

\$2.4 Million Grant for USU to Track Students from Grad School to Labor Market | CEHS

06/22/2018



Dr. David Feldon, a professor in the Instructional Technology and Learning Sciences Department at Utah State University, was awarded over \$2.4 million from the National Science Foundation on June 1, 2018. The purpose of the grant is to study the factors that influence career trajectories of PhD students in the biological sciences. The grant will be used by Utah State University under the direction Dr. David Feldon in collaboration with Dr. Josipa Roksa from the University of Virginia, and Dr. Kimberly Griffin from the University of Maryland.

"It is always exciting when a grant proposal is funded," Dr. Feldon explained, "However, in this case, it was also very satisfying, because the award is a direct endorsement of the work we generated over the first four years of the study."

This research will add to previously longitudinal data collected. "This project is an extension of our earlier endeavor," said Dr. Roksa. "We started tracking over 300 biology Ph.D. students from the time they entered their Ph.D. programs in the fall of 2014 through the first four years of doctoral education."

The researchers will continue the study of 286 biology graduate students who began their PhD programs in 2014. Feldon, Roksa, and Griffin hope to uncover to what extent graduate research training and professional goals influence the success of these students as they transition into their postdoctoral work and early research careers. They will also examine how demographic data such as race and gender influence their career results.

According to the grant submission project summary, the "understanding of early career research trajectories in biological sciences [is] a critical but surprisingly understudied area." The researchers believe the impact of the study will be to "meaningfully inform—and perhaps reform—policies and practices for the preparation and retention of the future research workforce in the biological sciences."

"We don't know much about career development for graduate students generally, and scientist in particular," explained Dr. Griffin.

"For the first time, we will be able to follow trajectories of students from the start of graduate school into the labor market," Dr. Roksa emphasized.

"We wanted to shift our focus somewhat as students began to move into dissertation research and from there out into the workforce so that we could better understand the complex relationships between graduate training experiences, individual expertise, and career trajectories," Dr. Feldon said.

Dr. Roksa's work focuses on inequality in higher education. She said this research will help those involved understand how to "ensure that all students, regardless of race, gender, or family resources, can be successful in their pursuits."

Dr. Griffin work on the grant will focus on answering the "how's and why's behind the research questions." She explained those answers do not fully come from the numbers. "I am leading the qualitative portion of the study," Dr. Griffin said, "which adds texture and nuance to the work and our quantitative data analyses."

Dr. Roksa and Dr. Feldon worked together at the University of Virginia where Dr. Feldon worked prior to coming to Utah State. Dr. Griffin was asked to collaborate last year because of her expertise in postdoctoral and early career research transitions. "One day I got an email inviting me to have a conversation about their research," said Dr. Griffin. "I was hooked immediately!"

Dr. Feldon focuses on the development of research skills within STEM disciplines as a function of instruction and other educational support mechanisms. Late last year, Dr. Feldon's research from his previous research with Dr. Roksa [found that PhD bootcamps had no affect in promoting long-term success.](#)