



A Tennessee Flagship Carnegie R1 Research Institution

RESEARCH + **INNOVATION**

NEWSLETTER



UofM Awarded Three Grants, \$2M+ from NSF

The University of Memphis wins major instrumentation investment across multiple disciplines.

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Stress Alert App Launched; Acts as Stress Assistant

Wearable AI startup turns watches into stress assistants using licensed UofM technology.

[Read Full Story](#)



Cavitation Erosion: Model to Full Scale

Understanding cavitation erosion employing the U.S. Navy's Large Cavitation Channel.

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Computational Chemistry and Modeling Methods

Using data mining and machine learning to enhance computational modeling of enzymatic reactions.

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Using AM Research to Build a Partnership

Metal Additive Manufacturing Research: Process - Structure - Property Relationship.

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Student-Funded Research for Geologic Mapping

Mapping of the protected Tecopa 7.5' quadrangle, a Pleistocene lake, a river and a canyon in California.

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Sandy Creek Stream Restoration Project

West Tennessee Basin Authority funds research on the Memphis aquifer in urban area, Jackson, TN.

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Research to Impact Black Youth with Type 1 Diabetes

Research seeks to develop and provide intervention to improve health outcomes.

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Future of Agricultural Research at the UofM

A faculty focus group will convene on the future of ag research at the University of Memphis.

[Read Full Story](#)



Supporting Research Growth for New Faculty

The Division of Research & Innovation will hold a new faculty orientation on October 26.

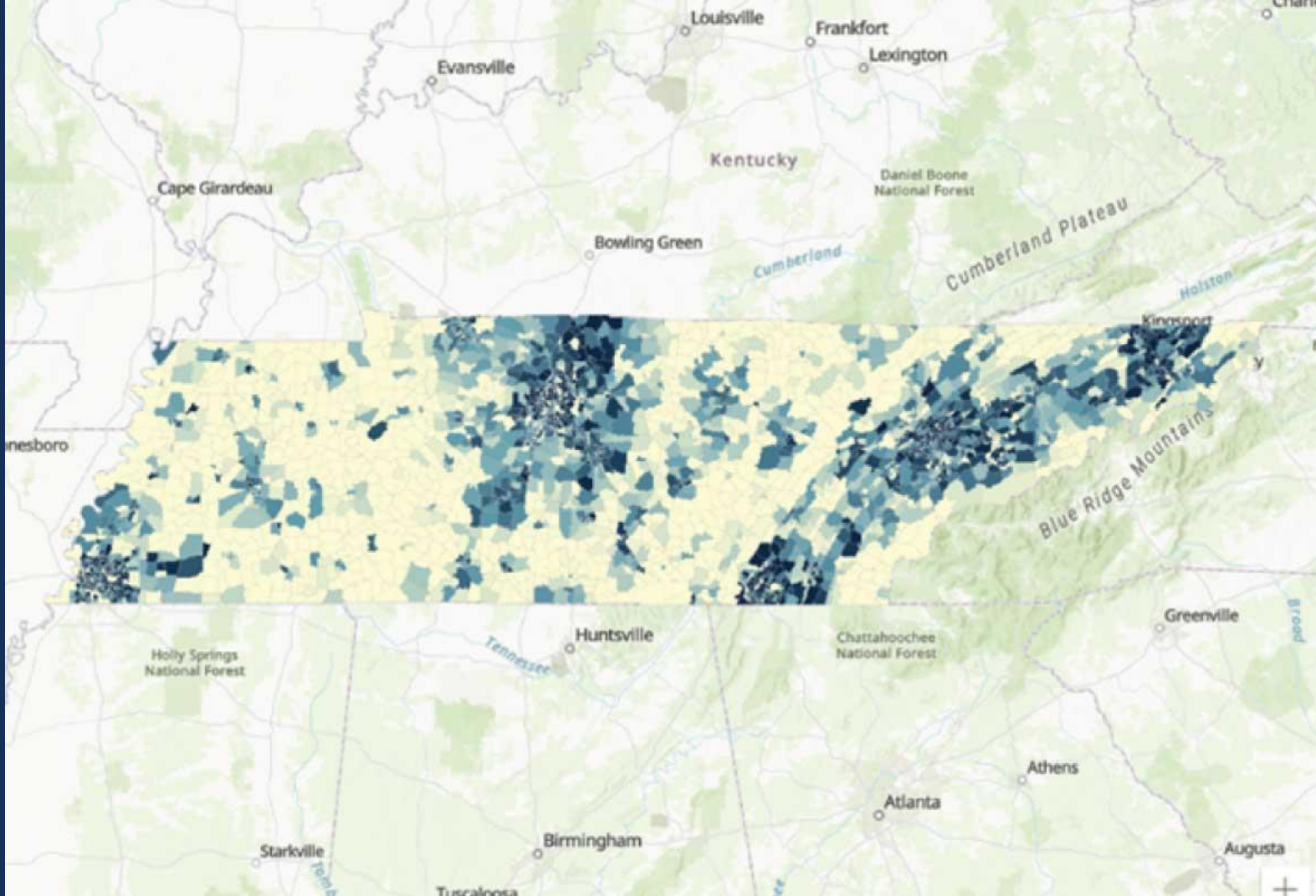
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Oxytocin Projections and Oxytocin Receptors

Distinguishing drug versus social reward, and the interplay of oxytocin and dopamine.

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TDOT Funds Developing Statewide Land Use Model

Used for Tennessee statewide land use model enhancements with local validation and implementation.

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CDC, DOD, DOE, NEH, NIH, and NSF Funding

Recently published federal agencies' funding opportunities outlining upcoming grants.

[See Full List](#)



Calendar of Events October 2023

Research Development, Research Enterprises, UMRF Research Park & FedEx Institute of Technology.

[See Full List](#)

Research Awards September 2023

Dr. Brian Waldron awarded \$486,180 from the Shelby County Government,” \$179,949 from the Tennessee Department of Transportation with the Federal Highway Administration and \$10,096 from the University of Tennessee - Knoxville with the U.S. Geological Survey.

Dr. Jennifer Mandel awarded \$478,371 from the National Science Foundation.

Dr. Farhad Jazaei awarded \$450,000 from the National Science Foundation.

Dr. Sarah Leat awarded \$328,585 from the Health Resources and Services Administration.

Dr. Lan Wang awarded \$261,656 from Peraton Labs Inc. with the Defense Advanced Research Projects Agency.

Dr. Richard Irwin awarded \$200,000 from the U.S. Economic Development Administration.

- Dr. Kelsey Harrison** awarded \$109,978 from Ford Motor Company.
- Dr. Gregory Boller** awarded \$98,237 from the Economic Club of Memphis.
- Dr. Stephanie Ivey** awarded \$74,183.29 from Leidos Incorporated with the Federal Highway Administration.
- Dr. James McCutcheon** awarded \$72,773 from the City of Memphis Police Department with the U.S. Department of Justice.
- Dr. Brian Meredith** awarded \$61,875 from the Tennessee Higher Education Commission.
- Dr. Philip Pavlik** awarded \$52,758 from Carnegie Mellon University with the National Science Foundation.
- Dr. Tenderano Muzorewa** awarded \$50,000 from the National Science Foundation.
- Dr. James Adelman** awarded \$49,000 from the National Science Foundation.
- Dr. Fawaz Mzayek** awarded \$46,204 from the University of Tennessee Health Science Center with the National Institutes of Health.
- Dr. Rory Pfund** awarded \$45,881 from the International Center for Responsible Gaming.
- Dr. Richard Bloomer** awarded \$44,383 from Lumanity with Mirpam, LLC for his project “Impact of a topical cosmetic product intended to promote the health and beauty of women’s hair.”
- Dr. William Jackson**, awarded \$34,736 from the U.S. Geological Survey.
- Dr. Kristoffer Berlin** awarded \$27,882 from the University of Tennessee - Knoxville with the National Institutes of Health.
- Dr. Lindsey Feldman** awarded \$27,290 from Innovate Memphis.
- Dr. Susan Neely-Barnes** awarded \$25,000 from the Health Resources and Services Administration.
- Dr. Wesley James** awarded \$15,000 from the Town of Inverness.

** Data reported the 18th of each month. Awards finalized after the 18th will be reported the following month.*

[Full project and award details available here.](#)

Upcoming Events & Announcements





Interdisciplinary Team Building

NSF Opportunities

Join the College of Arts & Sciences, Herff College of Engineering, College of Education and the Division of Research & Innovation for a networking event to discuss upcoming NSF opportunities in the areas of:

- Science and Technology Studies (STS) - Research Community Development Grants
- Dynamics of Integrated Socio-Environmental Systems (DISES) - DISES-RCN Track 3 Research Coordination Networks Proposals
- Dynamics of Integrated Socio-Environmental Systems (DISES) - DISES-EX Track 2 Exploratory Proposals
- Dynamics of Integrated Socio-Environmental Systems (DISES) - DISES Track 1 Research Proposals

Wednesday, October 4 | 2:30-4 PM
University Center Fountain Room (UC 350)



Memphis Entrepreneurship Showcase

Powered by

UofM Crews Center for Entrepreneurship, Epicenter Memphis and the UofM FedEx Institute of Technology

Do you want to **start your own business** or **commercialize a technology**? Are you interested in **learning more** about entrepreneurship?

Join us for an exciting discussion around entrepreneurship with a panel discussion featuring successful entrepreneurs and a presentation on entrepreneurial resources available in the Memphis region. Networking and refreshments immediately following panel discussion.

Panel Moderator:

- Dr. Brian Evans, Manager of Strategic Research Initiatives | UofM Division of Research & Innovation

Panelists:

- Dr. Paul Brister, CEO | Foundation Instruments
- Dr. Leta Nutt, CEO & Founder | NuttBio, Inc.
- Chris Ramezanpour, President & Founder | Secure Food Solutions

Thursday, Oct. 5 | 3 PM | FedEx Institute of Technology Fishbowl (203/205)

REGISTER



FedEx Institute of Technology Technology Serving Humanity Speaker Series

Welcomes

Dr. Abhay Mishra

Kingland Systems Faculty Fellow in Business Analytics and associate professor of Information Systems and Business Analytics at
Debbie and Jerry Ivy College of Business
Iowa State University

Information technology (IT) is having a profound impact on modern business and society. The healthcare industry provides a fascinating context in which to explore such impacts. The industry has set three goals for itself - improve the patient experience of care (including quality and satisfaction), improve the health of populations, and reduce per capita costs of health care. In order to achieve these goals, and to make sound policies and good business decisions, it is critical to consider how different entities within the healthcare industry use IT, how the use of IT changes the nature of work, and how the value IT creates is appropriated.

In this talk, Mishra will draw upon his extensive research on healthcare to highlight that IT has made a significant impact in the healthcare industry, but it is not a panacea. He will also explore how the contemporary developments in AI may impact the nature of work for doctors and the doctor-patient relationship. Mishra will conclude with his personal perspective on why fairness is a worthy goal towards which we can progress using IT and analytics.

Talk Title: "IT Use, Value and the Future of Work in Healthcare"

Tuesday, Oct. 10 | 3 PM | Zoom

[REGISTER](#)



SciENCv Workshop

Join us on October 19, from 2-3 p.m. for a virtual workshop on using Science Experts Network Curriculum Vitae (SciENCv). SciENCv is a new electronic system that helps researchers assemble the professional information needed for participation in federally funded research. SciENCv gathers and compiles information on expertise, employment, education and professional accomplishments. Researchers can use SciENCv to create and maintain biosketches that are submitted with grant applications and annual reports. SciENCv allows researchers to describe and highlight their scientific contributions in their own words.

Learn more about the Division of Research & Innovation's workshops and training [opportunities >>](#)

Questions? Email Dr. Brian Evans at researchdev@memphis.edu.

Thursday, Oct. 19 | 2-3 PM | Virtual

REGISTER



Faculty Focus Group on the Future of Agricultural Research at UofM

As part of our recently launched strategic plan, the university is exploring high-potential opportunities for growth in the areas of agricultural research, regenerative ag, sustainability, food systems, and agtech. A visioning effort, led by **Dr. Jennifer Mandel** in the Department of Biological Sciences, will identify key assets and opportunities where the university can serve as a leader in these fields—not just in the natural sciences but across multiple colleges and disciplines.

We are inviting any faculty whose research interests align to join us for a focus group to share your ideas and vision for agriculture on our campus. This discussion will be facilitated by Epic Pivot, a local consulting firm the university has retained to help gather input from faculty, community partners and other key stakeholders whose contributions will be critical in shaping our vision and direction.

To RSVP, email Dr. Mandel at jmandel@memphis.edu. We hope to see you there!

Friday, Oct. 20 | 2-3:30 PM | Ellington Hall 131

RSVP



Research Roundtable: Introductions & Overview

UofM research support staff, please join our first Research Roundtable: “Meet your Research Enterprise Services Team.”

Discover the faces behind the scenes – from research accountants to research administrators to research support analysts – and gain a deeper understanding of their expertise and the critical processes they manage in the pre- and post-award services offices. This event is an opportunity to foster collaboration and build stronger connections for the common goal of supporting sponsored research on our campus. Coffee and bagels will be provided. Can't wait to see you there!

Questions? Email Laura Wright at llwri@memphis.edu.

Friday, Oct. 27 | 9-10 AM
University Center Senate Chamber | UC 261

REGISTER



Demystifying Academic Book Publishing in the Humanities, Social Sciences, and Natural Sciences

Hosted by the College of Arts & Sciences

The publication of monographs, textbooks, and edited books are highly valued scholarly achievements, but the process can be confusing or intimidating for first-time authors. Join this panel to hear CAS authors' experiences about the publication process. Topics include: pros and cons of authoring and editing books at various career stages; identifying publishers and editors for your project; preparing an effective prospectus; and negotiating contracts. Panelist comments will be followed by Q&A.

Panelists:

- Melanie Conroy, Associate Professor, World Languages and Literatures
- Stephen Diko, Assistant Professor, City and Regional Planning
- Davia Cox Downey, Associate Professor, Public and Nonprofit Administration
- Andrew Olney, Professor, Institute for Intelligent Systems
- Beverly Tsacoyianis, Associate Professor, History
- Terrence Tucker, Associate Professor, English

Friday, Oct. 27 | 1-2:30 PM
University Center Senate Chamber | UC 261

[MORE WORKSHOPS](#)



Research Studies

Participation Opportunities

Currently available:

- [Center for Information Assurance >>](#)
- [Cognition, Language and Speech Lab \(CLaSLab\) >>](#)
- [College of Health Sciences >>](#)
- [Department of Psychology >>](#)
- [Hearing Aid Research Laboratory >>](#)
- [Loewenberg College of Nursing \(Heart Failure Study\) >>](#)

If your department or college would like to have its research study participation opportunities listed, email thisweek@memphis.edu.

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