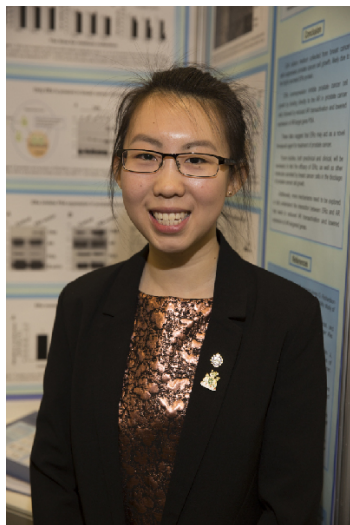


CWSF 2016 - Montreal, Quebec



Kelly Yang

Let Cancer Kill Cancer: A novel therapeutic strategy

Challenge: Health

Category: Senior

Region: Northwestern Ontario

City: Thunder Bay, ON

School: Sir Winston Churchill C.V.I.

Abstract: Although cancer is a prevalent issue, it is uncommon for two primary cancers to develop simultaneously, suggesting that one cancer may prevent the growth of another. In cancer cells, mutated genes secrete molecules that promote cell growth and migration. This experiment discovered that breast cancer cell excretions inhibit prostate cancer cell growth through a variety of molecular pathways, without adverse effects to normal cell viability.

Biography

As a grade 11 IB student attending Sir Winston Churchill high school in Thunder Bay Ontario, I am highly involved in the community around me. I recently represented my riding in the Legislative Assembly of Ontario's Model Parliament program, where I voiced my concerns for the future of my province. Additionally, I am involved with Student Council and I serve as the Marketing Chair for my chapter of Sustainable Youth Canada. As for extra curricular activities, I am a violinist in the Thunder Bay Symphony Youth Orchestra, I enjoy photography, playing soccer, snowboarding and running. In the future, I would like to pursue a career in medicine or business. Surprisingly, the initial inspiration for my project came from a history assignment. In writing a historical investigation on Frederick Banting and the discovery of insulin, I became intrigued with the concept of cellular excretions. This led me to my current project: investigating the effects of cancer cell excretions. In further investigations, I hope to delve deeper into the mechanisms behind my findings, and perhaps eventually move to in vivo testing. To other students thinking about doing a project, my only advice is to start early and be prepared for the unexpected.

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