

For immediate release — Friday, June 22, 2018

High School Synthetic Biology Team Wins Six Medals for BioTreks Paper

Students from the Lethbridge High School iGEM team earn accolades and have their paper published in online journal.

The 2018 iGEM season continues to be a great success for members of the Lethbridge high school team. The team submitted a scientific paper outlining their synthetic biology project, as well as participated in an online conference.



“This was a great experience for the students,” says team mentor Sydnee Calhoun. “We are so proud of their progress and how much they have learned this year.”

For their efforts, the team received medals for problem solving, conference participation, scientific rigor, innovation, collaboration, and visual communications. Michelle Wu also received special recognition for her excellent participation in the BioTreks Conference on April 28. The paper can be found [here](#).

Taking a break from studying for exams, team members participated in a wet lab skills workshop June 16 and 17.

“I loved it! It was so much fun to get in the lab and learn all these new things,” says Mark Lea, a grade 11 student from Chinook High School.

The team was introduced to pipetting, transformations, PCR (polymerase chain reaction), restriction digestion and making competent cells – all techniques they will need for their project. They hope to create a more cost effective and energy efficient method of removing metal contaminants from effluent water and tailings ponds.

In order to complete their project, a significant amount of external funding is required. As this is an extracurricular activity, it is the team’s responsibility to cover all the operation costs – chemicals, equipment, competition and travel fees. To help offset

some of these costs, the team has set up a [gofundme campaign](#). All donations are welcome and will be acknowledged during the presentation at the iGEM Giant Jamboree in Boston. The team is made up of students from Winston Churchill High School, Lethbridge Collegiate Institute, Chinook High School and Catholic Central High School.

Follow the team's progress on social media: [@LethHS_iGEM](#) and [@lethbridgehsiGEM](#).

This news release is available online at [iGEM](#).

Contact(s):

Laura Keffer-Wilkes (kefferwilkesl@uleth.ca), 403-382-7121

Primary Investigator

ABOUT geekStarter:

geekStarter, a program started by Alberta Innovates in 2009, engages students in finding and solving authentic problems, and building solutions based in emerging Science, Technology, Engineering, and Mathematics (STEM) fields. The project-based learning experience culminates in inspiring community events and prestigious international competitions, where students share their research and innovations with other young scientists as well as with leaders in STEM. Through emphasis on multi-media presentations and networking, these events provide students with opportunities to celebrate their successes and build a community of peers across Alberta and the world.

ABOUT iGEM:

iGEM, the International Genetically Engineered Machine Competition, is the largest synthetic biology community and the premiere synthetic biology competition for both university and high school level students. iGEM inspires learning and innovation in synthetic biology through education, competition and by maintaining an open library of standard biological parts, the Registry of Standard Biological Parts.

Combining molecular biology techniques with engineering concepts, students work in interdisciplinary team to create novel biological systems. At the beginning of the competition season, each registered team is given a kit of 1000+ standard interchangeable parts called BioBricks from the Registry of Standard Biological Parts. Working at their own schools, teams use these parts and new parts of their own design to build, test, and characterize genetically engineered systems and operate them in living cells in an effort to address real-world issues. Along with submitting their newly created BioBricks to the Registry of Standard Biological Parts, teams are required to actively consider the safety implications of their work and document their projects on team wiki pages. At the end of the competition season, teams converge at the Jamboree event to showcase their research. Teams present their work through posters and oral presentations, and compete for prizes and awards, such as the coveted BioBrick trophy.

For more information about iGEM, visit their website http://igem.org/Main_Page.