

JMU Research, Scholarship & Creative Endeavors

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Please join us in congratulating VCC executive director Alleyn Harned, who was recently inducted into the U.S. Department of Energy's Clean Cities Hall of Fame Margaret Smith, DOE's technology manager in the Vehicle Technologies Office, commented, "Alleyn not only sees the path forward for clean, domestically fueled transportation in Virginia, but knows how to navigate the political economy of the Commonwealth to get there."

The Student Awards, Initiatives, and Research (STAIR) team developed a partnership with Sister2Sister, a program that provides Pakistani women educational opportunities in the U.S. This past summer, two students were selected to spend several weeks at JMU, which included funding support covering tuition, travel costs, health insurance, living expenses, and visas (courtesy of Research & Scholarship). <u>Learn more about their experiences</u> engaged in research with JMU faculty and students.

Managing editor Jennifer Risser represented the Center for International Stabilization and Recovery at the 20th Meeting of the States Parties to the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-personnel Mines and on Their Destruction (20MSP) in Geneva last month. CISR participated in this meeting through its longtime role as an NGO observer under JMU's Consultative Status with the UN Economic and Social Council.

Our congratulations to Erin Kamarunas, associate professor in the Department of Communication Sciences and Disorders, who was awarded the highly competitive 2022 New Century Scholars Research Grant from the American Speech-Language-Hearing Association (ASHA). This \$25,000 award will provide funding support for Kamarunas' project "Predictive Value of Oral Sensory Perception on Dysphagia."

We'd also like to recognize L. Renée, assistant director of the Furious Flower Poetry Center, who recently received a Pushcart Prize nomination for her poem "Shoes," which also won the 2022 Rattle Poetry Prize.

For those on campus in mid-January, please consider joining the JMU community for events celebrating the life and legacy of Dr. Martin Luther King, Jr. <u>View the schedule</u> at the Center for Multicultural Student Services website.

Wishing all a safe and cheerful holiday season,

Research & Scholarship



Wilson Hall on JMU's historic Quad

Grant Awards

For a monthly listing of recent faculty grant awards, please<u>visit the JMU Office of Sponsored Programs website</u>. Here are some notable awards from September and October 2022:

Jolynne Bartley (Institute for Innovation in Health and Human Services) received \$185,629 from the Virginia Department of Education to provide after school enrichment of the Gus Bus mobile literacy vehicle for families attending Smithland and Waterman Elementary Schools.

Suzanne Fiederlein and Nicole Neitzey (Center for International Stabilization and Recovery) received \$135,643 from the U.S. Department of Defense to observe and characterize the visual and structural changes that have occurred to munitions as a result of aging in an underwater environment.

Hossain Heydari and Brett Tjaden (Department of Computer Science) received \$258,956 for the Cyber Scholarship Program to encourage faculty and students to perform cutting edge research, disseminate knowledge, foster collaboration, support outreach, increase the number of underrepresented students, help recruiting efforts, and educate cybersecurity professionals.

Anthony Matos (Department of Public Safety) received \$349,999 from the U.S. Department of Justice to support a full-time and part-time licensed professional counselor that would be imbedded in the police department to assist the officers with crisis intervention responses.

Remy Pangle (Center for the Advancement of Sustainable Energy) received \$25,000 from the Dominion Foundation to support an engineering design competition where students build a wind turbine and compete to generate the most energy.

Christina Rost (Department of Physics and Astronomy) received \$64,824 from Penn State University to establish the scientific foundation for structure-property relationships in entropy-stabilized oxides (ESO) and use this newfound understanding for unique material property engineering.

Duke Hall Gallery Receives International Grant

From University Communications:

The Duke Hall Gallery of Fine Art has recently been awarded a grant to<u>support the exhibition Both Sides of the River</u> (January 31 - March 18, 2023). The exhibit brings together the work of international and U.S. artists to foster conversations on the relation of art, decolonial ecology, and environmental stewardship. Among the featured artists will be JMU sculpture professor Greg Stewart working with an artist collective, Kosmologym.

Visit the Duke Hall Gallery website for updates.

Examining Racial and Gender Inequities in Education Leadership

Research & Scholarship caught up with Monica Smith-Woofter, assistant professor in the Department of Learning, Technology and Leadership Education, regarding her research article, "The Double Whammy: Navigating Racial and Gender Inequities and Microaggressions in Education Leadership," published in the Educational Justice Journal.

When asked how this line of inquiry has involved since publication of 'The Double Whammy," Smith-Woofter commented, "Currently, I am working with some of my LGBTQ+ colleagues who are interested in conducting further research in the area of P-12 executive leadership as it relates to challenges, barriers, and navigating inequities and microaggressions. We know this will be a multi-year study/research and we are in our initial planning stages. We are also in the midst of working on manuscripts for publication considerations."

In response to how this research is disseminated, Smith-Woofter added, "I present on some form of equity on an ongoing basis throughout the year (locally, regionally, and statewide in both VA and NC). As far as microaggressions are concerned, I work within the [College of Education] DEI committee to provide ongoing professional learning sessions/workshops about microaggressions to faculty, adjunct faculty, and students."

Wearable Tech for Physical Therapy



From the College of Integrated Science and Engineering

Almost everyone will visit a physical therapist at some point in life, whether for a sports injury, a hip replacement, or chronic back pain. For JMU engineering professor Jason Forsyth (pictured far left with students), this moment came 10 years ago when he suffered a back injury. The experience led Forsyth to start brainstorming ways physical therapy could work to serve patients more efficiently.

"I just kept thinking, are there better ways to get feedback on the [physical therapy] process, and are there better ways to know if I'm doing my exercises correctly?" Forsyth said.

Using his background in wearable computing, Forsyth came up with a potential solution. He is now <u>leading a research team to develop a wearable computing system</u> to assist people with at-home physical therapy programs.

Expansion of Tropical Alpine Communities due to Climate Change

From University Communications:

With glaciers melting away faster every year in the Peruvian Andes, the result of warming temperatures, family groups of llama-like vicuña are routinely finding new areas to roam. And where vicuña roam, they leave piles of dung, creating mounds of life-sustaining nutrients.

Working at elevations as high as 17,700 feet, JMU biology professor Kelsey Reider and her students will begin looking into the role vicuña are having in kickstarting new life in baron, nutrient-starved landscapes.

"I think it's going to change the way we think about how animals intervene in this process of primary succession, which has typically been thought to be driven by the environment," said Reider, who received a three-year \$470,000 grant from the National Science Foundation to do the work. She and her team, including microbial ecologist Steve Schmidt at the University of Colorado Boulder, will make their first visit in May.

A new exhibit celebrates the 50-year history of the Marching Royal Dukes. Organized by JMU Libraries, Special Collections, the Music Library, the School of Music and the Marching Royal Dukes, <u>Virginia's Finest: 50 Years of the Marching Royal Dukes</u> includes photos, recordings, uniforms, and additional pieces of MRD history, which can be accessed through an online exhibit.

Q&A with JMU's Disability Studies Co-Coordinator

According to the United Nations Disability Inclusion Strategy, over one billion members of the global population are disabled, making the celebration of Disability Pride Month in July increasingly important to many. Sometimes confused with Disability Awareness Month in March, Disability Pride Month distinguishes disability as an aspect of identity that should be honored, not a condition that requires a cure. This philosophy underpins the interdisciplinary field of Disability Studies (DS). The Office of Research and Scholarship recently spoke with one of the co-coordinators of the Disability Studies minor, Associate Professor of Writing, Rhetoric and Technical Communication Susan Ghiaciuc, about the program's development and its relationship to DS scholarship.

Messaging to Deter Texting and Driving

From the College of Business:

[Marketing faculty Kelly Naletelich's] most recent paper, "Curbing texting and driving with advertising co-creation," co-authored with Seth Ketron of the University of North Texas and Juan Alejandro Gelves of the College of William & Mary, has just been accepted for publication by the *Journal of Business Research*. It is expected to appear in print in early 2023.

The paper <u>looks at the effectiveness in curtailing texting and driving of advertising cocreation</u>, in which consumers become active participants in the development of marketing communications messages.

"We found that, when consumers are allowed to co-create an ad themselves, it's a lot more influential in leading them to reduce their intention to text and drive, as well as their overall distracted-driving behavior," says Naletelich.

Tracing the Genealogy of Racial Melodrama since the mid-19th Century

English professor Matt Rebhorn recently published his essay, "<u>The Unfinished Drama of the American Civil War</u>," in *The Cambridge Companion to the Literature of the American Civil War and Reconstruction*.

From the summary: "Tracing the particular genealogy of racial melodrama from before the Civil War to the beginnings of Black Lives Matter, this chapter discovers the way in which playwrights have deployed and manipulated melodrama's black-or-white aesthetic mode both to retrench and to reimagine Black and white racial relations."

Rebhorn also serves as an FY23 R&S Faculty Fellow, working to enhance JMU's research ecosystem through scholarly activities, proposal development, and faculty mentorship.



From the School of Nursing:

[Nursing student] Rachel Brandon (pictured right) presenting her JMU Honors College project ["How Cultural and Societal Norms Impact Birthing Mothers at Shirati Hospital in Tanzania"] at the Honors Symposium in the Festival Highlands room. Rachel completed her research while participating in a short-term study abroad trip to Tanzania this past spring. Professors Herron (pictured), Jagiello and Schminkey served as her project committee with professor Herron advising and helping Rachel while in Tanzania.

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