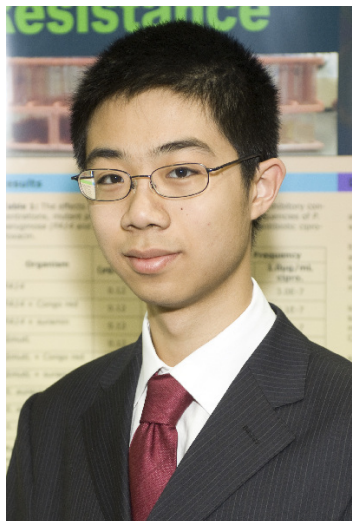


## CWSF 2009 - Winnipeg, Manitoba



### Forson Chan

#### Suramin, Congo Red, and Antibiotic Resistance

**Division:** Biotechnology / None  
**Category:** Senior  
**Region:** Greater Vancouver  
**City:** Vancouver, BC  
**School:** St George's School  
**Abstract:** Suramin and Congo red have been found to inhibit a protein involved in SOS response, which may prevent mutations conferring antibiotic resistance from developing in bacteria. Bacteria were grown at various concentrations of the antibiotic ciprofloxacin, suramin, and Congo red. Minimum inhibitory concentrations and mutant prevention concentrations were unchanged, but suramin decreased mutation frequencies and thus may improve the efficacy of antibiotics in combination therapy.

#### Biography

My name is Forson Chan and I'm in grade 12 at St. George's School. Science is my greatest passion; I love writing physics, chemistry, and mathematics competitions. I am also involved with debating and Model United Nations; I have been recognized with Outstanding Delegate awards and was director of the World Health Organization at VMUN 2009. I am a writer for the school yearbook and an editor for the school arts publication The Opus. I regularly volunteer with St. John Ambulance and Children's Hospital, and I am the manager of my school theatre's Box Office. I currently have a job teaching chess classes. My hobby is piano performance. I have played the piano for over ten years, and earned my ARCT and DipLCM piano diplomas from the Royal Conservatory of Music and the London College of Music, respectively. I am a technology junkie and spend my free time searching for the latest and greatest cellphones, laptops, and cameras. I plan to study science in university next year. Aside from my Canada-wide Science Fair project 'Suramin, Congo Red, and Antibiotic Resistance,' I am also working on an original research study that investigates the relationship between sleep, caffeine, and examination performance.

#### Awards

#### Value

Petro-Canada Peer Innovation Award - Senior - Western Canada Sponsor: Petro-Canada	\$200
Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 000
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$3000 Entrance Scholarship Sponsor: University of Ottawa	\$3 000
Silver Medal - Biotechnology & Pharmaceutical Sciences - Senior Sponsor: Youth Science Canada	\$700
<b>Total</b>	<b>\$9 400</b>