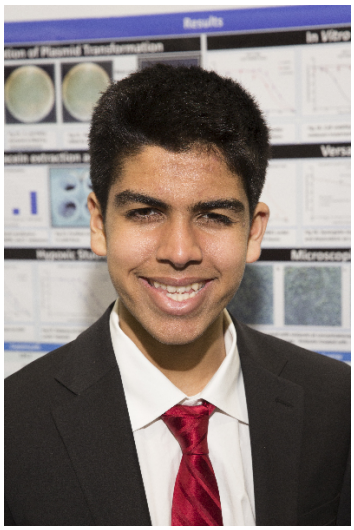
CWSF 2019 - Fredericton, New Brunswick



Harry Parmar

Synthetic Violacein: The Power of Designer Pharmaceuticals in the Real World

Challenge: Innovation
Category: Intermediate
Region: York
City: Thornhill, ON
School: Maple H.S.
Abstract: By transforming a biosynthetic cluster in the form of a plasmid containing the genes to produce the anti-cancer compound violacein to different heterologous hosts that are non-pathogenic and fast-growing, the optimal host that produces violacein inexpensively can be found. Using the tumour-colonizing strain Salmonella typhimurium to produce violacein, may suggest the power of a targeted drug delivery system of violacein, to a local tumour environment.

Biography

My name is Harry Parmar, and I am a grade 10 student at Maple High School. At school, I enjoy literacy and math. I also play on a basketball team in Thornhill, and I like playing the piano. Outside of school, I like discovering answers to questions that aren't usually asked. One topic that interested me the most was synthetic biology. By inserting new genetic code into a new organism to create desirable features, synthetic biology can help change the world. I was first introduced to the topic by a Ph.D. student at Ryerson University. In the future, I plan on conducting long-term studies of my project for new useful research. Some great advice I learned from my mentor, is never to give up. Even when you can't find the answer, continue to fail until you succeed.

Awards	Value
Excellence Award - Intermediate - Gold Medal Sponsor: Youth Science Canada	
Challenge Award - Innovation - Intermediate Sponsor: Youth Science Canada	
Western University Scholarship Gold Medallist - $4000 Entrance Scholarship Sponsor: Western University	$4 000
Total	$4 000