

JMU Research, Scholarship & Creative Endeavors

Volume 6, Issue 2

Thank you to all who participated in our winter food drive benefiting the Blue Ridge Area Food Bank. Our collective efforts encouraged more than \$3,100 in online donations and 2,100 lbs. of food and household supplies. A special thank you to JMU Athletics who contributed more than 1,300 lbs. of food! The generosity of our partners over the 13-year history of the drive has provided an equivalent of 50,000 meals in the Blue Ridge region.

JMU's commitment to inclusion and combatting racial injustice led to a<u>historic</u> <u>announcement</u> by the Board of Visitors during their February meeting. Three campus buildings that had previously been named for Confederate military leaders received approval for new names:

- Mountain Hall will be renamed **Gabbin Hall** in honor of outstanding faculty members Drs. Joanne V. and Alexander Gabbin, professors at JMU for more than 35 years;
- Justice Studies Hall will be renamed **Darcus Johnson Hall** in honor of Dr. Sheary Darcus Johnson ('70, '74M), JMU's first Black student and graduate; and
- Valley Hall will be renamed **Harper Allen–Lee Hall**, in honor of Doris Harper Allen ('19H) and Robert Walker Lee, both dedicated staff members and unsung heroes in dining services and maintenance respectively, as well as active members of the Harrisonburg and Rockingham County communities.

President Alger shared these thoughts, "Today's decision to rename three buildings on our campus is part of our deliberate effort to underscore JMU's commitment to being a welcoming and inclusive institution. These names help us to tell a more complete history of our institution. They highlight and celebrate the contributions and accomplishments of important individuals and groups who have historically been underrepresented in prominent campus namings. Collectively they represent faculty, staff, students, alumni and prominent members of our local community."

We'd also like to congratulate Dayna Henry, faculty member in the Department of Health Sciences, on her recent appointment to serve as the inaugural Coordinator of Student Research at JMU. The position will focus on assisting R&S, faculty, and staff in supporting, mentoring, and showcasing JMU student research, scholarship, and creative activities. Read a <u>Q&A about this new position</u>.

Office of Research & Scholarship James Madison University



Signage for Darcus Johnson Hall on the JMU Quad

Faculty Grant Awards

For a monthly listing of recent faculty grant awards, please<u>visit the JMU Office of</u> <u>Sponsored Programs website</u>. Here are some notable awards from December 2020 and January 2021:

Suzanne Fiederlein (Center for International Stabilization & Recovery) received \$562,624 from the American University of Kurdistan to increase the institutional capacity of American-style institutions of higher education in Iraq and enhance partnerships with the US and regional higher education to promote development of the faculty, curriculum, and pedagogy of Iraqi universities.

Jonathan Miles (Center for the Advancement of Sustainable Energy), Keith Holland (Department of Engineering), and Emily York (School of Integrated Sciences) received \$20,000 from the National Renewable Energy Laboratory to solve technical and social challenges related to product development, deployment, and marketing, while addressing broader educational objectives pertaining to wind energy.

George Vidal (Department of Biology) received \$210,600 from the National Institutes of Health to understand the mechanism and behavioral consequences of integrin beta 3 in regulating the development of excitatory cortical circuitry in vivo.

Samy El-Tawab (School of Integrated Sciences) received \$21,000 from George Mason University to focus on developing experiential learning activities that will contribute to capacity building for a strong multidisciplinary cybersecurity workforce.

Alleyn Harned (Virginia Clean Cities) received \$262,070 from the Virginia Department of Mines, Minerals and Energy to support and foster a regional electric vehicle ecosystem in Virginia, District of Columbia, Maryland, and West Virginia.

Sara Snyder (Department of Educational Foundations and Exceptionalities) received \$61,610 from George Mason University to develop and implement a statewide program to meet the initial and continuing education needs for teachers of students with severe disabilities in the Commonwealth of Virginia.

\$1M NSF Grant Provides Research Experiences for Students

From University Communications:

Led by Dr. Casonya Johnson, academic unit head of biology, the research hopes to shed light on the ways a certain group of proteins regulate gene development in the early stages of life, just after egg fertilization.

Through a combination of course-based undergraduate research experiences (CUREs) and independent mentored research, undergraduate students will use genetics, molecular biology, mathematical modeling and artificial neural networks to model protein-DNA interactions that regulate gene expression.

The first students working on the research are biology and computer science majors, but Johnson is hoping to recruit students from other disciplines as the project progresses. "One of the reasons we are excited is because it gives us an opportunity to take students from other fields," she said. In addition to biology, the research will involve chemistry, computer science, mathematics and physics.

Read the article

College of Education is Key Partner on \$10.8M Grant

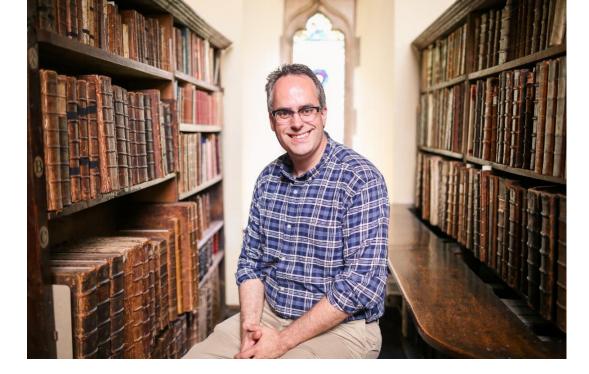
From University Communications:

The James Madison University College of Education is partnering with Virginia ED Strategies and the Virginia Department of Education on a <u>\$10.8 million federal grant</u> to create a professional development program to increase teacher effectiveness and improve in-person, remote and hybrid instruction in science, mathematics and computer science.

Announced [in February] by Gov. Ralph Northam, the five-year Education, Innovation and Research grant from the U.S. Department of Education will be used to build sustainable teacher effectiveness capacity in secondary STEM teachers in rural settings through systematic, teacher-directed selection of professional learning experiences that increase collective teacher efficacy within a community of practice.

College of Education faculty will collaborate to create a self-assessment tool that will drive teacher choice in professional learning opportunities in rural settings.

English Faculty Named Provost Award Winner for Research



Professor Rankin in Merton College Old Library (Merton College, Oxford)

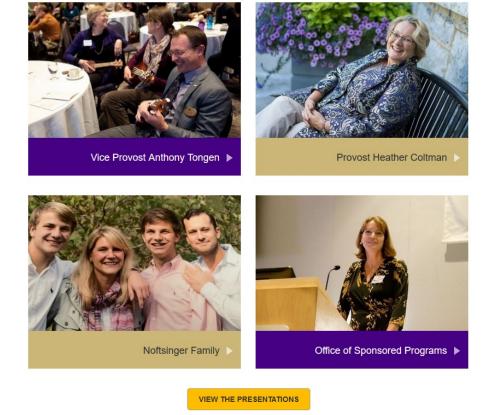
Professor of English Mark Rankin has been selected as the<u>2021 Provost Award Winner</u> for Excellence in Research and Scholarship. This award recognizes a faculty member who has demonstrated achievement in research, scholarship, and/or creative work. Recipients of the award provide JMU students with a stimulating environment that fosters learning and affirms the university as an intellectual and cultural leader. The <u>vol. 5</u>, iss. 6 edition of this newsletter highlighted Rankin's <u>\$159,005 grant award</u> from the National Endowment for the Humanities to direct a 2021 Summer Seminar for higher education faculty "Printing and the Book During the Reformation: 1450-1650."

Music Education Faculty Using Critical Race Theory to Challenge Oppression



For Amy Lewis, assistant professor of music education, her dissertation journey started one afternoon as she drove home from work, radio playing after her day as a music teacher concluded. Lewis (pictured at a Black Lives Matter rally) was deeply moved by an interview with Trayvon Martin's mother, and that interview served as the exigency for a more critical examination of the state of education in America. Critical race theory provided Lewis with the necessary <u>academic and</u> <u>activist tools</u> needed to do the work she sought to accomplish.

Noftsinger Celebration of Madison Scholarship & Recognition Reception



JMU faculty, please join R&S for a virtual Noftsinger Celebration of Madison Scholarship & Recognition Reception. The <u>event site</u> hosts presentations by the 2020 Provost Award Winner for Excellence in Research and Scholarship, the 2020 Madison Scholars, the Office of Sponsored Programs, and welcome remarks from Vice Provost for Research & Scholarship Anthony Tongen, Provost Heather Coltman, and the Noftsinger Family. We apologize to our external audience, as participation for this event is limited to JMU faculty and staff.

Health Professions Faculty Member Publishing Critical Athletic Training Research

John W. Goetschius, assistant professor of health professions, presented on the use of blood flow restriction (BFR) for lower-extremity rehabilitation at the virtual 2021 Virginia Athletic Trainers' Association (VATA) annual meeting in January. BFR is a rehabilitation training technique that involves the use of an inflatable cuff (similar to a blood pressure cuff) to alter blood flow to-and-from muscles during rehabilitation exercises. This technique has provided an opportunity for patients to achieve improvements in muscle strength while performing low-intensity exercises that cause less stress and pain to healing joints. Based on studies conducted with students at his former institution, Adrian College, he has co-authored two articles on this therapy model for the *Journal of Sport Rehabilitation*, most recently in February 2021.

College of Business Research Highlights

From COB Marketing and Communications:

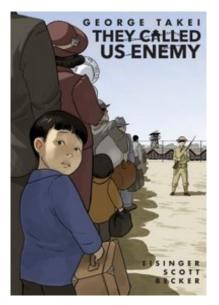
Congratulations to economics and international business professor Nevin Cavusoglu, who has just <u>published an article</u> in the *Journal of Macroeconomics*. The co-authored piece titled "Currency returns and downside risk: Debt, volatility and the gap from benchmark values" examines competing portfolio-balance specifications of currency returns including one based on expected utility theory and another on prospect theory. The empirical analysis uses survey data on exchange rate expectations to test directly the models' predictions concerning ex ante excess returns, and also relies on the cointegrated VAR

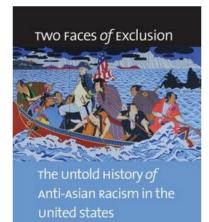
framework. The research shows little support for the expected utility theory model in three major currency markets, while the prospect theory model's predictions are largely borne out in the data. The authors find the strongest support for a hybrid model that incorporates the risk factors of both models.

Congratulations to management professor Sergiy Dmytriyev, who recently published an article in the *Journal of Management*. The co-authored piece is titled "Stakeholder Theory and the Resource-Based View of the Firm," and was supported by the College of Business through a summer research grant. The <u>article examines</u> the similarities between the resource-based view of the firm (RBV) and stakeholder theory. It sees RBV as in its current form as incomplete, and suggests there are four aspects that stakeholder theory can offer to inform RBV: normativity, sustainability, people and cooperation. It then offers a two-part guideline to management scholars and practitioners seeking to reconcile stakeholder theory and RBV.

Congratulations to School of Strategic Leadership Studies [faculty member] Adam Vanhove on his recent appointment to serve as associate editor for the *Journal of Managerial Psychology*. He has been reviewing for the journal for the past three to four years, and when the position at the journal came open, he was nominated by the current editorial team based on his strong track record as a high-quality reviewer. In advising Ph.D. students in SSLS, Adam has always taken a hands-on approach to developing their research skills, in part, through detailed and constructive feedback, so reviewing has been a constant part of his scholarly work over the past few years. This is one of a few different journals for which he frequently reviews articles.

Contextualizing Anti-Asian Racism -A Virtual Resource Display





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From JMU Libraries:

Members of our Libraries Council on Diversity, Equity, and Inclusion prepared this<u>virtual</u> <u>book display</u> in response to the tragic murders in Atlanta [on March 16th] and the recent increase in hateful acts against Asian Americans, Pacific Islanders, and Asian people in the US. [Contextualizing Anti-Asian Racism in the United States: Then and Now] includes digital media as well as print materials available from the JMU Libraries. Please use these resources to learn more about Asian American cultures, histories, and perseverance in the United States.

Industrial Hemp Research Featured on JMU Podcast

Well Dukes, a podcast from JMU's Office of Health Promotion & Well-Being, recently

<u>conducted an interview</u> with JMU faculty members and industrial hemp researchers Sam Morton (engineering) and Dan Downey (chemistry and biochemistry). Morton and Downey discussed the history of industrial hemp in the United States and Virginia; collaborative projects with agricultural partners focused on growing hemp using conventional farm practices; the various fiber, feed, and CBD products that can be produced from hemp; and current efforts to explore a sustainable hemp economy in the Shenandoah Valley. <u>Learn more about this initiative</u> at the JMU Industrial Hemp Research Program website.

Computer Science Teams Up with Virginia Tech on Graduate Education Opportunities

From CISE Marketing Communications:

This new partnership program enables JMU computer science students to apply early and <u>earn graduate credits in master's degree programs</u> based at the Virginia Tech Innovation Campus in Northern Virginia and the Blacksburg campus. The goal is to create a more robust graduate program with students equipped to become leaders in the field.

A key goal of this partnership is to address the state's Tech Talent Investment Program. JMU and other universities have committed to graduate approximately 31,000 new computer science graduates over 20 years to help fill a critical workforce need in Virginia.

"This new partnership is a wonderful opportunity for our JMU students," says Sharon Simmons, Computer Science Department Head. "They can complete their CS Bachelor of Science degree at JMU and transfer up to 12 hours of upper-level courses to VT's graduate program. Our students will be prepared to complete their 5th year at VT to earn a master's degree."



Stay up-to-date with faculty awards, grants, and publications from the College of Arts and Letters by following a <u>dedicated page</u> featuring the scholarly accomplishments of faculty representing the 10 departments and schools of the college. As stated on the website, "[CAL faculty] advance innovative solutions to the grand challenges of our time, from immigration and social justice to the place of poetic creativity and the challenges of living an ethical and meaningful life. We pursue cutting-edge research, inviting students to share in the process as a cornerstone of their undergraduate experience."

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