

# CWSF 2011 - Toronto, Ontario



## Yasamin Mahjoub

### Protection against iron neurotoxicity

**Challenge:** Health

**Category:** Senior

**Region:** Calgary Youth

**City:** Calgary, AB

**School:** Sir Winston Churchill High School

**Abstract:** This project investigated neuroprotection by pregnancy-related hormones against iron neurotoxicity. Prolactin, estrogen and progesterone were found to protect neurons against the toxic effects of iron. These results can be used to develop neuroprotective treatments for MS, Alzheimer's and other neurodegenerative diseases.

#### Biography

I am a grade 11 student at Sir Winston Churchill High School. At the Calgary Youth Science Fair, my project won the UofC Biochemistry and Experimental Biology Award, the Calgary West Central Primary Care Network Healthy Living Senior Award and a CYSF Travel Award. I won first place at the Sanofi-Aventis BioTalent Challenge and will represent Calgary at the national competition. Working in the lab of my mentor, Dr. Wee Yong, at the University of Calgary has truly been an amazing experience! Apart from science, I am also involved in other extra-curricular activities. In 2007, I participated in the Natural Disasters Youth Summit in Aichi, Japan, in which I presented my group's earthquake awareness project. I enjoy music, and I play the flute in my school band, in which I am section leader. I also play piano and the Persian setar. At school, I have been part of the cross-country and swim teams, as well as robotics club and Reach for the Top. I enjoy spending time volunteering, including at an epilepsy summer camp and wheelchair tennis. My hobbies include reading, music, skiing, tennis, and travelling. In the future, I would like to pursue a career in biomedical research.

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	\$300
The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
<b>Total</b>	<b>\$2 300</b>