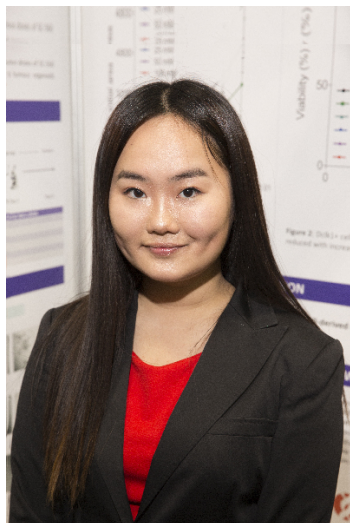


# CWSF 2019 - Fredericton, New Brunswick



## Sarah Chun

### Effect of COX-1 Inhibition on Tumour Organoids Using SC-560

**Challenge:** Health

**Category:** Senior

**Region:** Thames Valley

**City:** London, ON

**School:** Central S.S.

**Abstract:** Cyclooxygenase (COX) is an enzyme that is responsible for formation of prostanoids. Some non-steroidal anti-inflammatory drugs (NSAIDs) have been shown to inhibit the growth of colon cancer cell lines. SC-560, an NSAID that selectively inhibits the COX-1 enzyme, is not currently used in humans. By testing SC-560 in-vitro, it will allow us to determine efficacy for potential use as treatment for patients with colitis-associated cancer.

#### Biography

Sarah Chun is a grade 11 student at London Central Secondary School in London, Ontario. In the 2018-2019 school year, she will work as a student trustee at the Thames Valley District School Board, representing 77,000 students across 160 schools. At the OSTA-AECO, she is proud to be serving as the Administration Coordinator of the Executive Council, representing the 2.1 million students in Ontario's public and catholic school boards. In her community, Sarah co-founded Girls in TE, a nonprofit organization that empowers young women to pursue careers in technology and engineering. For her work at Girls in TE, she was awarded the Stanford She++ fellowship and recognized by the Ascena Retail Group as a HerLead fellow. Sarah also researched artificial intelligence at Stanford University, creating a computer vision algorithm capable of detecting poverty in Uganda as a part of the Stanford Artificial Intelligence Laboratory Outreach Research summer program. At her school, she is the president of Central Eco Club, a trainer at DECA and a member of Science Olympics. Additionally, she has been playing the violin for over 12 years and has competed both provincially and nationally. Currently, she is the principal 2nd violinist of the London Youth Symphony.

#### Awards

#### Value

Excellence Award - Senior - Silver Medal Sponsor: Youth Science Canada	
Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2500 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 500
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
University of New Brunswick Canada-Wide Science Fair Scholarship Silver Medallist - \$2500 Entrance Scholarship Sponsor: University of New Brunswick	\$2 500
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Ottawa	\$2 000
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
<b>Total</b>	<b>\$11 000</b>

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