into reality. Additionally, Spartan Innovations organizes entrepreneurial events like the Greenlight Business Model Competition (www.greenlightmichigan.com), which awards a \$25,000 prize.

A team of four MSU students are leveraging the help they have received from Spartan Innovations to compete in the Student Startup Madness competition in March. Their product, TempoRun LLC, is an app that will allow users to run at a consistent and enjoyable pace, using tempo music as a guide. They were selected as one of eight finalists from a pool of 64 college teams from around the country.

Contact Paul Jaques from Spartan Innovations at pjaques@spartaninnovations.org for more information.

IMPORTANT SPRING DATES

February 15
UURAF Registration Closes

April 12
15th Annual UURAF
MSU Union

April 18
UR Neighborhood Poster
Showcase Reception
Brody Grotto, 6:30-8:30 PM

SPRING WORKSHOP SERIES

For more information about these workshops, or to register if required, visit urca.msu.edu/event.

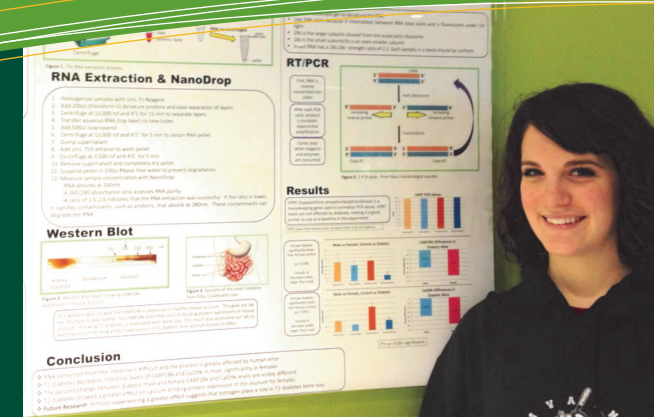
Writing Abstracts
February 13, 6:00-7:00 PM
Bessey Hall, Room 112

Funding Graduate Experiences: Professional Schools
February 22, 3:00-5:00 PM
Library, Room W101D
*Registration required

Preparing Poster Presentations
April 3, 5:30-6:30 PM
Bessey Hall, Room 312

Preparing Oral Presentations
April 8, 6:00-7:00 PM
Bessey Hall, Room 105

Preparing for Success at UURAF
April 12, 7:00-8:00 PM
Bessey Hall, Room 312



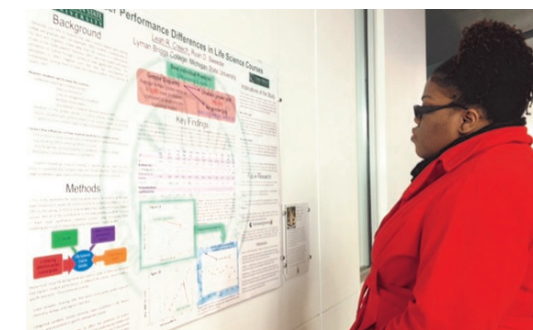
THIS ISSUE

UR POSTERS IN NEIGHBORHOODS
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UR POSTERS DISPLAYED IN NEIGHBORHOODS

MSU is pleased to announce the *Undergraduate Research Neighborhood Poster Showcase*, which is a collection of undergraduate research posters created by current undergraduate students. Its purpose is to increase current and prospective students' awareness regarding undergraduate research and the benefits of engaging in a research experience.

There are six permanent poster displays in Brody Hall and four in Hubbard Hall. The posters are rotated on a monthly basis throughout the year. The displays provide tangible examples of undergraduate research, while accompanying biographies capture in the students' own words how they became involved and have benefited from the experience.



The Brody and East Neighborhood Engagement Centers were ideal locations because of the high concentration of first- and second-year students living in those areas. The Neighborhood initiative helps students transition into college life by bringing MSU services and resources to where they live.

"The concept for the Showcase emerged when Dr. Jerry Caldwell, Director of the Charles Drew Science

Scholars program, inquired if there was space in Brody Hall to display the research conducted by Drew students," explained Kelly High McCord, Director of the Brody Neighborhood Engagement Center. Kelly connected with Dr. Korine Wawrzynski, Director for Undergraduate Research, and they discussed where posters could be placed and the impact it could have on current students, prospective students and their parents, and campus visitors.

While the original idea focused on posters in Brody, interest spread to other neighborhoods. Reggie Noto, Director of the East Neighborhood Engagement Center, thought the concept could be useful for the students in her neighborhood. "We have a very high percentage of first-year students and I wanted them to see the way that undergraduate research can transform their academic trajectory." She noted that the posters help "make the academic culture within the Neighborhood more visible."

Students are excited to have their posters displayed. "I think it's a great way to expose students to what exactly it is you can do," says sophomore Rachel Brock, whose poster is displayed in Hubbard Hall. "The posters not only show results, but the steps taken to reach those conclusions. Discovering the process is just as important as getting results, especially if a student is new to research."

Contact the Undergraduate Research Office to have your student's research displayed.

From top: Rachel Brock standing in front of her research poster displayed in Hubbard Hall. Cina Ci-mone examining a poster displayed in Brody Hall.

SUMMER RESEARCH REGISTRY

Nearly 300 undergraduate students engage in research and scholarship over the summer. We would like to connect with students not affiliated with formal university summer programs (i.e. SROP, EnSURE) so that we can alert them to free summer professional development opportunities that would complement their research experience.

We will send out a short survey in April to collect contact information about these students. Additionally, you can reach the survey now at <http://bit.ly/10WH3I8>.

If you are mentoring undergraduate researchers this summer, please register your students or forward the message to them so they can register themselves. Please note: If your students are participating in SROP or EnSURE, we will already receive their information from program coordinators.

STUDENT PROFILES

We spotlight student research experiences on our website and feature specific students as Undergraduate Researchers of the Week. View current spotlights on our website: urca.msu.edu/students. If you'd like to nominate a student for a spotlight, please send their name and contact information to ugrsrch@msu.edu.

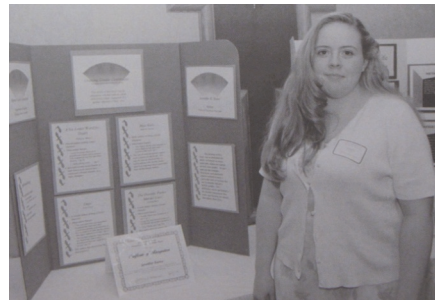


AN HISTORICAL LOOK AT UR AT MSU

To celebrate the 15th anniversary of UURAF, we examined historical documents in the MSU archives to learn more about the history of undergraduate research at MSU.

Undergraduate Research in the Sciences

A report written in 1960 details MSU's first year as a site for the National Science Foundation's (NSF) Undergraduate Research Participation Program (URPP), in which 48 students worked with faculty in the Mathematical, Physical Sciences and Biological Sciences departments (URPP, 1960). Participants applied to a centralized committee for admittance into the program. Upon acceptance, they were required to find a faculty mentor to assist in writing a proposal for their project.



The report detailed several benefits of program participation. Similar to contemporary findings on engaging in an undergraduate research experience, more than 80% of URPP student participants planned to attend graduate school in the field they researched, and of that group, nearly 20% cited their research experience as the deciding factor in choosing to attend graduate school. The faculty mentors claimed that the URPP students were more engaged with the research projects than students in typical classes.

Beyond URPP, documented undergraduate research at MSU continued to be concentrated in the sciences. In January 1974, the *State News* reported that a group of 12 MSU students were awarded a \$16,300 NSF grant to work on a forensic soil analysis. They were the first student group from MSU to receive this type of grant. The same article mentioned that Therese Payne from Lyman Briggs College was the first MSU student to publish her research in a national journal, *The American Biology Teacher*, as the sole author (Holmes, 1974). A second *State News* article published the following year further solidified the emergence of independent student research. It covered a group of engineering students who entered the Student Competition On Relevant Engineering (SCORE), a national undergraduate research competition (Merrell, 1975).

Undergraduate Research and the Honors College

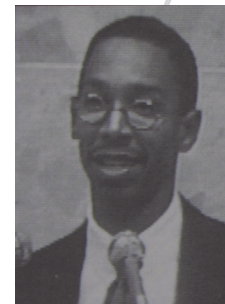
Established in 1956, the Honors College has a long tradition of encouraging undergraduate research. From its beginning, a key component of the honors experience was undergraduate research, either as a feature of honors courses or as co-curricular activities for advanced students ("Only Large Frogs...", 1959).

The Professorial Assistantship (PA) program was established by the Honors College in 1978 as a means to recruit high achieving students to MSU (Lammers, 1984). The program appoints a select group of entering freshmen as PAs; the students are provided with a two-year research position with a faculty mentor, a stipend, and a scholarship to the university. When the program began,

20 students received the scholarship; currently, there are approximately 200 PAs (Pearson, 2012).

Ronald E. McNair Scholars Program

Michigan State University was selected as one of the federal government's original fourteen McNair Scholars Program institutions. The program began in 1986 and provided undergraduate research opportunities for first-generation, low-income, and underrepresented students (Office of Supportive Services, 1996). MSU's McNair program also had the distinction of having graduated the first McNair student to earn a Ph.D. (Office of Supportive Services, 1996). Eric T. Crumpler graduated from MSU in 1990 with bachelor degrees in German and chemistry ("First McNair Scholar Comes to MIT," 1996). He earned his doctorate in chemistry from Northwestern University in 1996 (Office of Supportive Services, 1996), and engaged in postdoctoral research at MIT. He is currently a professor of chemistry at Valencia College.



UURAF

The first university-wide research forum was organized in 1999 by the College of Natural Science, the Honors College, and the Office of the Associate Vice Provost for Undergraduate Education. Known then as the University Undergraduate Research and Creative Activities Forum, the forum was held on April 10 in the Radiology Building. During the first year, 63 students participated. Nearly 560 students participated in the 2012 forum. The steady increase in student participation not only indicated a growing percentage of students who participated in undergraduate research, but also a rising appreciation for the benefits of offering a venue for students to present their work.

In 2000, UURAF moved to the Student Union where it has remained for the last 13 years. The model of UURAF was established early on—faculty members

and graduate students evaluate student posters and presentations, and students receive awards for high achievement in their category. In 2013, UURAF will celebrate its fifteenth year, reflecting the institutionalization and broadening of the undergraduate research tradition at MSU.

Undergraduate Research Office

In 2006, the Provost's Office hired a coordinator for undergraduate research, Dr. Korine (Steinke) Wawrzynski, to coordinate and promote campus efforts. The office's mission is to increase opportunities for MSU undergraduates to engage in faculty scholarship, expand the pool of faculty and partners engaging in undergraduate research, and better understand the impact of undergraduate research on student learning and retention.

While UURAF is the office's signature event, the undergraduate research staff facilitates workshops for students and faculty, awards \$300,000 in undergraduate research grants to colleges, manages Venture, MSU's undergraduate research database of opportunities, coordinates the summer research forum and professional development series, creates marketing and outreach materials, and represents and promotes the university's undergraduate research efforts to regional and national audiences.



Nearly 10,000 students engage in research annually through coursework, special programs, and co-curricular research experiences. Undergraduate research and creative opportunities are available in each of the 14 colleges that offer undergraduate degrees.

All pictures courtesy of Michigan State University Photograph Collection, Michigan State University Archives & Historical Collections, East Lansing, MI.

SUMMER UR FORUM ANNOUNCEMENTS

We are pleased to announce that the Summer Undergraduate Research Forum (SURF) is now the Mid-Michigan Symposium for Undergraduate Research Experiences (Mid-SURE). Mid-SURE 2013 will be held on July 24.

In addition to a new name, there are several other exciting event changes. The symposium will be held in the Breslin Center Concourse, which will accommodate more than 250 posters simultaneously, allowing for a greater number of student presenters. We will also have more than 20 representatives from various graduate school programs. Additionally, students from other institutions in our region will be invited to present their research.

Mid-SURE represents a collaboration between the Undergraduate Research Office, the Graduate School's Summer Research Opportunities Program (SROP), the College of Engineering's Summer Undergraduate Research Experience (EnSURE), the BEACON Center for the Study of Evolution in Action, and the MSU Research Education Program to Increase Diversity in Health Researchers (REPID).

For more information, visit the Mid-SURE website: urca.msu.edu/midsure.

Questions can be directed to Megan Shannahan at shannah2@msu.edu or 517-884-1559.

2013
15th annual
UURAF

1986
MSU selected as
one of the original
fourteen McNair
institutions

1974
State News article
details student
experiences in
undergraduate
research

1958
Mathematical,
Physical and
Biological Sciences
Division begins
inaugural cycle of
URPP at MSU

1996
Alumnus, Eric T.
Crumpler, becomes
first McNair gradu-
ate in the country
to earn a Ph.D.

1999
First annual Under-
graduate Research
Forum held at MSU

1978
Professorial
Assistant program
established