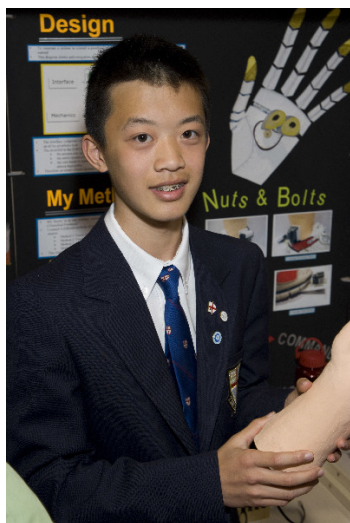


# CWSF 2008 - Ottawa, Ontario



## Alex Yang

### X-CoP 101 - "eXternal CoNtrolled Prosthesis"

**Division:** Health Sciences / Environmental Innovation

**Category:** Junior

**Region:** Greater Vancouver

**City:** Vancouver, BC

**School:** St George's School

**Abstract:** Robotic technology becomes essential with prosthetic limbs, aiding millions of amputees. My aim was to introduce another method of controlling prostheses. After innovating an interface utilizing external sensors, I compared it to the EMG system-currently the most advanced interface available. My system of control proved feasible and effective. This innovation could influence a wider field of biomechanics, aiding victims of various illnesses and accidents.

### Biography

"Expect nothing. Live frugally on surprises"-Alice Walker. I base this quote on every aspect of my daily life in order to succeed. My name is Alex and I'm in Grade 7 at St. George's School, one of the best private schools in Canada. It's a privilege to be the Head Boy of the Junior School, which keeps me busy every day. At school, I am involved in sports such as basketball, soccer, rugby, and track. One of my many notable achievements with the school team is a national basketball championship in Ottawa this past February. Extra-curricular activities I am involved in are Model UN, public speaking, fundraising, and many more. I created a group to help fundraise for Free The Children, an organization started by youths. I am a person that is interested in hands-on activities and am very keen to learn kinesthetically. Some of the many subjects I'm interested in are Chemistry and Math. I'm sure this national science fair will be a stunning experience for me.

### Awards

### Value

|   |                |
|---|----------------|
| The University of Western Ontario Scholarship<br>Silver Medallist - \$1500 Entrance Scholarship<br>Sponsor: University of Western Ontario | \$1 500        |
| Honourable Mention - Environmental Innovation - Junior<br>Sponsor: EnviroExpo, Presented by VIA Rail Canada                               | \$100          |
| Silver Medal - Engineering - Junior<br>Sponsor: Youth Science Foundation Canada   | \$700          |
| <b>Total</b>  | <b>\$2 300</b> |