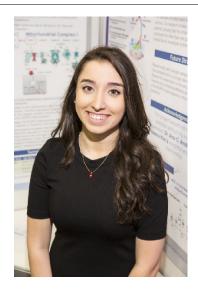




CWSF 2015 - Fredericton, New Brunswick



Nika Elmi

The Mystery of Bipolar Disorder

Challenge: Discovery
Category: Senior
Region: York

City: Maple, ON

School: Academy for Gifted Children - P.A.C.E.

Abstract: The purpose of this study was to quantify the NLRP3 inflammasome in

mitochondrial, cytoplasmic, and whole brain fractions of patients with bipolar disorder. Inflammation in the prefrontal cortex was examined as a downstream target of oxidative stress caused by mitochondrial ROS. Researching the activation of the NLRP3 inflammasome will not only help determine the cause of BD but will also eliminate the stigma behind it.

Biography

Nika Elmi is a grade 12 young scientist from Richmond Hill, Ontario, active in the world of neuroscience and psychiatry. She first began her research on bipolar disorder after a friend's psychiatric condition was criticized due to all the stigma around it. Nika researched this topic to not only better educate herself on what is causing bipolar disorder (and have her very own scientific foundations to defend the illness) but also to research a drug to treat the condition. Nika hopes to use science to eliminate the stigma around psychiatric illnesses for good, and she encourages everyone else to do the same.

Awards	Value
Weizmann Canada Award for Scientific Achievement - Senior	\$4 700
Sponsor: Weizmann Canada	
Excellence Award - Senior - Bronze Medal	
Sponsor: Youth Science Canada	
University of Ottawa Entrance Scholarship	\$1 000
Senior Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Ottawa	
Western University Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: Western University	
Total	\$6 700



