

# CEHS Professors Colby Tofel-Grehl and Stephanie Borrie Named Inaugural Dean's Scholars

10/01/2024



Inaugural Dean's Scholars recipients Colby Tofel-Grehl and Stephanie Borrie

Emma Eccles Jones College of Education and Human Services Endowed Dean Al Smith recently announced two inaugural Dean's Scholars. Colby Tofel-Grehl, associate professor in the School of Teacher Education and Leadership, and Stephanie Borrie, associate professor in the Communicative Disorders and Deaf Education, are the inaugural recipients.

"This honorific recognition is given to mid-career scholars who have shown particularly strong performance as well as an accelerating trajectory of growth and impact that will meaningfully strengthen the college," says Smith. "The recognition comes with a total financial distribution of \$45,000 that will be distributed over a three-year period. The funds are to be used in advancing the scholarly agenda of these outstanding mid-career scholars."

Tofel-Grehl's research focuses on identifying the affordances of various technologies for supporting young people's STEM identity and interest across rural spaces. She is currently principal investigator on four funded grants by the National Science Foundation to engage populations across Utah and Hawaii in community-centered curriculum and program development. However, as Tofel-Grehl notes, not every important piece of scholarship can receive external funding.

"Part of what is so wonderful about this fellowship is that I can spend time diving into more theoretical work to advance research in rural education," explains Tofel-

Grehl. "Our team is using the Dean's Scholar funding to advance a more inclusive definition of what it means to be a rural space and community. Currently, various government agencies use different benchmarks such as population density or proximity to medical centers to determine rural status. Having wide ranging definitions can make it hard for some communities to access resources. We are working to develop a definition of rural that goes beyond 'not urban.'"

By bringing together a wide range of public data sets into one superset, Tofel-Grehl hopes to use GIS software to map out models of different rural community profiles. "This type of work is difficult to get funded, but the field needs it desperately. So, the Dean's Scholar funding is critical to advancing the field."

She continues, "This funding will allow us to better identify the wide range of needs for students and teachers in rural communities." Her long-term research goal is to develop comprehensive profiles of rural communities that can inform the ways various services are provided to rural schools and communities.

Borrie focuses her research on finding ways to improve communication for people with speech disorders that result from neurological conditions such as Parkinson's disease, ALS, and multiple sclerosis. "Effective communication is a fundamental human right," Borrie says, "it allows people to interact and engage in so many life experiences. Unfortunately, neurological conditions can result in communication difficulties that can challenge someone's ability to fully participate in daily life."

She was awarded a five-year National Institutes of Health grant in 2023 to establish new treatment targets that would help people with Parkinson's disease participate more successfully in their everyday conversations.

In August, Borrie was awarded a second five-year grant from the National Institutes of Health entitled, "Listener training for improved intelligibility of people with Parkinson's disease." This second grant, a large-scale clinical trial, will allow for the development of a treatment program that directly trains communication partners (e.g., family, friends, caregivers) to better understand their loved one with a neurological speech disorder. The communication partner training can be completed remotely on a desk or laptop computer and will include an accessibility component for individuals who live in rural communities and might not have easy access to healthcare systems.

With the new training approach, many more participants will be available to be included in the study because they will be able to test the software from their home computer. "Health disparities are a huge issue for many families that live in rural communities and seek healthcare treatment options," explains Borrie. "The new grant, along with the Dean's Scholar funding, will help to provide more options for families and communities dealing with neurological conditions." Dean Smith views her work as "integral to our emerging initiative on health disparities and a model of scholarly excellence."

"The fellowship funding will allow the students in my lab to work on pilot projects. One pilot project is to extend training programs to help children and adolescents with neurological conditions such as cerebral palsy to experience better conversations," shares Borrie.

Currently, Borrie supports 11 student researchers in her lab, who range from post-docs to undergraduates. This research keeps Borrie busy, but she is passionate about helping people with speech disorders, and their communities, communicate more successfully with one another.

Dean Smith views Borrie and Tofel-Grehl as "amplifiers of collaboration, scholarly excellence, and impact. As such, we look to these highly successful mid-career scholars to shape the future of the College and their respective scholarly disciplines."