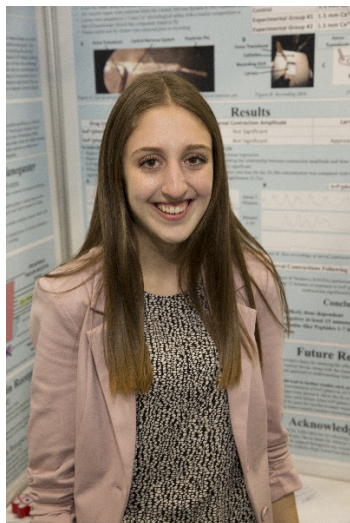


## CWSF 2019 - Fredericton, New Brunswick



### Zoe Gagnon

#### Activating Insulin Receptors in Fruit Fly Larvae Decreases Movement

**Challenge:** Discovery

**Category:** Senior

**Region:** Niagara

**City:** Port Colborne, ON

**School:** Lakeshore Catholic High School

**Abstract:** This project has observed the crawling behaviour of fruit fly larvae in order to study the way that chemical messages are sent in the brain. There are many human diseases that involve errors in the way these messages are sent. Developing a basic understanding of the way that these messages signal could help to develop treatments or cures for these diseases.

#### Biography

My name is Zoe Gagnon, and I am a grade 12 student from Port Colborne, Ontario. I was inspired to complete my project through my involvement in the Science Mentorship Program at Brock University. Throughout high school I have taken many opportunities to express my love and enthusiasm for science. I have volunteered weekly at my local hospital in the Dialysis and Extended Care Units. I have also held a job working as a Pharmacy Assistant. At my school, I have been a member of the environmental team and STEM tutoring program, as well as have given STEM presentations to younger students interested in science. In conjunction with my research, these experiences have allowed me to determine that pursuing a career in the healthcare field is the right choice for me. In the fall I will be attending university in a biological science program to allow me to apply to pharmacy school. Along with my love for science, I have spent time throughout high school playing on many basketball teams and helping to organize fundraising events at my school. If I were to offer advice, I would tell others to embrace their love for science.

#### Awards

#### Value

Excellence Award - Senior - Silver Medal Sponsor: Youth Science Canada	
Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2500 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 500
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
University of New Brunswick Canada-Wide Science Fair Scholarship Silver Medallist - \$2500 Entrance Scholarship Sponsor: University of New Brunswick	\$2 500
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Ottawa	\$2 000
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
<b>Total</b>	<b>\$11 000</b>