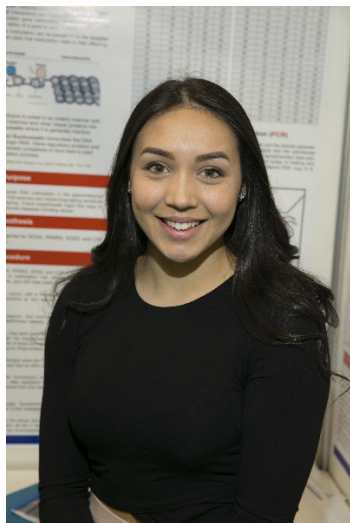


# CWSF 2017 - Regina, Saskatchewan



## Jessica Vaszily

### Epigenetics Has Exercise Knocking on its Door

**Challenge:** Health

**Category:** Senior

**Region:** South Shore

**City:** Bridgewater, NS

**School:** Park View Education Centre

**Abstract:** The objective of this experiment was to test if exercise can change gene expression through methylation. (When environmental activities, experiences, or habits can bind methyl groups to the DNA, decreasing the ability of a gene to receive signals to then express itself.) The 4 genes chosen: NOX4, SOD2, PPARG, and Catalase were targeted in DNA from the gastrointestinal system of involuntarily exercised and control mice.

#### Biography

My name is Jessica Vaszily, I am 18 years old, a grade 12 student at park View Education Centre. My project hoped to prove or disprove whether exercise can change gene expression through methylation. The inspiration for this project came from my love of healthy living. All my life I have played sports including soccer, basketball, volleyball, cross country, track and field, and badminton. I even coached young soccer teams from the ages 5-13 I have been religiously attending the local YMCA daily for workout and exercising, along the line competing in a bodybuilding bikini competition called the East Coast Classic. Recently in 2017 I took my personal trainer course because I want to spread my love of health and fitness to everyone. Obesity is a growing global issue and I want to help change that in any way I can through research or teaching, coaching or speaking. If you are interested or not in science fair I promise you will not regret it. There are so many opportunities that many of you don't realize are even out there. Many scholarships and bursaries and awards. Do something you love and everything else will fall into place. Good luck!

#### 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
<b>Total</b>	<b>\$2 000</b>