

CWSF 2017 - Regina, Saskatchewan



Hareshan Suntharalingam

A New Vision For Diabetic Patients

Challenge: Health

Category: Intermediate

Region: York

City: Markham, ON

School: Markham District H.S.

Abstract: Diabetic retinopathy is one of the complications that results from chronic hyperglycaemia in diabetic patients and leads to vision loss. However, there is no effective treatment available to treat this condition. My project focuses on the development of a medicine and it involves the creation of biodegradable contact lenses specially designed to increase the efficacy of the administration of this medicine to treat retinopathy.

Biography

My name is Hareshan Suntharalingam and I am currently a grade 10 student at Markham District High School in the gifted program. My favourite subjects at school are math and science, particularly biology and chemistry in terms of science. I seek opportunities in STEM to apply the theoretical knowledge that I have acquired at school and also from my personal research in real life. In addition, I am interested in pursuing health sciences in the future and this is what sparked my curiosity into doing further research and analysing studies to create innovative solutions to medical conditions that don't have an effective treatment. This year my project was a study on diabetic retinopathy and developing an alternative form of treatment and my inspiration was my family because some of my family members have diabetes and are at risk of developing this condition. I was a participant in the York Regional Science and Technology Fair last year and I won a bronze medal. I also participated in several math competitions such as the Pascal and Cayley contests run by the University of Waterloo. My leisure activities would include reading non-fiction books, playing soccer, solving math problems/puzzles, and playing the piano.

Awards

Value

Excellence Award - Intermediate - Silver Medal Sponsor: Youth Science Canada	
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
Total	\$2 000