



## CWSF 2012 - Charlottetown, Prince Edward Island



## Diana Bark, Neesha Persad

## **Pounding Cancer with PTEN**

Challenge: Health
Category: Senior
Region: Edmonton

City: Edmonton, AB, Edmonton, AB

**School:** Old Scona School, Lillian Osborne High School

**Abstract:** Increased levels of the oncoprotein, beta-catenin, promotes tumor cell

metastasis. In melanoma, PTEN, a tumour suppressor and negative regulator of the PI3K pathway, is inactive or lost. We have determined that the re-introduction of PTEN to metastatic melanoma cells decreased active beta-catenin levels, and reduced the migratory and invasive potential of these cells. This investigation elucidated the putative mechanisms

underlying metastatic melanoma.

## **Biographies**

Diana - I am from Korea and I attend Old Scona Academic High School. My two loves are biology and French. I first was introduced to the world of research through the Heritage Youth Researcher Summer program, and have also participated in the Gene Researcher for a Week program. I plan on continuing my research endeavours throughout my academic career, and would like to pursue an MD/PhD.

Neesha - Hi, my name is Neesha! I am currently in grade 11, attending Lillian Osborne High School where i am enrolled in the IB program. I am a person who enjoys playing the piano and I have a passion for swimming. I am a member of my school's swim team and have been in competitive swimming for the past 4 years. Last summer, I did research within the Persad laboratory, preforming very fascinating experiments, and this is where i got my inspiration to do this project. I really hope to continue doing summer research, as it is an excellent way to spend your summer, looking at research topics that interest you! It is truly engaging experience that I hope ...

Awards	Value
The Manning Innovation Achievement Award	\$500
Sponsor: Ernest C. Manning Awards Foundation	·
Excellence Award - Senior - Gold Medal	\$1 500
Sponsor: Youth Science Canada	
Dalhousie University Faculty of Science Entrance Scholarship	\$5 000
Senior Gold Medallist - \$5000 Entrance Scholarship	
Sponsor: Dalhousie University, Faculty of Science	
UBC Science (Vancouver) Entrance Award	\$4 000
Senior Gold Medallist - \$4000 Entrance Scholarship	
Sponsor: The University of British Columbia (Vancouver)	
University of Manitoba Entrance Scholarship	\$5 000
Senior Gold Medallist - \$5000 Entrance Scholarship	
Sponsor: University of Manitoba	
University of Ottawa Entrance Scholarship	\$4 000
Senior Gold Medallist - \$4,000 Entrance Scholarship	
Sponsor: University of Ottawa	
Western University Scholarship	\$4 000
Gold Medallist - \$4000 Entrance Scholarship	
Sponsor: Western University	
Total	\$24 000





