



## JMU Research, Scholarship & Creative Endeavors

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Volume 2, Issue 3

Greetings from the Shenandoah Valley!

As graduation season comes to a close, our congratulations to all of the Commonwealth's newly minted graduates, and in particular the 4,365 JMU students who received their diplomas earlier this month. We wish our latest class of alumni continued success and share a friendly reminder that learning is a lifelong activity.

In thinking about our intelligent, tenacious, and curious students, I would like to commend the work of the James Madison Undergraduate Research Journal (JMURJ). Re-launched in 2013, the student comprised editorial board seeks to, "promote, publish, and share the excellent research and scholarship by undergraduate students across James Madison University," and recently completed the fourth volume of the journal. Visit the [JMURJ website](#) to access student research on a diverse array of topics, including: high energy batteries, the effect of sleep deprivation on behavior, and the role of place when designing a bathhouse.

I would also like to recognize the JMU students who presented their research at the National Conference on Undergraduate Research (NCUR) and the Colonial Academic Alliance (CAA) Undergraduate Research Conference this past spring. JMU has supported student participation in these highly visible events since 1989 (NCUR) and 2003 (CAA). Our Facebook page hosts photo albums of JMU students in action during oral and poster presentation sessions: [CAA](#) and [NCUR](#). Student research experiences like these expose our students to real-world challenges, prepare them for an ever-evolving job market, and train students to think critically and be multi-dimensional problem solvers.

It may be summer, but campus shows no sign of slowing down!

Sincerely,

Yvonne Harris

Yvonne Harris, Ph.D.  
Vice Provost for Research & Scholarship



The 2017 JMU commencement ceremony at Bridgeforth Stadium

## Genomics and Bioinformatics Workshop - Register Now!



**2017 CGEMS Summer Training Workshop in Genomics & Bioinformatics for Beginners & Beyond**

- ❖ July 10-12, 2017
- ❖ On the campus of James Madison University
- ❖ Harrisonburg, VA

**SAVE THE DATE!**  
more info & free registration coming soon  
[@JMU\\_CGEMS](#)

*\*tentative schedule, subject to change*

**Day 1: CyVerse Genomics in Education Tools I**

- Genome Annotation
- DNA Barcoding

**Day 2: CyVerse Genomics in Education Tools II**

- Transcriptome Analysis
- Microbiome Analysis

**Day 3: Intro to CyVerse Tools and Services**

- Data upload, sharing, and management
- Data cleaning and quality control
- Cloud-based Data analysis and exploration



**\*Co-sponsored by:**



**4-VA**

Registration for the 2017 Workshop in Genomics & Bioinformatics is open [here](#)

For additional workshop details, please contact Dr. Ray Enke at [enker@jmu.edu](mailto:enker@jmu.edu)

**Chasing the Madison Vision:  
Serving the Community to  
Advance Health and Well-  
being**

The Institute for Innovations in Health and Human Services (IIHHS), housed in the College of Health and Behavioral Studies, coordinates innovative health outreach programs in the Harrisonburg community and beyond. JMU Research & Scholarship conducted an interview with IIHHS Coordinator of Children and Youth Services, Kim Hartzler-Weakley, to learn about the people and services that are impacting countless families' lives for the better. [Read more](#)



Kim Hartzler-Weakley and Sarah Hussein pose with then-First Lady Michelle Obama at a White House ceremony recognizing the Gus Bus

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## College of Education Professor Receives a \$286,000 Grant from the Virginia Department of Education



Dr. David Slykhuis

Dr. David Slykhuis, Professor in the Middle, Secondary, and Mathematics Education Department of the College of Education, received a \$286,000 grant to once again host four Content Teaching Academies: 1) Augmenting Science and Special Educator Teams- Teaching Inquiry Learning Together (ASSET-TILT), 2) Adapted Physical Education (APE), 3) Best Practices in Inclusion Education (BPI), and 4) Augmenting Mathematics and Special Educator Teams (AMSET). The Content Teaching Academy aims to improve the performance of teachers in the classroom through enhancing their content knowledge, improve their application of technology in the classroom and their ability to meet the needs of a diverse student population. [Read more](#)

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## JMU's Engineering Program Drives Undergraduate Achievement in Defense and Innovation





Darren Halford (right), executive director of Hacking for Defense, Inc., speaks with JMU senior Intelligence Analysis major Jack O'Neil at the H4D final presentations event

## **Undergrads shine in Hacking for Defense Class**

[Hacking for Defense](#), a class that provides students with experiences working on problems confronting the Department of Defense and U.S. Intelligence Community, was established at Stanford University in 2016. JMU was one of six additional schools to offer the course this spring, and is the only school where it was offered exclusively to undergraduates. Students presented their final projects at an event in X-Labs, the maker space in Lakeview Hall where the H4D classes were held. [Read more](#)

## **Engineering Department receives Curricular Innovation Award**

On March 23-25, representatives from the JMU Engineering Department took part in Open 2017, a conference held in the nation's capital to celebrate innovation and entrepreneurship in higher education. The event was hosted by VentureWell, an organization devoted to cultivating a nation-wide pipeline of inventors, innovators and entrepreneurs. For the past three years, JMU has been a part of the Pathways to Innovation Program, which was developed at Stanford University and continues to receive support from VentureWell. The program is designed to help universities adapt their undergraduate engineering programs to encourage students to pursue entrepreneurship and real-world innovation. At Open 2017, JMU was named the winner of the "Curricular Innovation Award," which recognized JMU's success in developing and implementing an innovative undergraduate engineering curriculum. [Read more](#)

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## **JMU Student Wins UVA Venture Competition**



Conner Feroce poses with Patrick McQuown, Director of JMU's Center for Entrepreneurship, at the UVA College Cup Competition

JMU senior Intelligence Analysis student Connor Feroce was recently awarded first place at the University of Virginia's College Cup venture competition, hosted by UVA's Galant Center for Entrepreneurship on April 15. Feroce received a \$6,000 prize and an invitation to compete in UVA's Galant Challenge on April 27. At the competition, Feroce pitched BeatGig, a startup he co-founded two years ago that provides musicians access to, and the ability to transact with, a global marketplace of buyers. [Read more](#)

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## JMU Hosts Second Annual TEDx Event



Freshman marketing major Raine Wilson addresses the crowd from the TEDx JMU stage



[TEDx JMU](#), a JMU hosted TED talk that launched last year, recently held its second set of talks, this time focusing on the theme "Horizons." The event's 100 attendees were chosen at random from a pool of students, faculty, alumni, and Harisonburg residents. The event was also live-streamed, with almost 2,000 viewers attending remotely. Five speakers were featured at the event, including two professors, two undergraduate JMU students, and the founder of a local nonprofit. [Read more](#)

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## JMU Biology Professor Uses Innovative Data Management Tool to Foster Research

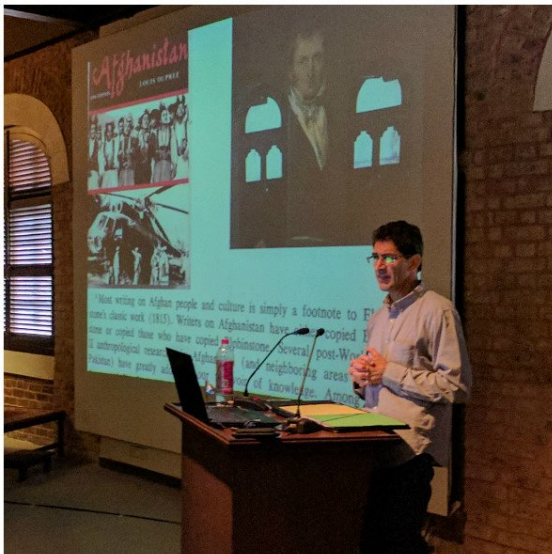
Assistant Professor of Biology Ray Enke was recently featured in an article released by CyVerse, an organization run by the National Science Foundation that aims to design, deploy and expand a nation-wide cyberinfrastructure to support research in the life sciences. Dr. Enke uses one of CyVerse's tools--a data storage, sharing and display program called the CyVerse Discovery Environment (DE)--in his undergraduate courses to help students collaborate on projects that require the analysis of large data sets. As a result of this work, Dr. Enke and his students were able to publish a [Scientific Data article](#) describing RNA-seq data generated and curated for retinal development in chickens. [Read more](#)



Dr. Enke in the lab with a student

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## JMU History Professor Helps Organize International Conference in Mumbai



Shah Mahmoud Hanifi speaks during the "A Knowing Power: Bourgeois Ideology and Colonial Surveillance" session at the Mountstuart Elphinstone International Conference

Held from April 20-22 at the Jnanpravahna Centre for Indian Aesthetics, Criticism & Theory, and Community Engagement in Mumbai, the "Monstuart Elphinstone International Conference II" convened scholars of South-Asian history from all over the world. JMU Professor of History Dr. Shah Mahmoud Hanifi served as Co-Chair of the event and was awarded a \$20,000 grant from the Carnegie Corporation of New York in support of the event. Over 50 scholars from at least seven different countries (U.S., Afghanistan, Pakistan, Nepal, Bangladesh, India and Sri Lanka) attended the event, which was designed to foster communication about colonialism and imperialism and their differential legacies throughout South Asia. "Knowledge formations do not correspond to political boundaries," explained Dr. Hanifi, "and therefore it is important to engage as many global perspectives as possible." [Read more](#)

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## Engaging Federal Policymakers and Agencies



## JMU on the Hill Reception

In partnership with the Political Science Department and Office of the President, Research & Scholarship hosted more than 100 alumni and students for a reception on Capitol Hill on May 16th. This annual event showcases JMU research programs; provides mentoring and networking for soon-to-be graduates studying Political Science, International Affairs and related fields; and offers an opportunity for our DC-area alumni to reconnect with friends and their alma mater. In addition to campus updates by President Alger and the Dean of the College of Health and Behavioral Studies, Dr. Sharon Lovell, Senator Tim Kaine dropped in to express his appreciation for the many JMU Dukes engaged in public service careers.

## Briefing Members of Congress and Staff



Virginia Representative Bob Goodlatte with Associate Dean of the College of Health and Behavioral Studies Dr. Rhonda M. Zingraff, Vice Provost for Research and Scholarship Dr. Yvonne Harris, and Director of Research Development & Promotion Mr. Ben Delp

The following day, a JMU contingent traveled to Capitol Hill to brief members of the Virginia Congressional Delegation and their staff on JMU federal priorities and capabilities. Some of the topics discussed included community engagement in the College of Health and Behavioral Studies (for ex., juvenile justice reform, traumatic brain injury, and healthcare for the homeless), JMU's emerging partnership with the Republic of Kosovo, the leadership role of the Center for Assessment & Research Studies in educational assessment, statewide cybersecurity engagement through the Virginia Cyber Range, the growth of the Valley Scholars Program, and the increased emphasis on incorporating entrepreneurship education across academic disciplines.

## Agency Visits

Following up campus visits in 2016 from the National Institutes of Health and Department of Energy, this past spring Research & Scholarship partnered with the Department of Physics & Astronomy to host a Defense Advanced Research Projects Agency (DARPA) program manager. The DARPA representative presented on funding opportunities and priorities at the agency that helped develop innovations like GPS, the Internet, and stealth aircraft. These talks are open to interested JMU faculty, students, and

administrators, as well as any faculty or students from neighboring institutions. If you would like to be placed on an email list for future events, please contact Ben Delp, [delpbt@jmu.edu](mailto:delpbt@jmu.edu)

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