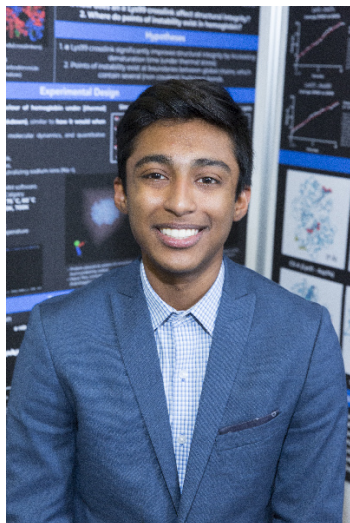


# CWSF 2018 - Ottawa, Ontario



## Faris Fizal

### Computationally Assessing the Structural Stability of HBOCs with MD Simulations

**Challenge:** Innovation

**Category:** Senior

**Region:** Calgary Youth

**City:** Calgary, AB

**School:** Westmount Charter School

**Abstract:** Now more than ever, there is a global need for human blood, however, most don't have access to it. Computational simulations are used to stabilize hemoglobin for use as an alternative to traditional blood transfusions. Four novel cross-linking targets have been discovered, which can be used to develop a safe, low-cost blood product for use in emergencies or in impoverished areas.

#### Biography

Hi! I'm Faris Fizal and I'm currently a grade 11 student at Westmount Charter School in Calgary, Alberta. My project this year advances an alternative to blood transfusions, which most of the world doesn't have access to, but desperately needs. This is my seventh year participating in science fair, and my third time attending CWSF ? each year I've had the opportunity to meet smart, driven peers from across the country and gain valuable skills and knowledge. I would definitely recommend science fair to anyone who loves to explore, learn, and innovate! Ultimately, science fair is about creating opportunities through learning, so anyone can do it!

#### Awards

#### Value

Excellence Award - Senior - Silver Medal Sponsor: Youth Science Canada	
Carleton University Entrance Award Senior Silver Medallist - \$2,000 Entrance Award Sponsor: Carleton University	\$2 000
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 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>\$10 500</b>