

### NEVADA RECEIVES NATIONAL SCIENCE FOUNDATION RESEARCH AWARD FOR \$20 MILLION



The Nevada System of Higher Education (NSHE) has been awarded \$20 million over a period of five years for the Harnessing the Data Revolution for Fire Science (HDRFS) project. This project is funded through the National Science Foundation Established Program to Stimulate Competitive Research (NSF EPSCoR); whose mission is to enhance research competitiveness of targeted jurisdictions (states, territories, commonwealth) by strengthening STEM capacity and capability.

The overarching goal of the RII Track-1: Harnessing the Data Revolution for Fire Science (HDRFS) project is to increase the capacity of Nevada for wildland fire research, education, and workforce development and to demonstrate this increased capacity through technology-enhanced fire science in the regionally important sagebrush ecosystem.

This system-wide partnership involves the three research institutions, the Desert Research Institute (DRI), the University of Nevada, Las Vegas (UNLV), and the University of Nevada, Reno (UNR). Further involvement includes faculty and students from NSHE undergraduate institutions.

“NSF continues to serve as an essential partner in supporting the critical work of the NSHE EPSCoR,” said NSHE Board of Regents Chair Cathy McAdoo. “As our region currently faces extreme fire and water challenges, we appreciate this investment in Fire Science research and workforce development; giving NSHE institutions (DRI, UNLV, UNR) more capacity to solve our most pressing environmental issues.”

This project will inform and improve land and fire management by providing scaling of fire effects and impacts from smaller to larger fires in four fire science areas: Ecology; Hydrology between fire events; Fire Processes; and Fire Emissions and their Atmospheric Aging during fire events. This will be achieved through strategic investments in expertise, facilities, Cyberinfrastructure Innovations, and Education and Workforce Development creating end-to-end pipelines for research and STEM advancements.

“This project will generate and harness large amounts of data from diverse sensor platforms to accurately model landscapes and wildland fires from plot to watershed scales,” said Frederick Harris, Nevada NSF EPSCoR Project Director. “We will study how fires impact the societal needs outlined in the Nevada Science and Technology Plan.”

In addition, NSHE researchers will study potential new areas of economic development for Nevada, emphasizing new opportunities for workforce development, diversity, hiring new faculty, and providing more scholarship opportunities for undergraduate and graduate students in STEM fields.

---

### CONGRATULATIONS DR. FREDERICK C. HARRIS, JR.

It gives us great pleasure to congratulate Dr. Frederick C. Harris, Jr., Nevada NSF EPSCoR Project Director, who was recently selected for the Foundation Professor award during the 2022 Honor the Best ceremony at the University of Nevada, Reno. The award is an annual stipend of \$5,000 for a three-year period to be used for professional endeavors.

Each winner’s name is inscribed on an engraved pillar with prior years’ winners in the University’s Honor Court. Nominees must have a record of excellence in their discipline as a teacher and scholar; national prominence in their field; a demonstrated record of service to the university; and a record of sustained achievement which gives full promise of continued achievement during the years of the award.



# NASA EPSCoR

## 2022 NV SPACE GRANT AND NV NASA EPSCoR STATEWIDE MEETING

The Nevada NASA Programs held a hybrid statewide meeting on April 29, 2022 at the Desert Research Institute's Las Vegas Campus. There were 50 attendees from across NSHE, including faculty with active NASA research project awards, as well as affiliates and advocates of the programs. As part of the meeting, 15 students provided research poster presentations and 9 faculty provided oral research presentations.

The keynote speaker, Dr. Matt Greenhouse, Integrated Science Instrument Module Project Scientist at NASA Goddard Space Flight Center, provided a talk about the James Webb Space Telescope. There was also a faculty workshop led by Mitch Krell, Deputy Program Manager, NASA EPSCoR and Space Grant, on writing successful proposals along with a student workshop on developing resumes and interviewing skills, led by UNLV's Career Services. (Photo credit: Michael Lujan)



# NSF EPSCoR

## YANAI AVILA AND HER TRANSFORMATION FROM MENTEE TO MENTOR

In today's fast-paced world, mentoring matters more than ever. Not only does it enable growth, learning, transformation, and accomplishment in education and research but greatly impacts the lives of those being mentored. This has been true for Yanai Avila, a student at the University of Nevada, Las Vegas and the current Program Manager for the Student Interactions with Science, Technology, Engineering, and Mathematics (SISTEM) program. The goal of this program is to increase awareness and excitement about the STEM disciplines through a diverse set of talks and activities led by STEM professionals.

Ms. Avila participated in SISTEM while she was a senior in high school. This opportunity made her realize that STEM careers are not restrictive, as many of the STEM professionals that presented had careers that overlapped with other subjects. She says, "because of this realization, I was more confident in the major that I chose since both computer science and electrical engineering interest me." In her current role, Ms. Avila is responsible for recruiting high school students to participate in SISTEM and serves as a mentor to these students. She says, "mentoring is much more than explaining things. People learn from experience, but when they do not have certain experiences, they can learn from the experiences of others. That is why I now like to talk to younger people about my academics, my major, college life, etc. as this is what mentees are most interested in hearing."



When asked what she finds most rewarding about being a mentor, Ms. Avila makes it clear that she enjoys when students ask her questions because it shows they are comfortable talking to her. She emphasizes, "when I was younger, I was usually too scared to ask people for help and I found people older than me or more experienced than me to be intimidating. When someone asks me a question, I like to think that I am doing a good job at fostering an environment where everyone can express their thoughts and interests." (Photo credit: Yanai Avila)



epscorspo.nevada.edu | 702.522.7070  
Nevada System of Higher Education  
4300 S. Maryland Parkway, Las Vegas, NV 89119