

Alberta and British Columbia Students are Inspired to Solve Global Issues through the Tech Futures Challenge

Four youth teams have received funding from MindFuel to solve issues affecting their communities

Calgary, AB - March 19, 2021 - Gene therapy of a fungus, a glucose biosensor for diabetic cats and Artificial Intelligence (AI) for metal fasteners are just some of the solutions Alberta and British Columbia youth have come up with to tackle real-world problems.

Through the Tech Futures Challenge, 13 teams of students from across Alberta and BC have spent the past five weeks thinking critically about problems facing their community or the world at large and developing a solution through STEM (science, technology, engineering and math) practices.



A snapshot of the project pitch presentation from Team ULethbridge iGEM explaining the effects of blue-green algae on Alberta's ecosystem.

Innovation is critical to the advancement of society, with breakthroughs and inventions continuously improving our quality of life. This important work also bolsters our Canadian economy, as industries and sectors grow and develop to create new opportunities for future careers.

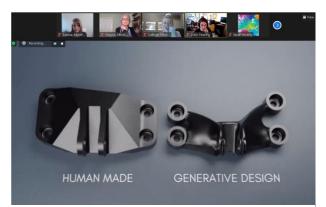
<u>MindFuel</u>, a pioneer nonprofit in online learning and STEM programming, launched the <u>Canada</u> Tech Futures (CTF) initiative as a

way for youth and young adults to develop innovative mindsets and STEM skills that will give them a head-start in their future learning and careers. Through CTF, the Tech Futures Challenge provides a platform for students to collaborate on a group project while receiving mentorship and the resources to potentially turn their ideas into reality. In a project showcase on March 13, the teams virtually presented their work in order to gain feedback from a panel of STEM mentors and subject matter experts, with four teams receiving funding through CTF to enter the next phase of the challenge and create prototypes of their projects.

• Best Pitch: Team Adventioneers

The four recipients include:

Beginner Teams



A comparison of metal fasteners Team Adventioneers are developing using AI to improve material usage and strength.

- (Canmore, AB) was awarded Best Pitch and \$2,000 in funding for their project that would develop AI to optimize material usage and strength in metal fasteners.
- Runner-Up: Team Renert High School (Calgary, AB) was awarded Runner-Up and \$1,500 in funding for their project to create a glucose biosensor for urinary testing in diabetic cats.

Advanced Teams

- Best Pitch: Team Oviita iGEM Calgary (Calgary, AB) was awarded Best Pitch and \$2,000 in funding for their project to develop a sustainable and community-based approach to alleviating Vitamin A deficiency by genetically modifying a form of fungus.
- Runner Up: ULethbridge iGEM Team (Lethbridge, AB) was awarded Runner Up and \$1,500 in funding for their project to genetically modify a bacteria to address the issue of blue-green algae in Southern Alberta and abroad.

"Congratulations to the 13 teams from Alberta and BC who passionately presented their innovative ideas for tackling complex real-world issues at our inaugural project showcase for the Tech Futures Challenge," said Cassy Weber, CEO of MindFuel. "Your ideas, developed by using the design-thinking process and cutting-edge science and technology, not only showcase your dedication to collaboration, innovation and community, but also sustainability both locally and globally."

Said one Grade 12 student about the competition, "MindFuel has definitely pushed my team to go beyond what is defined as conventional. I would recommend this challenge to anyone interested in the STEM fields."

MindFuel prioritizes innovation as key to Canada's economic prosperity and works to target underrepresented demographics in STEM fields to provide equal opportunity to students interested in a STEM career. Through CTF and its other programming, MindFuel aims to give youth the skills and tools they need to develop innovative mindsets and become critical thinkers.

The four winning teams have until March 22 to decide if they will continue to work with mentors to bring their projects to fruition, in order to present at the Prototype Showcase on May 29.

Youth interested in learning more about the Tech Future Challenges, or other opportunities provided by CTF can visit <u>mindfuel.ca/challenge</u>.

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About MindFuel

MindFuel is a registered charity, established in 1990, focused on creating future generations of innovators and problem-solvers. As a digital literacy and online learning pioneer, MindFuel is helping Canada diversify its economy through a focus on online STEM (science, technology, engineering and math) education resources and in-field learning. Recognized with many awards of excellence, MindFuel supports teachers with 21st century learning resources and helps immerse students in the fun world of STEM through blended learning, which includes both digital and hands-on activities, critical to advancing Canada's Innovation Agenda. MindFuel places a large emphasis on empowering girls, Indigenous youth and students in rural and remote regions to pursue studies and careers in STEM. In 2019-20, MindFuel programming reached hundreds of thousands of students across Canada in both French and English and is used in over 170 countries around the world.

For more information, please visit mindfuel.ca.

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