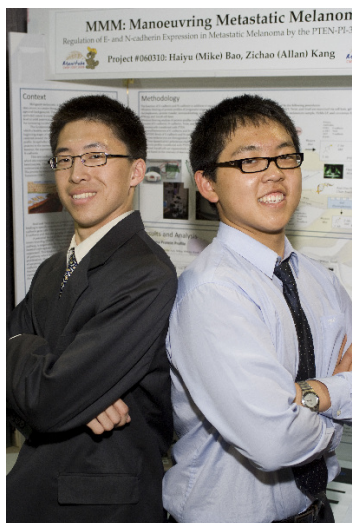


# CWSF 2009 - Winnipeg, Manitoba



## Mike Bao, Allan Kang

### MMM: Manoeuvring Metastatic Melanoma

**Division:** Physical & Mathematical Sciences / None

**Category:** Senior

**Region:** Edmonton

**City:** Edmonton, AB, edmonton, AB

**School:** Harry Ainlay School, Old Scona School

**Abstract:** In this project, the molecular mechanisms of melanoma were investigated. The cadherin protein profiles of various cell lines undergoing melanoma progression were established. The PTEN gene was found to regulate the cadherin profiles of melanocytes through the mechanisms of the PI-3K pathway and the transcriptional factors of Twist and Snail. The reintroduction of PTEN into cancer cells lead to a reversal of cancer properties.

### Biographies

**Mike** - My name is Haiyu and ever since I was capable of memory, I have loved science, biology in particular. In my current grade 12 year in Harry Ainlay High School, I have had the much appreciated opportunity to undertake my science fair project in the laboratory of Dr. Sujata Persad. Aside from my keen interest in science, I am also passionate in volunteering for the community, such as my prolonged dedication to the Good Samaritan Society senior home, my local community, and the Heart and Stroke Foundation. I am also firmly enthusiastic towards politics, as I extensively volunteered during the 2008 Canadian Federal Elections, and sports, where I h...

**Allan** - I have always been intrigued by science. At a young age, I entered various science fairs at the local and provincial level. Having grown up, I satisfy my craving for science by being consistently involved in skin cancer research at the University of Alberta. My research has yielded promising results, earning me the award for the best project in a medically related field as well as second overall in my category at the Edmonton Regional Science Fair. Apart from science, I volunteer at 3 different hospitals and run the community association in our region. I also enjoyed being apart of our school sports teams such as basketball, soccer, handball,...

### Awards

### Value

|  |                 |
|--|-----------------|
| The Manning Innovation Achievement Award<br>Sponsor: Ernest C. Manning Awards Foundation   | \$500           |
| Dalhousie University Faculty of Science Entrance Scholarship<br>Senior Gold Medallist - \$4000 Entrance Scholarship<br>Sponsor: Dalhousie University, Faculty of Science | \$4 000         |
| UBC Science (Vancouver) Entrance Award<br>Senior Gold Medallist - \$4000 Entrance Scholarship<br>Sponsor: The University of British Columbia (Vancouver)                 | \$4 000         |
| The University of Western Ontario Scholarship<br>Gold Medallist - \$2000 Entrance Scholarship<br>Sponsor: University of Western Ontario                                  | \$2 000         |
| University of Ottawa Entrance Scholarship<br>Senior Gold Medallist - \$20,000 Entrance Scholarship (\$5,000 each year for 4 years)<br>Sponsor: University of Ottawa      | \$20 000        |
| Gold Medal - Life Sciences - Senior<br>Sponsor: Pfizer Canada  | \$1 500         |
| <b>Total</b>   | <b>\$32 000</b> |