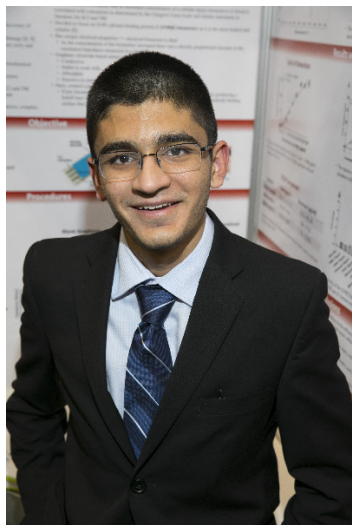


CWSF 2017 - Regina, Saskatchewan



Varun Kundra

A Novel Biosensor for the Detection of CNS Injuries

Challenge: Health

Category: Senior

Region: Calgary Youth

City: Calgary, AB

School: Webber Academy

Abstract: In this project, an electrode-based biosensor was developed to measure the concentration of the S100B protein which is correlated with central nervous system injuries such as concussion, spinal cord injury, and traumatic brain injury. The non-invasive, portable, and highly selective CNS injury biosensor will allow diagnosis by a finger-prick blood test within 30 minutes in under \$10.

Biography

Hi! My name is Varun Kundra and I am a Grade 11 student in Calgary. I am a strong proponent of applying science to create technologies that have tangible impacts on our daily lives and as such, I have an interest in the intersection between entrepreneurship and STEM. In particular, biotechnology is a field that has massive potential to improve and save millions of lives, which is why I decided to pursue it. My interests are not limited to biotech, however, as I enjoy participating in many mathematics and physics competitions and have an insatiable curiosity about why things are as we perceive them. Aside from academics, I enjoy reading books, playing badminton and table tennis, and watching movies with friends and family. For the last two years, I've had the pleasure of working at the University of Calgary and am grateful for the opportunity. I think the best part about science is being able to communicate ideas to like-minded, passionate people and am looking forward to doing that at CWSF 2017!