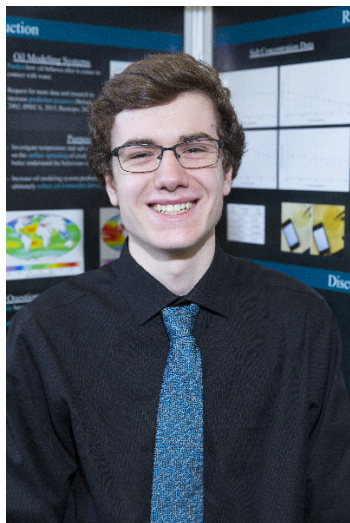


CWSF 2018 - Ottawa, Ontario



Jackson Weir

Experimental Analysis of Environmental Factors: Surface Spread of Oil on Water

Challenge: Environment

Category: Senior

Region: Fundy

City: Saint John, NB

School: St. Malachy's Memorial High School

Abstract: In response to the risk of oil spills, scientists have created computer programs that predict how oil will behave once it comes in contact with water. However, after reviewing the literature, a discrepancy was identified in the field. Data collected on spread rates warrants the addition of temperature into future prediction models. Its inclusion will help improve prediction accuracy and reduce environmental damage.

Biography

My name is Jackson Weir. I am a grade 12 student at St. Malachy's Memorial High School in Saint John, New Brunswick. The process of developing a research topic was definitely a difficult one. One day (as I was low on time choose a topic) I was cleaning the dishes at the kitchen sink after a greasy meal. I noticed the small droplets of oil in the water were behaving differently based on the water's temperature. This observation was sufficient to inspire further reading. After a review of the literature on oil spills and surface spreading, I identified a gap in the field and pursued the topic. In the future, I hope to continue research in other fields to deepen my understanding of how the world works. I plan to attend post-secondary next year in the sciences. After my undergraduate degree, I aspire to complete a masters degree and eventually either a PhD or an MD for research. Hopefully my professional work will bring new understanding to my field and ultimately benefit society. Outside of school, I enjoy playing volleyball and basketball, and I love salmon fishing. This summer I have been accepted to attend SHAD at Memorial.

Awards

Value

Excellence Award - Senior - Gold Medal Sponsor: Youth Science Canada	
Challenge Award - Environment - Senior Sponsor: Youth Science Canada	
Carleton University Entrance Award Senior Gold Medallist - \$4,000 Entrance Award Sponsor: Carleton University	\$4 000
Dalhousie University Faculty of Science Entrance Scholarship Senior Gold Medallist - \$5000 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$5 000
UBC Science (Vancouver) Entrance Award Senior Gold Medallist - \$4000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$4 000
University of Manitoba Entrance Scholarship Senior Gold Medallist - \$5000 Entrance Scholarship Sponsor: University of Manitoba	\$5 000
University of Ottawa Entrance Scholarship Senior Gold Medallist - \$4,000 Entrance Scholarship Sponsor: University of Ottawa	\$4 000
Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University	\$4 000
Total	\$26 000