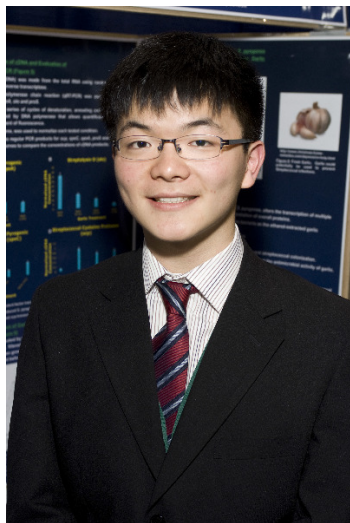


CWSF 2010 - Peterborough, Ontario



Tony Kwon

Allium sativum as a Potential Antimicrobial against Group A Streptococcal Infect

Division: International

Category: Senior

Region: London District

City: London, ON

School: A.B. Lucas S.S.

Abstract: This project investigated if a natural product, such as garlic, could be used to prevent or treat Group A Streptococcal infections. It discovered that garlic extract inhibits the growth of *S. pyogenes*, alters the transcription of multiple streptococcal virulence factors and affects the translation of overall proteins. These positive results support the potential of fresh garlic as an economical antimicrobial in especially third world countries.

Biography

I am a grade 12 student in London, Ontario, Canada who attends A.B. Lucas Secondary School. I am currently a string bassist in Lucas Concert Band and a representative of the school music council. To further pursue my interest in music, I have played in a monthly concert at the residential home ever since I was in grade seven. Also, I am in the school badminton team as a men-singles player. My hobbies and interests include scientific experiments, music, and sports. My interest in science (especially Biology) has been channeled through science fair. It has been a wonderful learning opportunity, providing me with academic knowledge, laboratory experience, and presentation skills. In order to promote the benefits of participating in a science fair, I have joined SMARTS, founded a science club at my school, and gave presentations at the local public schools. Thanks to the wonderful experience I had through the local university lab, I hope to become a microbiologist when I grow up.

Awards

Value

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
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$3000 Entrance Scholarship Sponsor: University of Ottawa	\$3 000
The University of Western Ontario Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Western Ontario	\$2 000
Silver Medal - Health Sciences - Senior Sponsor: Canadian Institutes of Health Research	\$700
Total	\$9 700