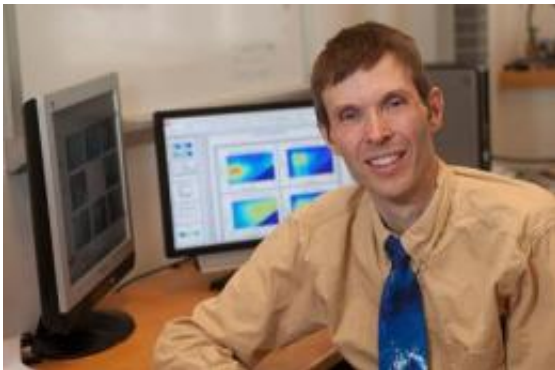


UD professor leads efforts to support science students with disabilities

April 27 2012



Karl Booksh is developing national initiatives to include more students with disabilities in STEM majors and careers. Credit: Ambre Alexander/University of Delaware

Karl Booksh points to data collected by the National Science Foundation (NSF) showing that Americans with disabilities make up some 10-15 percent of the population but account for less than 1 percent of those earning doctoral degrees in the sciences. Now, the UD professor of chemistry and biochemistry is exploring ways to change that.

Booksh, who recently was appointed to two committees of [science](#) organizations addressing disability issues, notes that educators nationally are seeking to expand the number of students in STEM (science, technology, engineering and mathematics) fields and to diversify that group. Initiatives have been developed to support and mentor members

of such underrepresented groups as women, African Americans, [Latinos](#) and first-generation college students, but those with [disabilities](#) often seem to be overlooked, he says.

"Of all the underrepresented minorities in science and engineering, students and professionals with disabilities are the only group where it's still common to hear people question whether they are capable of doing the work," Booksh says.

He has been named to the National Science Foundation Committee on Equal Opportunities in Science and Engineering and appointed chair of the American Chemical Society's (ACS) Chemists with Disabilities group. During his tenure with the ACS group, Booksh says, he hopes to oversee such initiatives as updating a book the committee produced some years ago for high schools and college undergraduate and graduate programs, *Teaching Chemistry to Students with Disabilities*, and possibly re-creating a series of short educational videos.

Booksh envisions the videos highlighting professional chemists with disabilities at work, he says: "Each segment would feature a chemist explaining, 'This is what I do. This is how I do my job. Here are the accommodations needed to enable me to do my job.'"

He also is exploring ways to develop specific programs to provide role models, mentoring and other support for students with disabilities. Such initiatives, he says, could include programs to offer research experience to undergraduates, improving their preparation for graduate school; to support students throughout their graduate studies, where attrition currently is a problem; and to help guide their transition from graduate school to the start of a career.

The first of these programs might be available at the University as early as this summer, Booksh says. He is working to bring 10 or 12

undergraduates from across the country to campus to get practical experience as research assistants working with UD professors. He says such groups as the American Association for the Advancement of Science, NSF and the National Institutes of Health have expressed interest in this type of program.

In general, Booksh says, [students](#) with disabilities may need [role models](#), mentors and sometimes physical accommodations in areas such as lab equipment, but he maintains that none of these challenges has to pose a serious problem.

His own career is a case in point. As a University of Alaska undergraduate planning a career as a high school chemistry or math teacher, he suffered a spinal cord injury while playing flag football and has used a wheelchair ever since.

With some accommodations from the university in living and transportation arrangements, he was able to finish his degree and move on to graduate school at the University of Washington. It was a complaint about handicap parking on that campus, he says, that first got him involved in advocating for more accessibility and inclusion for those with disabilities.

"People were very supportive of my goals," he says of his student years. "I was lucky, and I got the right start. That's what I'd like to see for others."

Provided by University of Delaware

Citation: UD professor leads efforts to support science students with disabilities (2012, April 27) retrieved 16 July 2024 from <https://phys.org/news/2012-04-ud-professor-efforts-science-students.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.