

# CWSF 2018 - Ottawa, Ontario



## Bryn Bain

### UV-C Light to Prevent Microbes from Taking Flight

**Challenge:** Health

**Category:** Junior

**Region:** Frontenac, Lennox & Addington

**City:** Kingston, ON

**School:** Calvin Park P.S.

**Abstract:** The effect of UV-C light application on the number of microorganisms in airport security screening bins was studied. Results indicate a significant microbial reduction with UV-C light application. The reduced microbial load in the bin may decrease the risk of microorganism transfer and potentially disease transfer to persons of contact. This could have an impact on the global spread of disease related to air travel.

#### Biography

I am a student in the Challenge program at Calvin Park Public School in Kingston, Ontario. I am enjoying the first of this two year program. Outside of school you will find me in the pool, five days a week. I am a competitive swimmer, qualifying for and attending provincial level competition. Currently I am preparing for my Grade 6 level Royal Conservatory examination in piano. This summer I will continue in my sailing endeavours, as I strive to complete my CanSail 5 certificate. At home I share in the duties on my family farm. We raise free range chickens and have been fortunate this season to see a great maple syrup yield. The inspiration for my science fair project came from a personal travel experience. Ideally, I would like to develop a practical UV-C sanitising device to be used on a commercial level. If you are thinking of participating in a science fair, and are looking for ideas for your project do not look very far. The best ideas are often right under your nose. Think of an everyday problem with a simple solution, that would benefit your community, be it local or global.

#### Awards

#### Value

Youth Can Innovate Awards - Junior Sponsor: The Gwyn Morgan and Patricia Trottier Foundation	\$500
Excellence Award - Junior - Silver Medal Sponsor: Youth Science Canada	
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
<b>Total</b>	<b>\$2 500</b>