



CWSF 2016 - Montreal, Quebec



Biography

My name is Kayley Ting and I am a student at The Academy for Gifted Children- P.A.C.E. I have a passion for all areas of science and in particular, learning about disabilities and the ways in which we can overcome them. Throughout my high school career, I have had the opportunity to engage in my varying fields of interest including medicine, math and statistical analysis, and programming. I think the best part about applying science is that it gives us the ability to combine discoveries from different fields. Science experiments empower us to find a need in our world and be a part of its solution. In the development of my project, I studied autism and neurodevelopment disorders, I learned about circuits, and studied the way the sympathetic nervous system works. With further research, I hope to apply my findings towards the creation of a wearable device that could assist individuals with autism.

Kayley Ting

autism.

Analysis of Electrodermal Activity to Quantify Stress Levels in Autism

Challenge:	Health
Category:	Intermediate
Region:	York
City:	Richmond Hill, ON
School:	Academy for Gifted Children - P.A.C.E.
Abstract:	My objective is to establish a method by which skin resistance readings can serve as early warning signs of a sensory meltdown in autism. Through monitoring electrodermal activity, I hope to quantify the severity and degrees of stress indicative of sensory overload. These findings can be applied to the development of a wearable device to assist individuals with

Awards	Value
Challenge Award - Health - Intermediate	
Sponsor: AstraZeneca Canada	
Excellence Award - Intermediate - Gold Medal	
Sponsor: Youth Science Canada	
Western University Scholarship	\$4 000
Gold Medallist - \$4000 Entrance Scholarship	
Sponsor: Western University	
McGill University Entrance Scholarship	\$2 500
An Entrance Scholarship of \$2,500 is offered to each recipient of a	
platinum award.	
Sponsor: McGill University	
Platinum Award - Best Intermediate Project	\$1 000
Sponsor: Youth Science Canada	
Best Project Award	
Sponsor: Youth Science Canada	
Total	\$10 250



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