

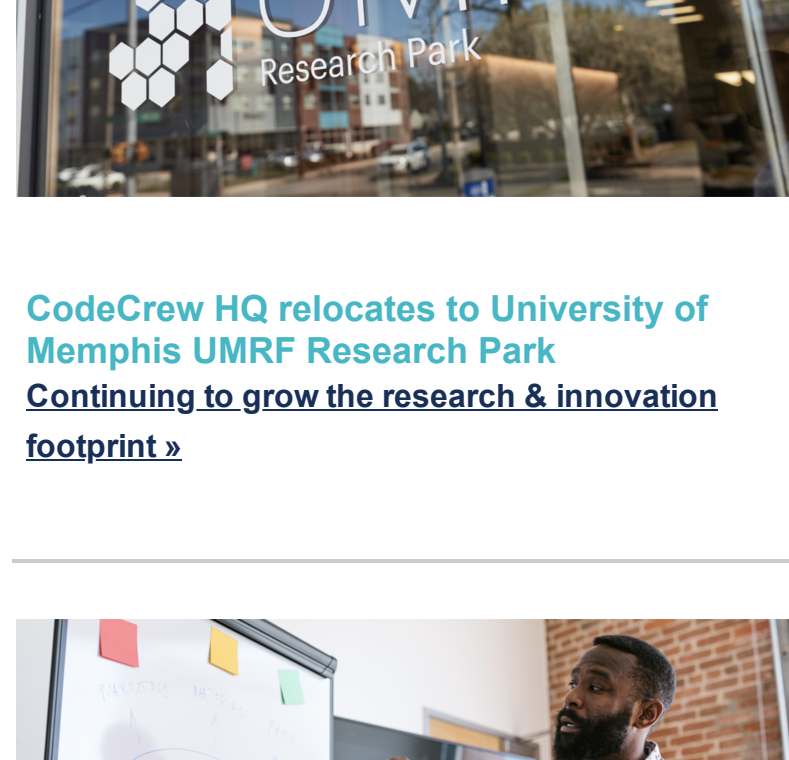
# RESEARCH + INNOVATION NEWSLETTER

December 2021 • COVID-19 Updates

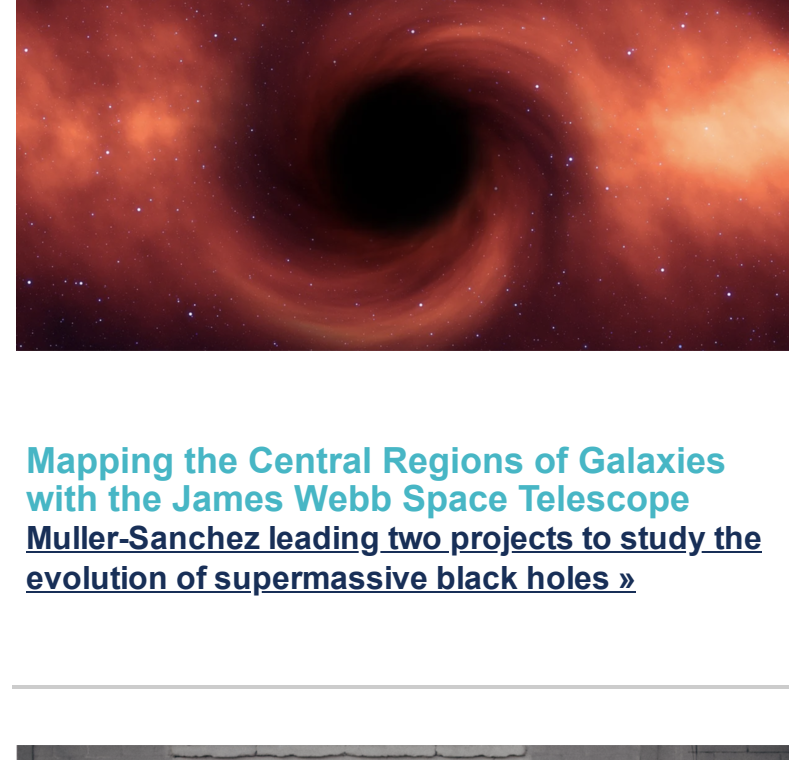
**Latest Update: The 2021 Carnegie Research Classification Rankings are slated to be released about Dec. 15, 2021.**



**UofM Will Develop Unmanned Aerial Systems as Part of the National Defense Authorization Act**  
**University efforts for DoD project led by Jacobs »**



**UofM Lambuth Partnership to Create First Dedicated Nursing VR Lab in Region**  
**To enhance workforce development needs »**



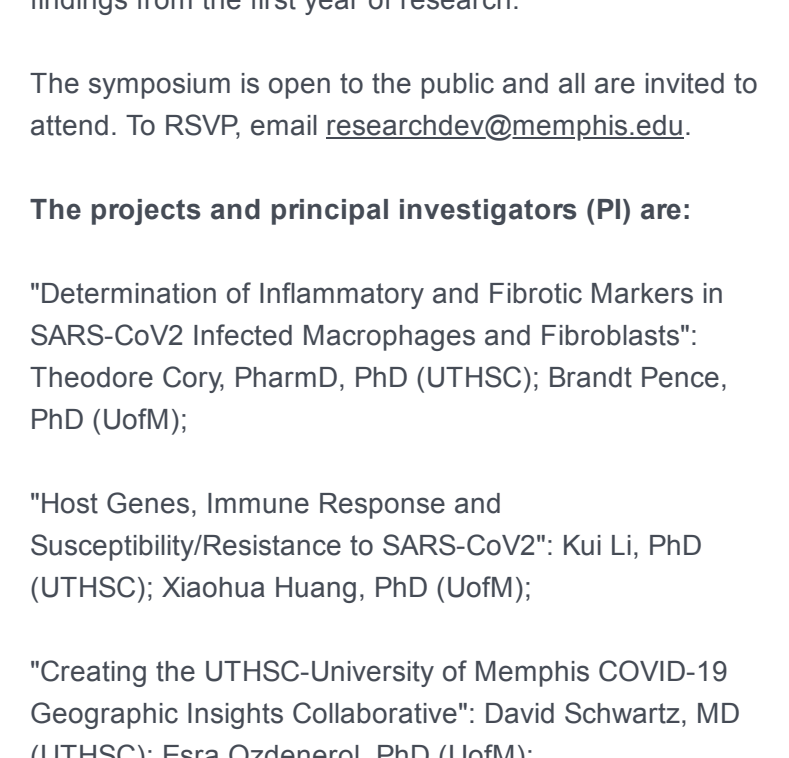
**Beck Elected to APA Board of Scientific Affairs**  
**Will serve through 2024 »**



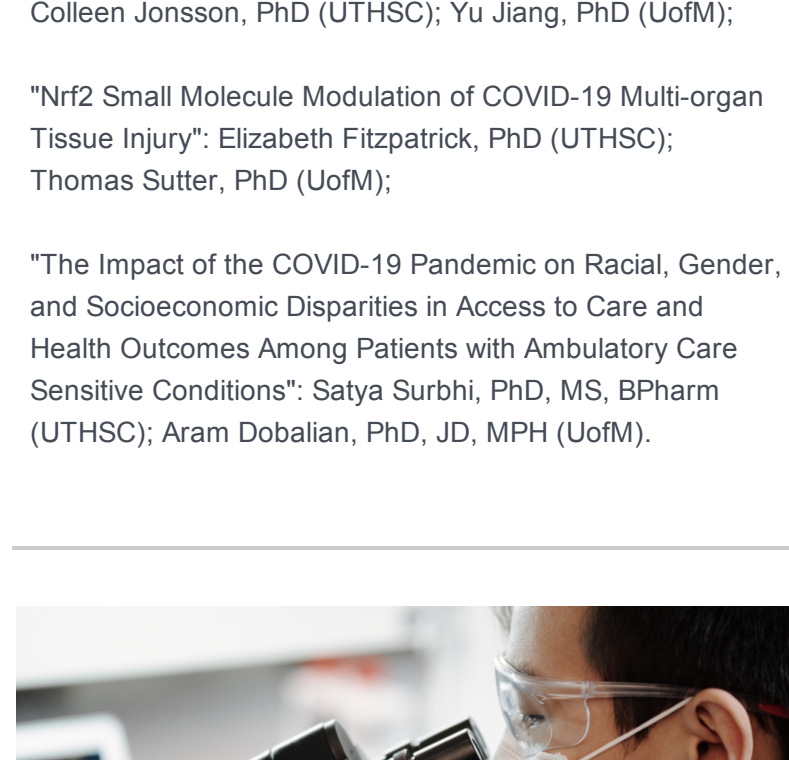
**CodeCrew HQ relocates to University of Memphis UMRF Research Park**  
**Continuing to grow the research & innovation footprint »**



**Foundation Fridays**  
**Office of Research Development provides opportunities for faculty to learn more about growing and optimizing funding from foundations »**



**Mapping the Central Regions of Galaxies with the James Webb Space Telescope**  
**Muller-Sanchez leading two projects to study the evolution of supermassive black holes »**



**Graduate Student Research Spotlight**  
**Highlighting Bilbeisi's research and work to foster empowered development and improved health »**



**Office of Sponsored Programs**  
**End-of-Year Deadlines**

Please plan ahead for December and January deadlines, especially considering the end of the fall semester, final exams, and the holiday break. For your convenience, see dates below.

If you are planning on a submission in the coming months, please draft a Cayuse record as soon as possible and plan to route with all required documents (internal budget, budget justification, abstract/scope of work, and all subrecipient documents) at least 7-10 days prior to the deadline so that OSP has time to review and authorize the record.

Feel free to reach out to OSP anytime if you have questions or concerns. We appreciate you!

**Important 2021-22 Dates**

**Fall Semester & Final Exams Completed:** Thursday, Dec. 9

**Holiday Break/University Closed:** Thursday, Dec. 23- Friday, Dec. 31

**MLK Day/University Closed:** Monday, Jan. 17, 2022



**COVID-19 Research Symposium**  
**CORNET (Collaborative Research Network) grant recipients present on their work**

In response to the COVID-19 pandemic, the University of Memphis and UTHSC partnered in 2020 to provide seed funding to research teams comprised of faculty from both institutions to investigate topics related to the pandemic. On Dec. 10, the two institutions will meet to present their findings from the first year of research.

The symposium is open to the public and all are invited to attend. To RSVP, email [researchdev@memphis.edu](mailto:researchdev@memphis.edu).

**The projects and principal investigators (PI) are:**

"Determination of Inflammatory and Fibrotic Markers in SARS-CoV2 Infected Macrophages and Fibroblasts": Theodore Cory, PharmD, PhD (UTHSC); Brandt Pence, PhD (UofM);

"Host Genes, Immune Response and Susceptibility/Resistance to SARS-CoV2": Kui Li, PhD (UTHSC); Xiaohua Huang, PhD (UofM);

"Creating the UTHSC-University of Memphis COVID-19 Geographic Insights Collaborative": David Schwartz, MD (UTHSC); Esra Ozdenerol, PhD (UofM);

"Models of Lung Microenvironment to Explore COVID-19 Pathogenesis and Drug Development": Marko Radic, PhD (UTHSC); Gary Bowlin, PhD (UofM);

"Aerosolization of Emitted Particles in Multiple Breathing, Speech and Singing Activities": Sandra Stinnett, MD (UTHSC); M. Boyd Gillespie, MD, MSc, FACS (UTHSC); Ranganathan Gopalakrishnan, PhD (UofM); Miriam van Mersbergen, PhD, CCC-SLP (UofM); Daniel Foti, PhD (UofM); Jeffrey Marchetta, PhD (UofM); John Hochstein, PhD (UofM);

"Identifying Areas of Geographical Inequalities in COVID-19 Morbidity and Mortality through Mapping of Spread of Confirmed Cases and Deaths across Disadvantaged Areas in Tennessee": James Rhudy, Jr., PhD, DNP, APRN, CCNS, CCRN-CMC-CSC (UTHSC); Anzhelika Antipova, PhD (UofM);

"Clinical, Immunological and Viral Determinants of COVID-19 Disease Severity in Adults and Children": Heather Smallwood, PhD (UTHSC); Nick Hysmith, MD (UTHSC); Colleen Jonsson, PhD (UTHSC); Yu Jiang, PhD (UofM);

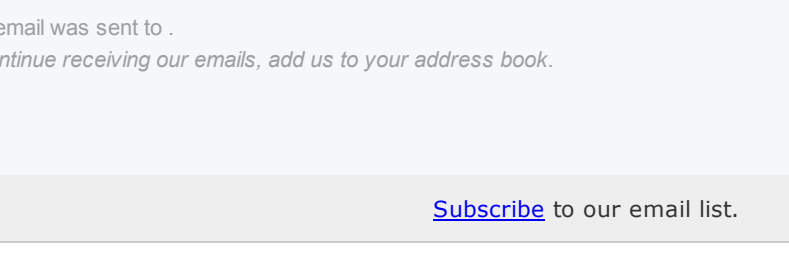
"Nrf2 Small Molecule Modulation of COVID-19 Multi-organ Tissue Injury": Elizabeth Fitzpatrick, PhD (UTHSC); Thomas Sutter, PhD (UofM);

"The Impact of the COVID-19 Pandemic on Racial, Gender, and Socioeconomic Disparities in Access to Care and Health Outcomes Among Patients with Ambulatory Care Sensitive Conditions": Satya Surbhi, PhD, MS, BPharm (UTHSC); Aram Dobalian, PhD, JD, MPH (UofM).



**Research Study Participation Opportunities**

- [College of Health Sciences »](#)
- [Department of Psychology »](#)
- [Speech Perception Assessment Laboratory »](#)
- [Hearing Aid Research Lab »](#)
- [Center for Information Assurance »](#)



## Research Awards November 2021

**Dr. Eddie Jacobs**, professor and undergraduate coordinator in the Department of Electrical and Computer Engineering, was awarded \$2,707,364 from the U.S. Army Research Office for his project "Multi-UAS Multi-Sensor Intelligence, Surveillance, and Reconnaissance" and \$449,996 from the University of Central Florida with the U.S. Army Research Laboratory for his project "Vision-based autonomous navigation using MLAI."

**Dr. Satish Kedia**, professor in the Division of Social and Behavioral Sciences, was awarded \$525,000 from Mending Hearts, Inc. with the Substance Abuse & Mental Health Services Administration for his project "SAMHSA MAT 2021 MHIT TBD" and \$99,984 from Buffalo Valley (BV) incorporated with the Substance Abuse & Mental Health Services Administration for his project "SAMHSA MAT 2021 BVI TBD."

**Dr. John Sabatini**, distinguished research professor in the Institute for Intelligent Systems, was awarded \$402,502 from the U.S. Department of Education for his project "Developing and implementing a technology-based, reading comprehension instruction system for adult literacy students."

**Dr. Chrisann Schiro-Geist**, professor in the Department of Counseling, Educational Psychology and Research, was awarded \$399,873 from the U.S. Department of Education for her project "Topic Area 6: Project FIRST (Finding Innovative Rehabilitation Services Training)" and \$92,650 from the Tennessee Department of Human Services with the U.S. Department of Education for her project "Pre-Employment Transition Services."

**Dr. Chunrong Jia**, associate professor in the Division of Epidemiology, Biostatistics and Environmental Health, was awarded \$24,142 from Harvard University with the JPB Foundation for his project "The Environmental Health Fellows Program for Urban Health" and \$340,516 from the Shelby County Health Department with the U.S. Environmental Protection Agency for his project "Field Validation of Miniature Thermal Desorption Samplers."

**Dr. Isaiiah Surbrook**, director of the Department of Engineering Student Services, was awarded \$205,000 from the Tennessee Student Assistance Corporation for his project "Administration of the Minority Engineering Scholarship."

**Dr. Stephen Zanskas**, associate professor in the Department of Counseling, Educational Psychology and Research, was awarded \$177,481 from the U.S. Department of Education for his project "Rehabilitation Counselor Training Program."

**Dr. Thouraya Al-Nasser**, clinical assistant professor in the Department of Instruction and Curriculum Leadership, was awarded \$175,000 from the Tennessee Department of Education with the U.S. Department of Education for her project "TEIS Vendor Services."

**Dr. Nathan DeYonker**, assistant professor in the Department of Chemistry, was awarded \$127,099 from the National Science Foundation for his project "CAREER: A Model-Building Platform for Rational, Reproducible, and Rigorous Computational."

**Dr. Richard Bloomer**, dean and professor in the College of Health Sciences, was awarded \$103,502 from Deerland Probiotics & Enzymes, Inc. for his project "Impact of Solarplast on Immunity," \$102,000 from the Tennessee Department of Mental Health and Substance Abuse Services with the U.S. Department of Health and Human Services for his project "Substance Use Prevention Among Vulnerable Youth," and \$18,976.50 from Calerie LLC for his project "Randomized double-blinded clinical study of Pyroloquinoline Quinone (PQQ) and Molecular Hydrogen (H2) on cognitive function and associated biochemical markers."

**Dr. Thomas Goebel**, assistant professor in the Center for Earthquake Research and Information, was awarded \$100,589 from the U.S. Department of Energy for his project "Assessing the relative contributions of fluid pressure and elastic stress to induced seismic energy release" and \$30,000 from the Southern California Earthquake Center with the National Science Foundation for his project "Conditions that promote deep induced earthquakes in California hydrocarbon basins."

**Dr. Jacquelyn Pence**, research assistant professor in the College of Health Sciences, was awarded \$43,692 from USANA Health Sciences for her project "Impact of Jump Start nutrition program on weight loss and associated measures of health in overweight and obese men and women."

**Dr. Michael Kennedy**, professor in the Department of Biological Sciences, was awarded \$48,960 from the American Ordnance, LLC for his project "Monitoring of Mammal Populations."

**Dr. Abby Parrill-Baker**, dean and professor in the Department of Chemistry, was awarded \$39,687 from First 8 Memphis LLC for her project "Seeding Success Shelby County Schools Pre-K Outcomes-Based Financing Project."

**Dr. Stephanie Ivey**, associate dean for research and professor in the Department of Civil Engineering, was awarded \$39,340 from Shelby County Schools for her project "SCS-Bolton HS Ambassadors" and \$38,000 from the Women's Foundation for a Greater Memphis for her project "Girls Experiencing Engineering 2021-22."

**Dr. Daniel Larson**, professor in the Department of Earth Sciences, was awarded \$32,000 from the City of Collierville for his project "Collierville gw quality research."

**Dr. Yufeng Zhang**, assistant professor in the College of Health Sciences, was awarded \$27,000 from Calerie LLC for his project "In Vitro examination of Pyroloquinoline Quinone (PQQ) and Molecular Hydrogen (H2) administration on PGC-1a levels, NRF-2 levels, citrate synthase activity in C2C12 myoblasts-markers related to aging."

**Dr. Wesley James**, executive director in the Center for Community Research and Evaluation, was awarded \$25,000 from the Women's Foundation for a Greater Memphis for his project "Evaluation for the Digital Literacy Project."

**Dr. Todd Zoblotsky**, research professor in the Center for Research in Educational Policy, was awarded \$19,903 from the Shelby County Office of Reentry with the U.S. Department of Justice for his project "Project Inspiring New Concepts."

**Dr. Michael Schmidt**, associate professor in the Department of Art, was awarded \$15,028.76 from Florida International University with the National Institutes of Health for his project "Developing and testing health warning labels on the ENDS device."

**Dr. Andrea Pirkey**, post-doctoral fellow in the Department of Social Work, was awarded \$15,000 from Compass Community Schools with The Urban Child Institute for her project "HERO Training Program: CompassUCI Pilot."

**Dr. Christodoulos Kyriakopoulos**, assistant professor in the Center for Earthquake Research and Information, was awarded \$15,000 from the Southern California Earthquake Center for his project "Is topography part of the 'key' in the Cajon Pass earthquake gate? Continuing study with realistic and synthetic models."

**Dr. Amanda Edgar**, associate professor in the Department of Communication and Film, was awarded \$10,318 from Villanova University for her project "Black Lives Matter: Perspectives from the Ground."

**Dr. Abu Mohammed Naser Titu**, assistant professor in the Division of Epidemiology, Biostatistics, and Environmental Health, was awarded \$2,500 from The Campbell Foundation for his project "Statistical Evaluation of 'Incidence of Flare Reaction Following Shoulder Steroid Injections: Comparisons of Kenalog (Triamcinolone) and Depomedrol (Methylprednisolone)."

**Dr. Barbara Bekis**, ESP coordinator in the Department of Educational Support Programs, was awarded \$1,879,021 from the Peer Power Foundation Inc. for her project "Peer Power Institute."

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

**Research + Innovation News**

**Quick Guide to Research & Sponsored Programs**

**Research Compliance**

**FedEx Institute of Technology News**

**Research Clusters**

**Emerging Tech Training**

**DevMemphis**

Dec. 7 | 6-7:30 PM | FIT 225

**Machine Learning/Data Science/R**

Dec. 7 | 7-8 PM | Virtual

**MemPASS / Power BI**

Dec. 9 | 5:30-7:30 PM | FIT 225

**Memphis Data Pros / Power BI**

Dec. 9 | 5:30-6:30 PM | FIT 225

**FedEx Institute of Technology Emerging Tech Training: Business Architecture**

Dec. 13-17 | 9 AM-5 PM | Virtual

**Memphis Web Workers**

Dec. 14 | 6-8 PM | FIT 225

**Memphis Game Developers Workshop**

Dec. 18 | 6-8 PM | Virtual

**Memphis Python**

Dec. 20 | 6:30-8:30 PM | Virtual

**Business Agility Memphis**

Dec. 23 | 6-7:30 PM | Virtual

**Memphis PHP User Group**

Dec. 28 | 6:30-8 PM | FIT 225

**Have research for the newsletter? Contact us.**