

CWSF 2017 - Regina, Saskatchewan



Caitlin Howard, Chloe Carriere

The effect of *Urtica dioica* on the Alzheimer profile in *Drosophila melanogaster*

Challenge: Health

Category: Senior

Region: North Bay

City: North Bay, ON

School: St. Joseph-Scollard Hall

Abstract: Abnormal function of the neuronal protein Tau is associated with Alzheimer's Disease, which can be modelled in *Drosophila* by driving human Tau expression within neurons. This study aimed to examine the ability of an extract of *Urtica dioica* (stinging nettle) to improve Alzheimer's-related phenotypes in this model system.

Biographies

Caitlin - My name is Caitlin Howard and I am from North Bay, Ontario. At school, I am the Student Trustee on our Student Administrative Council. I am in grade 12, and currently am deciding between schools for post secondary. The inspiration for this project sprung from our enjoyment of science, and my specific enjoyment for neuroscience. To further our investigation, we plan to draw more conclusions and do more tests on the locomotor function in *Drosophila*, and to introduce Tau proteins to learn more about other diseases such as MS. My advice for other students thinking about doing a project is to reach out for help from professionals to achieve the be...

Chloe - I'm a grade 12 student at St. Joseph-Scollard Hall, in North Bay, Ontario. I am the vice president of our Student Administrative Council, participate in mission trips to Costa Rica with the Duke of Edinburgh program, and have a strong passion for science. I love to spend my summers and spare time camping, canoeing, volunteering, and composing my own music on the piano. This September I will be attending The University of Ottawa to study political science and women's studies, and wish to eventually become a lawyer. I was inspired to do this project by my love for biology and an interest in the medical field, as well as my passion for making po...

Awards

Value

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	\$2 000