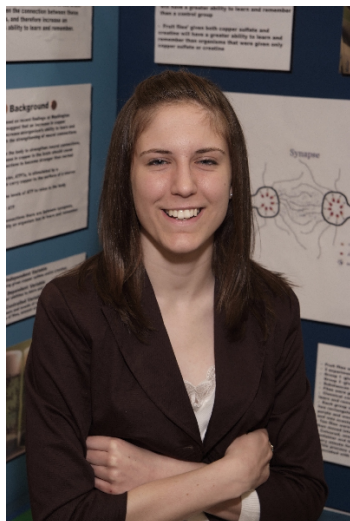


## CWSF 2007 - Truro, Nova Scotia



### Karleigh Turnbull

#### Copper or Coincidence?

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

**Category:** Senior

**Region:** Chignecto East

**City:** Pictou, NS

**School:** Pictou Academy-Dr. T. McCulloch School

**Abstract:** This project studied whether an increase in copper in the brain could improve an organism's ability to learn and remember. Fruit flies were the test specimen and classical conditioning was used to test memory and learning ability after increasing their copper intake. It was found that an increase in copper can strengthen an organism's ability to learn and remember.

#### Biography

I enjoy being involved in many activities in my community. At the Trenton Nazarene Church I am part of the Nazarene Youth International Atlantic Council, nominating committee, and youth group. I have also counselled at the Nazarene Church's summer camp for several years. At my school, Pictou Academy, I have been involved in the school band, Yearbook Committee, Spirit Committee, Math Society, and am co-chair of the Youth Health Committee. I play guitar, flute, sing in the Pictou District Honour Choir and am part of the Trenton Nazarene Church's youth worship band. I was chosen to attend Encounters With Canada, as well as a Science camp at Dalhousie University. In grade eleven I was awarded for having the second highest standing. I have also received many bronze, silver, and gold medals at the New Glasgow Music Festival. At the Chignecto-East Regional Science Fair I was awarded first place and best application of scientific method in the senior division. I have also received a \$1000 and \$12 000 scholarship to Saint Francis Xavier University. After high school I will be attending St FX in their school of nursing. Afterwards, I would like to work in a hospital in the Maritimes.

#### Awards

#### Value

Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 000
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
Silver Medal - Life Sciences - Senior Sponsor: Pfizer Canada	\$700
<b>Total</b>	<b>\$6 200</b>