

# Biological Engineering Student Shares Research on Capitol Hill | College of Engineering

02/08/2021

Feb. 8, 2021 — USU undergraduate student Kelsey Bradshaw presented her research Feb. 2 as part of Utah's Research on Capitol Hill event.



*Kelsey Bradshaw was one of nine USU students and the only undergraduate from the College of Engineering to present at Utah's 2021 Research on Capitol Hill.*

A senior from Gorham, Maine, Bradshaw was one of nine USU students — and the only engineering student — selected to present at the Capitol event where student researchers share their work with state senators and representatives.

Bradshaw presented her research on age-related macular degeneration, which causes patients to lose their vision over time. Current treatment for the disease is limited to preserving the eye in its present state and is often administered after the disease has already progressed. Bradshaw developed a computational model to predict the extent and severity of the eye disease, enabling future work on improved diagnosis and intervention. This research was supported by a grant from the NIH National Eye Institute.

This year's presentations took place remotely, but the digital format did have its perks. "It's not just people walking by a poster, and you have 30 seconds to give them your elevator pitch," said Bradshaw. "It's somebody who's willing to sit down and listen to your whole spiel." Bradshaw presented alongside another USU student in a Zoom call with Sen. Kathleen Riebe, a member of the Senate Education Committee.

Bradshaw's interest in biological engineering began in a galaxy far, far away. "When I was a really little kid, I watched the 'Star Wars' movie where Luke Skywalker builds his own bionic arm. And I thought that was pretty much the coolest thing ever," said Bradshaw. "When I realized it wasn't real, I was like, 'that should be real.'"

For the past two years, Bradshaw has been making her dream a reality as a research assistant to Elizabeth Vargis, an associate professor of biological engineering who also manages several on-campus labs. The experience prompted her to continue her education in biomedical engineering with a focus in biocomputing. "I never really thought I would be into that. I just happened to fall into this research because that's what was available at the time I started, and I realized I liked it."

Bradshaw hopes other USU students take advantage of undergraduate research opportunities. "It gives you something other than school to do that feels like you're still progressing in your career path. I just think it's an amazing opportunity, and I'm glad Utah State has it."

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