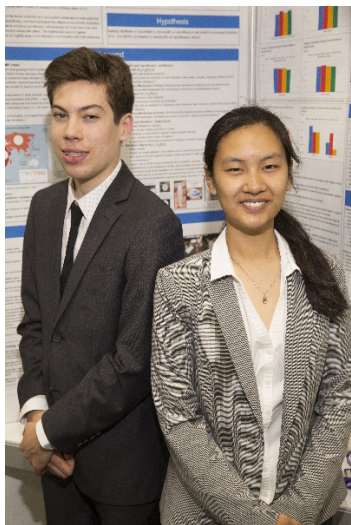


## CWSF 2019 - Fredericton, New Brunswick



### Heather Mislant, Gavin Howells

#### Antibiotics and Antioxidants: Allies in Combating Antibiotic Resistance

**Challenge:** Health

**Category:** Intermediate

**Region:** Yukon Stikine

**City:** Whitehorse, YT

**School:** Vanier Catholic Secondary

**Abstract:** Antibiotic resistance is a growing global concern. The purpose of this experiment was to determine if the antioxidants ascorbate and riboflavin can increase the inhibitory action of the antibiotics amoxicillin and ciprofloxacin. Results suggest that some of the tested antibiotic and antioxidant combinations have potential to treat infections more efficiently, and therefore, the capability to slow down the development of antibiotic resistance.

#### Biographies

Heather - Heather Anne Mislant, a 14 year old grade 9 student attending Vanier Catholic Secondary School in Whitehorse, Yukon. She's grateful to be among the chosen out of the territory to be a representative at the CWSF, and excited to be alongside her partner, Gavin, who also shares immense scientific interest. Both agreed on the project relating to antimicrobial resistance after exposure to scientific journals and articles emphasizing the threat it poses to society. Gavin and Heather finalized on the notion of increasing antibiotic efficiency through added antioxidants. It was hypothesized that antioxidants to antibiotic treatment would provide a re...

Gavin - Gavin Howells is a 15 year old high school student who attends Vanier Catholic Secondary School in Whitehorse, Yukon. His interests include science, music, soccer, mountain biking, tennis, golf and travelling. At last year's Canada Wide Science Fair (CWSF), Gavin was awarded a gold medal for his project that tested the effects of cell-phone radiation on yeast cells. He is honoured to have been chosen again to represent the Yukon at the CWSF. Gavin and his partner, Heather, became interested in the topic of antimicrobial resistance after reviewing various articles and reports describing the issue. They decided that they wanted to contribute ...

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