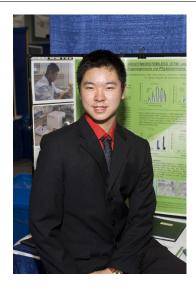




## CWSF 2010 - Peterborough, Ontario



## Allen Liu

## Effects of the Brassica genes STM and CLV1 on Arabidopsis shoot organogenesis

**Division:** Earth & Environmental Sciences

Category: Intermediate

Region: Manitoba Schools Science Symposium

City: Winnipeg, MB School: Acadia School

**Abstract:** The expression of the Brassica (canola) genes STM and CLV1 involved in

stem cell formation in vivo affects shoot formation in vitro, with STM favoring the process and CLV1 repressing it. Expression and localization studies revealed that the two genes affect cytokinin signalling in opposite ways by modulating the expression of key components required for the

initiation of shoots.

## **Biography**

Allen Liu is currently a student at Acadia Junior High School in Winnipeg, Manitoba. From an early age, he has been involved in various extracurricular activities. As a result, his interests encompass math, science, debating, public speaking, music, and athletics. For the past five years Allen has received recognition in Canadian math contests including CNML, Gauss, and the Pascal. Following elementary school, his rapid progress in both the mastery of piano and saxophone were recognized in regional and provincial levels, where scholarships were awarded. Additionally, he has achieved the highest average in academics for both grade 7 and 8. These two honors, known as the Acadia Axemen Academic Athlete Award, had relevance to athletics as well, where Allen received awards for most promising player in badminton and MVP for volleyball. In past science fairs, Allen has achieved top standings in the SABC and MSSS competitions. Presently, Allen is associated with the Manitoba Academy of Chinese Studies, working as a teacher assistant for the education of Chinese. For the future, Allen is intent on pursuing a career in the professional fields of the sciences, law, or business, and has high aims for an extensive post-secondary education.

Awards	Value
The University of Western Ontario Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Western Ontario	
Bronze Medal - Biotechnology & Pharmaceutical Sciences	\$300
Intermediate	
Sponsor: Youth Science Canada	
Total	\$1 300





