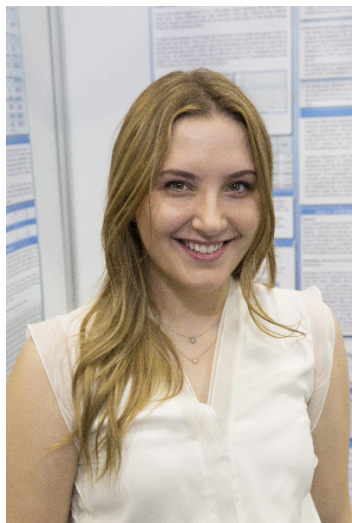


# CWSF 2019 - Fredericton, New Brunswick



## Crystal Radinski

### EEG Coherence as BioMarker for Alzheimer's Dementia

**Challenge:** Discovery

**Category:** Senior

**Region:** Calgary Youth

**City:** Calgary, AB

**School:** Rundle College Senior High School

**Abstract:** The human brain is a biological wide web made of neurons, brain cells that communicate using electricity. When connections between neurons break down, people could experience loss of memory, inability to think clearly and difficulty understand others. I used an EEG, a method to track the brain's electrical activity, to identify people at risk for brain diseases.

#### Biography

My name is Crystal Radinski and I am a grade 10 student attending Webber Academy in Calgary, Alberta. This year, I focused my attention on finding an EEG biomarker for Alzheimers Disease. My project was inspired by my awareness of the needs of the growing population of seniors in Canada. This is my second year attending CWSF but my fifth participating in science fair. Each year has been a fantastic experience as I meet people who have similar scientific drive yet different perspectives. Science fair is something I look forward to every year and urge others to join.

#### Awards

#### Value

|   |                |
|---|----------------|
| Ted Rogers Innovation Awards - All categories<br>Sponsor: Rogers Communications Inc.  | \$2 000        |
| Excellence Award - Senior - Bronze Medal<br>Sponsor: Youth Science Canada   |                |
| University of Ottawa Entrance Scholarship<br>Senior Bronze Medallist - \$1000 Entrance Scholarship<br>Sponsor: University of Ottawa | \$1 000        |
| Western University Scholarship<br>Bronze Medallist - \$1000 Entrance Scholarship<br>Sponsor: Western University                     | \$1 000        |
| <b>Total</b>  | <b>\$4 000</b> |