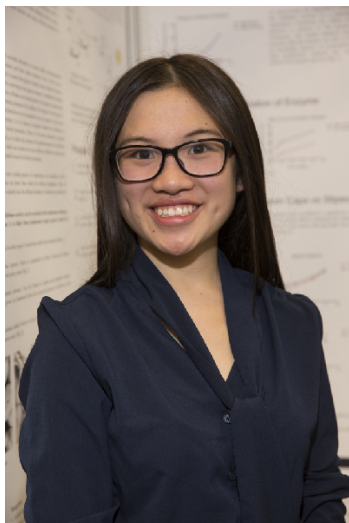


## CWSF 2016 - Montreal, Quebec



### Allison Cai

#### Influence of Habitat on Cellobiase Activity in Mushrooms

**Challenge:** Energy

**Category:** Intermediate

**Region:** Waterloo-Wellington

**City:** Guelph, ON

**School:** Centennial Collegiate & Vocational Institute

**Abstract:** Cellulosic ethanol is a biological fuel which can offer a more environmentally-friendly alternative to fossil fuels. However, this biofuel is disadvantageous as cellulose must be broken down in an inefficient process to create it. The purpose of this research was to evaluate the potential of using the cellobiase enzyme in mushrooms as a catalyst for cellulose degradation, presenting the possibility of more efficient biofuel production.

#### Biography

Allison is a grade 10 student studying at Centennial CVI in Guelph, Ontario. She thoroughly enjoys learning at school, and has received awards such as "Top Academic Student" and "Top Science Student". At a young age, Ally believed (and still believes) that "science holds the secrets of the universe". Needless to say, she is captivated by science and its endless possibilities. Aside from doing science fair, participating in Science Olympics, and being a part of Science Club, she is also extremely passionate about music and volunteering. Everyday Ally looks forward to playing piano, and plans to achieve her Grade 10 Royal Conservatory of Music certification this year. She also prides in being a trombonist in an orchestral ensemble and her school's Jazz Band. Ally takes pleasure in improving her school by being a member of Academic Council and Environmental Council. Her favourite part of the week is when she volunteers at the hospital. Nothing is more satisfying to Ally than seeing the smile of a patient. However, the hospital also exposes her to the struggles of many. It is because of this, that Ally's greatest aspiration is to channel her passion for science in a way which can help people.

#### Awards

#### Value

Australian National Youth Science Forum Award - Intermediate Sponsor: National Youth Science Forum Australia	\$1 000
Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$2 000</b>