Stephanie Knowlton

Student – University of Connecticut

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I would first like to thank the members of the Appropriations committee for the opportunity to share my experiences and thoughts on the proposed budget for the University of Connecticut.

My name is Stephanie Knowlton and I am a PhD student in biomedical engineering at UConn. I have been a long-time Connecticut Husky – I grew up in Tolland, graduated from UConn in 2015 with my bachelor's degree with honors, and then decided to stay at UConn to pursue a PhD. I now have an NSF graduate research fellowship and I am working on medical diagnostics with the goal of making diagnostics faster, cheaper, and more accessible and to, someday, positively impact healthcare in Connecticut and worldwide. UConn has given me invaluable opportunities, and I doubt I would be where I am today if not for the education and research programs there.

I first came to UConn because I was promised a quality education for a tuition that my family and I could afford. Not only did I learn the basic principles in science and engineering, but I soon came to find that there was world-class research going on in the laboratories right next to the classrooms. I was very fortunate for the opportunity to participate in research in the areas of cardiac and neural tissue engineering, high-resolution 3D printing for micron-scale fluid manipulation devices, bioprinting tissues to be used in drug discovery, and (most recently) developing accessible, on-site diagnostic tools for global health. Beyond my coursework, I learned about the engineering challenges facing our society today and how to approach these problems using the principles of science and engineering, working with a diverse and interdisciplinary team, and communicating my research in prestigious peer-reviewed journals and at international conferences. The opportunity to participate in such cutting-edge research has been invaluable to my educational experience at UConn. And all of this was only accessible to me through funding from the State of Connecticut: from my tuition scholarship to a summer fellowship to awards to travel and present my research. If the funding to Uconn is reduced this year, and reduced even more in the coming years, I fear that students following me will not be afforded the same opportunities as I have.

Another aspect of UConn which I would like to emphasize is the translation of technologies developed at the university into commercializable products. The way I see it, commercialization is the best way to bring the innovative ideas and technologies developed in research labs out to the real world, to a point where they can impact real people. Thanks to the mentors and programs at UConn, I gained an entrepreneurial perspective and learned how to transform the technology I was working on for on-site medical diagnostics into a product which I hope will one day change the way we carry out medical diagnostics. I have started a company called mBiotics with a professor at UConn and we are now working on technology development using a grant through the UConn Innovation and Entrepreneurship Consortium. Even though Connecticut is surrounded by two biotechnology hubs in Boston and New York, Connecticut has proven to be an entrepreneur-friendly home for our startup thanks to the many programs we have here.

I would strongly urge the members of the Appropriations Committee, before authorizing cuts to UConn's budget, to consider the impact of UConn on Connecticut's future by attracting top students, educating them to become top scientists and engineers, and, in this way, promoting economic growth right here in our state.