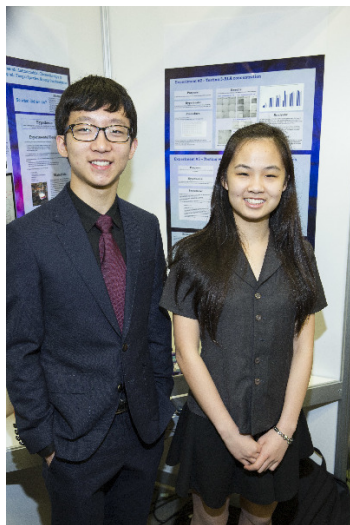


## CWSF 2014 - Windsor, Ontario



### Cindy Huang, Denny Choi

#### Photodynamic Antimicrobial Chemotherapy (PACT) for Eradicating Mould Pathogens

**Challenge:** Health

**Category:** Senior

**Region:** South Fraser

**City:** Surrey, BC, Surrey, BC

**School:** Semiahmoo Secondary, Fraser Heights Secondary

**Abstract:** Scientists find increasingly difficult to treat certain fungal infections with antibiotics and a better alternative is desired. This project looks at the effects of one of these alternatives, PACT, against the fungal species *Aspergillus fumigatus*. The fungi were cultivated in a 96-well plate and different variables in the PACT process were varied. The experimental results show the feasibility of PACT with regards to *A. fumigatus*.

#### Biographies

Cindy - My name is Cindy Huang. I like to meet new people and make others laugh. In my community, I volunteer and help out whenever possible. At school, I am one of the executives for Science Club, where we encourage people to love science. This science project was inspired by our biology class discussions on the rise of superbugs. The growing antibiotic-resistance scared us and we felt that it was important to find alternatives to antibiotics. After researching, we found PACT as a possible answer. We wanted to contribute to the scientific community so we felt really happy at being able to test PACT on *A. fumigatus*, which has never been tested with P...

Denny - Denny is a grade 11 student who is currently attending Fraser Heights Secondary. As an individual with the hope to make a difference in the community, he volunteers, leads organizations, and fervently learns about new science concepts. He truly wishes to share his passion for sciences and global issues with others. Yet, he still enjoys spending time playing musical instruments and listening to some "calm" music. Denny was inspired to start his project from doing background research with his partner, Cindy Huang. While flipping through articles about effects of photodynamic therapy, he and his partner came across the idea of expanding this...

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$100
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$2 100</b>