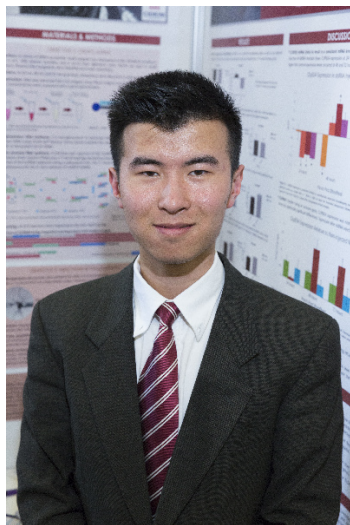


CWSF 2018 - Ottawa, Ontario



William Shen

Exploring the Genetic Basis of Dengue Virus Transmission

Challenge: Health

Category: Senior

Region: Greater Vancouver

City: Burnaby, BC

School: Burnaby North Secondary

Abstract: The Dengue virus infects 390 million people per year and lacks a specific treatment. Dengue is transmitted primarily by *Aedes aegypti* mosquitoes; thus, identifying the mosquito genes that aid or hinder viral transmission may allow us to genetically engineer mosquitoes resistant to the virus and develop Dengue-targeting drugs. This project studies the effect of suppressing expression of candidate gene CLIPB34 on Dengue virus transmission.

Biography

William Shen is a research volunteer at Simon Fraser University, a student and school president at Burnaby North Secondary, and an incoming freshman at Harvard University. He began his current research on Dengue virus and vector immunology after thoroughly enjoying other immunology research experiences in immunochromatography at a Burnaby-based pharmaceutical company and feline cancer immunotherapy at Cornell Veterinary School. When he is not conducting experiments in the lab or advocating for student voice around the district, William can be found painting photorealistic portraits, performing violin, hunting for the newest music, learning new culinary dishes, or hitting the ski slopes. He intends to pursue an MD-PhD before becoming a surgeon-researcher.

Awards

Value

| | |
|--|-----------------|
| The Actuarial Foundation of Canada Award - Senior Sponsor: The Actuarial Foundation of Canada | \$1 000 |
| Excellence Award - Senior - Gold Medal Sponsor: Youth Science Canada | |
| Carleton University Entrance Award Senior Gold Medallist - \$4,000 Entrance Award Sponsor: Carleton University | \$4 000 |
| Dalhousie University Faculty of Science Entrance Scholarship Senior Gold Medallist - \$5000 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science | \$5 000 |
| UBC Science (Vancouver) Entrance Award Senior Gold Medallist - \$4000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver) | \$4 000 |
| University of Manitoba Entrance Scholarship Senior Gold Medallist - \$5000 Entrance Scholarship Sponsor: University of Manitoba | \$5 000 |
| University of Ottawa Entrance Scholarship Senior Gold Medallist - \$4,000 Entrance Scholarship Sponsor: University of Ottawa | \$4 000 |
| Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University | \$4 000 |
| Total | \$27 000 |