

\$1.25M NSF Grant Awarded to CEHS for Innovative Postdoctoral Training Program Focused on Access and Accessibility in STEM

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David Feldon, associate vice provost, and Shawn Whiteman, associate dean for research and innovation, at Utah State University

A \$1.25M grant from the National Science Foundation (NSF) has been awarded to David Feldon, associate vice provost of the school of graduate studies and professor of instructional technology and learning sciences, and Shawn Whiteman, associate dean for research and innovation, both in the Emma Eccles Jones College of Education and Human Services (CEHS) at Utah State University. The grant is a three-year project that introduces an innovative postdoctoral training program with the specified aim to transition three postdocs with interdisciplinary research expertise directly into tenure-line positions within the college.

“We are thrilled to have the opportunity to provide this innovative postdoctoral training program focused on access and accessibility in STEM to the college,” says Whiteman. “The training period will strategically provide fellows the opportunity to expand their scholarship, which they can then continue to develop and accelerate during their future faculty role.”

By definition, a postdoctoral appointment is a temporary, full-time research position that usually lasts between one and three years. However, postdoctoral positions have two purposes, explains Feldon. “On the one hand, postdocs

are there to be practicing scientists in their disciplines—to publish papers and build a reputation—on the other hand, they are also there to receive extended training.”

Both Feldon and Whiteman see significant limitations to the traditional postdoctoral model, so they designed the newly funded NSF program to address them. “The downside of the postdoctoral position is that it’s a temporary position,” Feldon explains. “If you get a one-year postdoc, your full focus is on the job for the first three months and then you’re also busy applying for the next job. The precarity is a downside of the postdoc.”

“Our approach is different,” continues Feldon. “We will bring in a cohort of three postdocs. If they meet their performance benchmarks over the two-year period, they will automatically be extended an offer for a tenured position. That’s how we remove precarity; they know that if they do well, they can stay. This means we can expect that they will be more productive in their research, and they will learn more from their training because they are able to be fully focused.”

The structure of the new postdoctoral position is also unique. The model includes a focus on interdisciplinary research with the theme of Access and Accessibility in STEM. “By design it is a very broad theme,” says Feldon. “We’re talking about access to STEM learning opportunities and access to STEM employment. It can really span anywhere from early childhood to entering the workforce. Accessibility has to do with making changes in such a way that people who wouldn’t otherwise have access can have it.”

The new postdocs will have opportunities to participate across departments in research that examines access and accessibility in STEM. “Every applicant will need to identify two different disciplinary areas that their work will fit into,” explains Feldon. “The first year they will work actively on two different projects that are housed in two different departments in CEHS, focusing on two different disciplines. They start with two different faculty mentors and ultimately transition to one. So, we’re looking for people who are interdisciplinary and whose work spans boundaries.”

Tenure-line faculty at USU are evaluated annually on three performance criteria: research, service, and teaching. Feldon and Whiteman added a fourth criterion, collegiality, to the performance review process. “If we are going to offer the security of having a tenure-line job,” explains Feldon, “it is really important to make sure we end up with somebody who is good to work with and values their relationships with their colleagues.”

Although this is an unusual approach to hiring, Feldon anticipates a lot of applicants because the career benefits are so enticing. “We’re casting a broad net,” he says. “The salary is competitive, and they are going to get a lot of proactive training on grant writing, teaching, and mentoring. The expectation is high input, high output.”

Feldon continues: “Our postdocs will also be able to work with data that has already been collected or is in the process of being collected, so they should be able to start publishing early. We want them attached to funded projects so they can immediately get involved in projects that are related to what they’re doing.”

Feldon sees the program as mutually beneficial for the new hires, the faculty they collaborate with, and the college at large. “We’ll set people up in a fair, well-resourced way with the best training, support, and opportunities so they can do their best work,” he says. “If they decide to stay, then we have a new colleague who is ready to hit the ground running.”

Additionally, the college will reap great benefits over the long-term. “Our goal is to seed the tenure-line faculty with people who have a very high level of training and have a demonstrated track record that is inherently interdisciplinary,” says Feldon. “CEHS could become a leader in many areas simply because we’re willing to put together job openings that seek people who are doing innovative research that draws together knowledge and insight from multiple fields.”