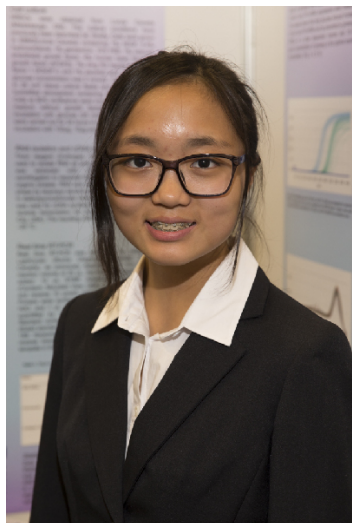


CWSF 2016 - Montreal, Quebec



Tori Chen

Sugar Science

Challenge: Health

Category: Junior

Region: Thames Valley

City: London, ON

School: Orchard Park P.S.

Abstract: Increased synthesis of extracellular matrix (ECM) proteins and capillary basement membrane thickening of the retina are features of Diabetic Retinopathy (DR). The present study investigated the effects of ginseng on glucose-induced ECM gene expressions in human retinal endothelial cells (HRECs). It was concluded that Collagen4 α 1 and Fibronectin mRNA up-regulation in HRECs were prevented by ginseng, which will help to develop future adjuvant therapies for DR.

Biography

Tori Chen is a grade 8 student studying at Orchard Park Public School in London, Ontario. Her hobbies include writing, reading, sketching, painting, and sports. She is heavily involved with music, as she plays flute and alto saxophone in the orchestra band at her school. Tori studies piano at the grade 9 level and has won many solo competitions. In terms of extracurricular activities, she has completed level 10 in swimming and takes part in volleyball and soccer teams during the summer. In 2014, she placed first in the Royal Canadian Legion Poster Competition in the junior division. In academics, she has placed first in her school for the math competitions Byron-Germain in grade 4, Fibonacci in grade 5, Pythagoras in grade 6 as well as the Gauss Mathematics Contest in grade 7. With great interest in medical science and microbiology, Tori wishes to pursue a career in medicine.

Awards

Value

Excellence Award - Junior - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 000

