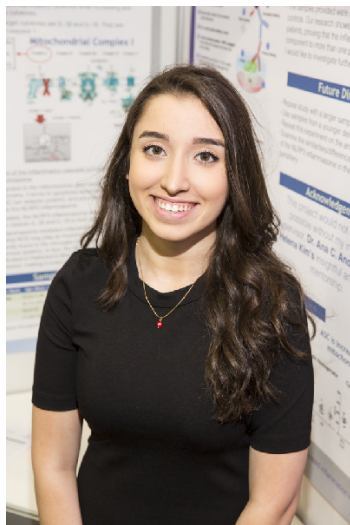


CWSF 2015 - Fredericton, New Brunswick



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