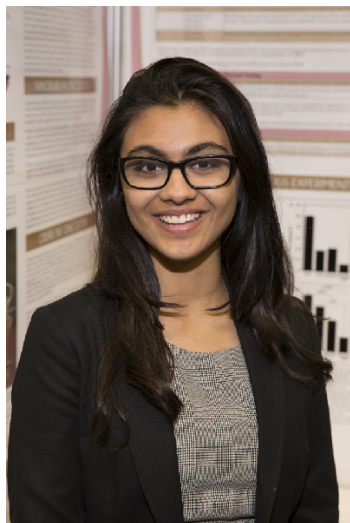


CWSF 2016 - Montreal, Quebec



Drishti Thakkar

Starving the Cancer

Challenge: Innovation

Category: Senior

Region: Peel

City: Mississauga, ON

School: Port Credit S.S.

Abstract: A two step treatment plan consists of nanoburrs with "drug-eluting core" of a transfection complex of a plasmid expressing Cas9 and gRNA silence gene p53 that causes drug resistance. Step two combines Paclitaxel and curcumin in the drug eluting core of a nanoburr coated with CDC 42 which efficiently targets the tumour while inhibiting tumour growth and reducing side-effects.

Biography

When the doctors said that my mother might have breast cancer, I felt scared, yet inspired to make my mark in cancer research so that more families don't feel the fear I felt. I wanted to make a difference in many lives, like my aunt does as a doctor. So, I set out on a journey to investigate how a spice they forced me to eat, turmeric and nanoburrs, can be used to improve the efficiency and targeting of chemotherapy. As a student wanting to pursue a career in medicine, I'm constantly fascinated by the miraculous functioning of the human body and often find myself hungry to learn more about it. To others thinking of doing a project, go for it. Find a topic that makes you hungry to learn, find your passion, and just do it! As I stand ready to enter university, I feel a rush of excitement to have the opportunity to engage in research in labs to test out my idea. Drishti, my name, means vision. And my vision is to conduct clinical trials with my treatment plan so that it can soothe families receiving bad news or even prevent them from receiving such news.

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
Total	\$2 000