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FORT COLLINS TEEN AWARDED \$25,000 FOR DEVELOPING TECHNOLOGY TO REDUCE BACTERIA THAT CAUSES FOODBORNE ILLNESS

Alyssa Keirn to be Named a 2020 Davidson Fellow Scholarship Winner

Fort Collins, Colo. – The Davidson Fellows Scholarship Program has announced the 2020 scholarship winners. Among the honorees is 18-year-old Alyssa Keirn of Fort Collins. Keirn won a \$25,000 scholarship for her project, *Solar-Powered Ozone and UVC-Based Decontaminator*. She is one of only 20 students across the country to be recognized as a scholarship winner.

“I am honored to be a part of the Davidson Fellows’ community,” said Keirn. “I hope to use this opportunity to further my multidisciplinary research and interest in engineering.”

More than 420,000 people worldwide die annually from foodborne illnesses, and nearly 30 percent are children under the age of five. To combat this, Keirn designed, built, and tested a portable, solar powered device to decontaminate a variety of bacteria from foods and utensils in areas where access to easy cleaning methods or electricity is limited. The device is controlled by a single board Raspberry Pi computer and uses a combination of UVC light and ozone gas in a sealed, reflective aluminum chamber to kill bacteria. The device reduced various types of bacteria present on the surface of products such as potatoes, kale, eggs, and eating utensils by more than 99 percent.

Keirn will be attending Massachusetts Institute of Technology in the fall where she plans to study electrical engineering and computer science.

“We are proud to announce the 2020 Davidson Fellows Scholarship recipients and applaud them for their hard work and achievement in their fields of study,” said Bob Davidson, founder of the Davidson Institute. “By being awarded this recognition, these students have shown immense skill and work ethic, and they should be commended as they continue their educational and research journeys while continuing to work to solve some of the world’s most vexing problems.”

The 2020 Davidson Fellows will be honored during a digital reception on September 30, 2020.

The Davidson Fellows Scholarship program offers \$50,000, \$25,000 and \$10,000 college scholarships to students 18 or younger, who have completed significant projects that have the potential to benefit society in the fields of science, technology, engineering, mathematics, literature and music. The Davidson Fellows Scholarship has provided more than \$8.2 million in scholarship funds to 366 students since its inception in 2001, and has been named one of the most prestigious undergraduate scholarships by [*U.S. News & World Report*](#). It is a program of the Davidson Institute for Talent Development, a national nonprofit organization headquartered in Reno, Nev. that supports profoundly gifted youth.

About the Davidson Institute

Founded by Bob Davidson in 1999, the Davidson Institute for Talent Development recognizes, nurtures and supports profoundly intelligent young people, and provides opportunities for them to develop their talents to make a positive difference. The Institute offers support through a number of programs and services, including the Davidson Fellows Scholarship and the [Davidson Academy of Nevada](#). For more information about the 2020 Davidson Fellows, please visit www.DavidsonGifted.org/Fellows-Scholarship.

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High-resolution photos are available at www.DavidsonGifted.org/Fellows-Scholarship.