

Previous Highlights Fall 2018

### NSHE AND NSF EPSCoR

## Marcie Jackson selected as Director of System Sponsored Programs and EPSCoR



We are happy to announce that earlier this summer Marcie Jackson was selected as the Director of System Sponsored Programs and EPSCoR. Ms. Jackson has been with SSPO/EPSCoR for over 7 years in the role of NSF EPSCoR Project Administrator.

Marcie Jackson joined the Nevada System of Higher Education System Sponsored Programs Office & EPSCoR in December 2011. As Director, she provides leadership for the pre-award and post-award administration of all grants and contracts, represents Nevada and NSHE to all EPSCoR program agencies and sponsors, and provides information and support systems to facilitate the acquisition of extramural funding for collaborative programs within the System.

She previously worked as NSF EPSCoR Project Administrator where she was responsible for the budget, finance, and cradle-to-grave grants management of Nevada's two Research Infrastructure Improvement (RII) awards, which totaled more than \$22 million in federal dollars and more than \$4 million in state dollars.

Ms. Jackson has more than 17 years of grant proposal development and grant administration experience and has a varied background in higher education, business, civil service, and non-profit management. She holds a Master of Public Administration degree from UNLV, and she is a member of the National Council of University Research Administrators and the Society of Research Administrators International. She served on the System Administration Faculty Senate from 2012-2018 and acted as Chair 2017-2018. She was a member-at-large on the NSF EPSCoR Project Administrator's Council for 2014-2017.

# Frederick C. Harris, Jr. selected as Nevada NSF EPSCoR Project Director

Nevada NSF EPSCOR announces the new Project Director, Dr. Frederick C. Harris, Jr. Following an internal statewide NSHE search, the Research Affairs Council along with Vice Chancellor Constance Brooks approved the appointment of Dr. Harris, who will take on the role of Project



Director while continuing his work at the University of Nevada, Reno, where he is a Professor in the Department of Computer Science and Engineering.

As the Project Director, Dr. Harris will lead the current National Science Foundation (NSF) Established Program to Stimulate Competitive Research (EPSCoR) Track-1 (NEXUS) project. In addition, he will serve as lead Principal Investigator (PI) on the new proposal that is under development for the next cycle of Track-1 (2020-2025) funding. The current Track-1 project began in June 2013, as a five-year cooperative agreement with an annual renewal process and has been extended through 2019. The total award is \$20 million with a state match requirement of \$4 million.

Dr. Harris has extensive experience with NSF EPSCoR. He has been part of three Track-1 projects and two Track-2 projects. His leadership positions in these projects have helped him understand the purpose and structure of the EPSCoR programs and enabled him to collaborate with researchers across the state and the western United States. He has also represented Nevada's Track-1 program at various national meetings and has been invited on multiple occasions to travel to Washington D.C. to present on his research and the state EPSCoR goals at NSF and the U.S. Senate. Dr. Harris has led collaborative research efforts throughout his career and looks forward to increasing this type of research across our state as the new NSF EPSCoR Project Director.

### NASA SPACE GRANT

## Monopolistic Behaviors in Unmanned Airspace by Dr. Scott Forer, University of Nevada, Reno

"During my graduate studies at the University of Nevada, Reno (UNR), under Dr. Yliniemi, I worked on a model enhancement to include more realistic unmanned airspace flight patterns for NASA's Unmanned Traffic Management (UTM) system. The current methods for modeling multiple subsystems of autonomous Unmanned Aerial Vehicles (UAVs) do not account for competitive markets."



#### Read more

# Risk Mapping Salt Mobilization and Mitigation Strategy Evaluation for Rangelands by Michael Founds, Desert Research Institute

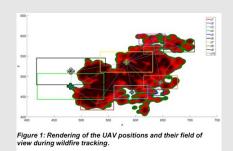


"Although rangeland covers the majority of the western United States, the impact of management practices on rangeland erosion is not well understood. Our team developed a risk mapping process to identify areas where disproportionate amounts of erosion occur within the Upper Colorado River Basin. Our approach leveraged NASA remote sensing and National Resource Inventory datasets to parameterize the Rangeland Hydrology and Erosion Model. The results predict erosion rates over large basins."

#### Read more

# Collaborative Control of Multiple UAVs for Wildfire Tracking and Monitoring by Hung M. La, Huy X. Pham, and David Feil-Seifer, University of Nevada, Reno

"According to the U.S. Forest Service, an annual average of 70,000 wildfires burn approximately 7 million acres of land and destroy more than 2,600 structures. Wildland firefighting is dangerous and a lack of information is one of the main causes of accidents. Unmanned aerial vehicles (UAVs) provide situational awareness of wildfire scenes because they can augment hazardous fire-tracking activities and significantly save operational costs."



#### Read more

# Multiple regulatory inputs control type three secretion in the bacterial pathogen Shigella flexneri by Joy Immak, University of Nevada, Las Vegas



"The goal of this project is to understand transcriptional regulation used by the bacterial pathogen, Shigella flexneri, to control the secretion of effector proteins via the type three secretion system (T3SS) needle. This analysis is important because many bacterial pathogens use the T3SS to inject effector proteins into a human host cell to cause disease... I hope that my findings can be used to develop novel therapeutics and/or a more effective live-attenuated S. flexneri vaccine."

#### Read more

### NASA AND NSF EPSCoR

# 2019 NV NASA Space Grant and NASA EPSCoR Statewide Meeting



The 2019 Nevada NASA Space Grant and NASA EPSCoR Statewide Meeting will be held in Reno, Nevada on Friday, April 26, 2019 (full day meeting).

More information will be available soon on the website.

### Request for Pre-Proposals for the Nevada NSF EPSCoR RII Track-1 Program

Nevada is eligible to submit a new proposal to the National Science Foundation (NSF)'s Established Program to Stimulate Competitive Research (EPSCoR) Research Infrastructure Improvement Track-1 (RII Track-1) in August 2019.

The award is expected to provide federal funding of \$20M total over five years, with \$15M dedicated to science, technology, engineering, and mathematics (STEM) research activities supported by NSF. The remaining \$5M in federal funds, along with a \$4M in required state match ("5+4"), will fund education, workforce development, communication, evaluation, sustainability, management and administration activities required by the RII Track-1 program.

NSF limits EPSCoR-eligible states to a single RII Track-1 proposal submission. Therefore, the Nevada System of Higher Education (NSHE) invited interested research teams to submit pre-proposals for evaluation by an external panel of reviewers. Based on the recommendations of the external review panel and the outside consulting firm, the NSHE Research Affairs Council will select, and the Nevada EPSCoR Advisory Committee will approve, the pre-proposal that will move forward for full proposal development.

If you have any questions or would like to share any highlights with the Nevada System Sponsored Programs and EPSCoR office, please contact Mayara Cueto-Diaz, Communications Specialist, at mcueto-diaz@nshe.nevada.edu.





epscorspo.nevada.edu | 702.522.7070 Nevada System of Higher Education 5550 W. Flamingo Road Ste. A-2, Las Vegas, NV 89103

STAY CONNECTED







