



## Canadian Rockies School Division

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### MEDIA RELEASE

## CCHS Synthetic Biology Team Wins 2nd Place in National Innovation Competition May 23, 2023

Canmore Collegiate High School's (CCHS) Synthetic Biology Team won second place, May 13, in the MindFuel Tech Futures Challenge, a national youth innovation competition focused on sustainability, taking home \$1,500 for their innovation in water testing technology.

The team of eight students was awarded the title of Runner-up Prototype in the Junior High/High School category for their innovation dubbed Project CRIT, a water testing kit that will help detect harmful toxins in water sources and allow municipalities to eradicate them quickly.

Project CRIT consists of a rapid portable test for cyanotoxins, typically found in freshwater bodies with algal blooms, using genetically engineered E. coli cells to produce a protein for toxin detection.

The group has been working on their project for the last year and a half, designing a circular loop of DNA, called a plasmid, using 3D printing and coding for the project, and building a case for the test complete with its own heating system.

"We've contacted stakeholders all over North America, including universities, Indigenous Knowledge Keepers, water test companies, and scientists at the Alberta Lake Management Society for feedback on Project CRIT," said the students.

"We hope Project CRIT can help clean up water systems and contribute to better ecosystems around the world."

The MindFuel Tech Futures Challenge engages and inspires youth to work collaboratively with friends or classmates on a sustainability challenge in their local or broader community. Using science, technology, design thinking, and mentorship support, teams will build tangible solutions to the problems identified, and showcase their projects for awards and prizes.

For more information, contact:

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