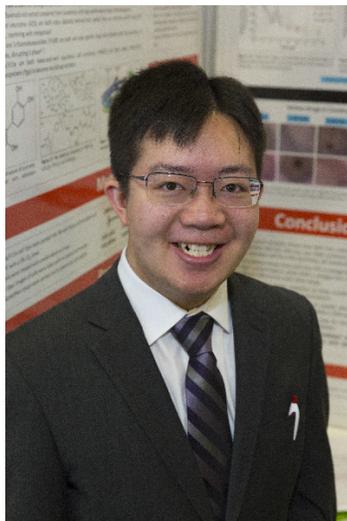


# CWSF 2018 - Ottawa, Ontario



## David Wu

### The Efficacy of Cancer Chemotherapy Combinations with Cranberry Extract

**Challenge:** Health

**Category:** Senior

**Region:** Thames Valley

**City:** London, ON

**School:** Central S.S.

**Abstract:** The study explores the potential of cranberry flavonoids in cancer chemotherapy through the efficacy of combination testing with anticancer drugs. Current understanding of flavonoid drug interactions and mechanisms is limited, so this study aimed to tackle these problems. Candidate drug combinations with cranberry extract and the effects of drug resistance on these combinations were identified, while mechanisms of action were proposed for future study.

#### Biography

My name is David Wu, and I am a Grade 11 at London Central S.S. in London, ON. Though I was born in Taipei, Taiwan, I've lived in Canada ever since I was one. I have a wide range of interests and participate in a variety of extracurricular activities. I lead my school's chess club and Science Olympics team, and I am part of my school's DECA team, senior concert band, and senior jazz band as well. I've also had great success with mathematics, where I've been invited to the Lloyd Auckland Invitational Mathematics Workshop in Waterloo thanks to my outstanding score on the Fermat contest. Inspired by the promising results of my research from last year, my project this year studies the potential of cranberry flavonoids in cancer chemotherapy from a more practical perspective than current literature offers by combining it with various anticancer drugs. This will be my 5th Canada-Wide and 7th science fair overall. My advice to others thinking of attending the science is to find something you are really interested in and look for a research question there. Design a rigorous experiment protocol and be confident in your material!

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	
Carleton University Entrance Award Senior Bronze Medallist - \$1,000 Entrance Award Sponsor: Carleton University	\$1 000
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
<b>Total</b>	<b>\$3 000</b>