

# CWSF 2013 - Lethbridge, Alberta



## Hailey Brake

### How are Microorganisms Useful to Humans?

**Challenge:** Discovery

**Category:** Junior

**Region:** Prince Edward Island

**City:** Charlottetown, PE

**School:** Queen Charlotte Intermediate School

**Abstract:** This project is about isolation of filamentous bacteria from soil and experimented how they are useful to humans. We isolated 10 bacteria and tested for bacterial killing activity and protease enzyme production. Four isolates were killing test bacteria, the chemical produced from this isolate can be further developed as an antibiotic. Few isolates were also found producing protease enzyme, can be used in detergent industries.

#### Biography

My name is Hailey Brake and I was born in Milton Ontario. I'm in grade 7 and I go to Queen Charlotte Intermediate School in Charlottetown Prince Edward Island. My favourite pastimes are reading, playing my clarinet in the school band and playing softball. Some of my achievements are learning to speak French, participating in a spelling bee and placing third and convincing my parents to get me a dog. My career plan is to study at the veterinary college on P.E.I and become a small animal vet. I love animals and I hope I can help them in the future. My project partner's father is a bio technologist and he gave the idea to us. With a little tweaking we soon made it our own unique project. I'd love to expand my project and develop an antibiotic or cleaning product to help people with their everyday needs. My advice to other students thinking of doing a project is to be absolutely certain the project you chose is the project you want to do because you are the one committing time to it. Give it your all and have high hopes for your project. That's what I did.

#### Awards

#### Value

Excellence Award - Junior - Bronze Medal Sponsor: Youth Science Canada	\$100
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 100