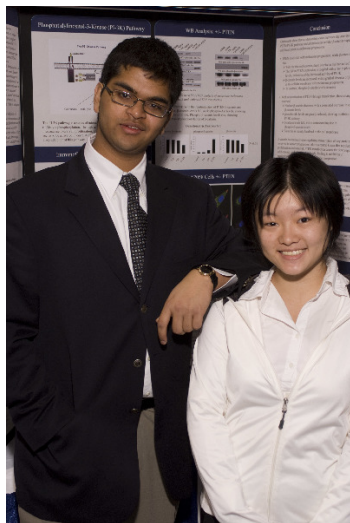


# CWSF 2010 - Peterborough, Ontario



## Xinran (Hannah) Yu, Amit Persad

### PTEN: Halting Progression of Metastatic Melanoma

**Division:** Earth & Environmental Sciences

**Category:** Senior

**Region:** Edmonton

**City:** Edmonton, AB

**School:** Old Scona School

**Abstract:**  $\beta$ -catenin, a multifunctional protein involved in cell-cell adhesion and transcription of harmful oncogenes, is deregulated in about 50% of melanomas. However, its regulatory pathway, Wnt, is abnormal in only about 5% of melanomas. PTEN, an important tumour suppressor and key inhibitor of the PI-3K pathway, is downregulated in melanoma. We reintroduced PTEN to metastatic melanoma cells to observe the effect on  $\beta$ -catenin expression and localization.

#### Biographies

Xinran (Hannah) - I am currently attending Old Scona High School and is currently in grade 10. At school, I have joined Unicef club so that I am able to help out with charity.

Along with Unicef, I am also in the OSA magazine club and has taken the position of one of the photographers. My biggest talent and hobby is playing the violin. I have been playing the instrument for 8 years and have won many certificates and scholarships from competitions. However, I desperately wish to learn piano. Due to a lack of time, that dream is unachievable.

Amit - My name is Amit Persad and I am a twelfth grade student attending Old Scona Academic High School in Edmonton, Alberta. I began attending Old Scona in the fall of 2007, immediately finding interest in the cell biology aspect of the biological sciences. My activities are by no means limited to academia; I participate in competitive swimming and volunteer regularly at the Stollery Children's Hospital. My adventures in cancer research began just last summer, where I was given a position as a summer project student working on the PTEN/Melanoma project. Some of the important figures to be used in the melanoma paper have been produced by myself. I wa...

#### Awards

#### Value

Dalhousie University Faculty of Science Entrance Scholarship Senior Gold Medallist - \$4000 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$4 000
UBC Science (Vancouver) Entrance Award Senior Gold Medallist - \$4000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$4 000
University of Ottawa Entrance Scholarship Senior Gold Medallist - \$20,000 Entrance Scholarship (\$5,000 each year for 4 years) Sponsor: University of Ottawa	\$20 000
The University of Western Ontario Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: University of Western Ontario	\$4 000
Gold Medal - Biotechnology & Pharmaceutical Sciences - Senior Sponsor: Youth Science Canada	\$1 500
<b>Total</b>	<b>\$33 500</b>

Youth Science Canada  
PO Box 297  
Pickering ON L1V 2R4  
www.youthscience.ca / info@youthscience.ca  
416-341-0040