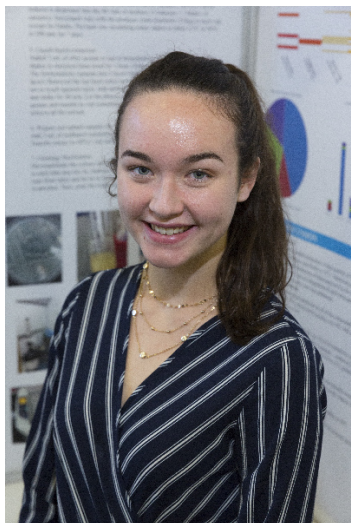


ESPC 2018 - Ottawa (Ontario)



Sophie MacDonald

Drug Discovery from Actinobacteria Using a Temperature/Culture Mimic Approach

Défi: Santé

Catégorie: Intermédiaire

Région: Prince Edward Island

Ville: Rice Point, PE

École: Bluefield High School

Sommaire: I tested a way to make bacteria produce different compounds and antibiotics by mimicking the bacteria's natural environment to increase its product production. When bacteria is grown in a lab, they do not produce as much natural product as they could. I grew my bacteria in two different temperatures and fed them heat killed cells of other bacteria to influence their production.

Biographie

Hello, my name is Sophie MacDonald. I am a grade 10 student from PEI at Bluefield High school. I have been a science fair participant for many years. I was inspired to do this project because I recently learned that humans are becoming resistant to many antibiotics. I fell into this category because the medication that I use to control my IBS started to have less of an effect. It made me wonder if there was a way to produce these antibiotics in a higher quantity and stronger concentration to help with this problem. I successfully found a way to do this by using a temperature variation and culture mimic approach on actinobacteria. I plan to continue my project and determine the uses of the compounds for antibiotics that I was able to produce. This project has lead me to want to peruse a career in medical sciences. I encourage all students to get involved in doing a project like this because it opens many doors for the future and it is a great learning experience.

Prix

Valeur

Prix d'excellence - Intermédiaire - Médaille d'argent Commanditaire: Sciences jeunesse Canada	
Bourse d'études de Western University Médaillé d'argent - Bourse d'admission de 2 000 \$ Commanditaire: Université Western	2 000,00 \$
Total	2 000,00 \$