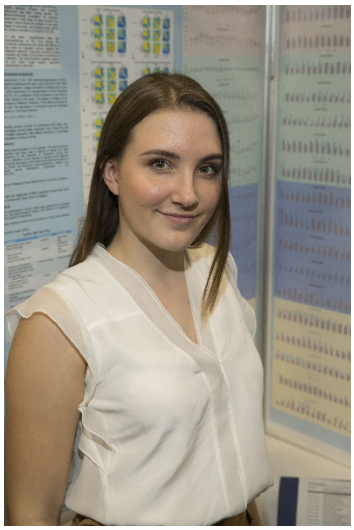
CWSF 2017 - Regina, Saskatchewan



Crystal K Radinski

EEG Coherence as a Marker for Alzheimer's Dementia

Challenge: Health
Category: Intermediate
Region: Calgary Youth
City: Calgary , AB
School: Webber Academy
Abstract: The study explores pathophysiology of dementia in order to develop an objective instrumental method for diagnosing Alzheimer's disease. If synaptic disconnection responsible for the failure of the brain to integrate various regions into effective networks, then the electroencephalographic evidence of the disruption of functional connectivity could be used to diagnose Alzheimer's dementia. EEG biomarker of neurodegenerative dementias was discovered and evaluated as a diagnostic method.

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
Statistical Society of Canada and Biostatistics Section Award Intermediate Sponsor: Statistical Society of Canada and Biostatistics Section	$750
Youth Can Innovate Awards - Intermediate Sponsor: The Gwyn Morgan and Patricia Trottier Foundation	$750
Challenge Award - Health - Intermediate Sponsor: AstraZeneca Canada	
Excellence Award - Intermediate - Gold Medal Sponsor: Youth Science Canada	$250
Western University Scholarship Gold Medallist - $4000 Entrance Scholarship Sponsor: Western University	$4 000
Platinum Award - Best Intermediate Project Sponsor: Youth Science Canada	$1 000
Total	$6 750