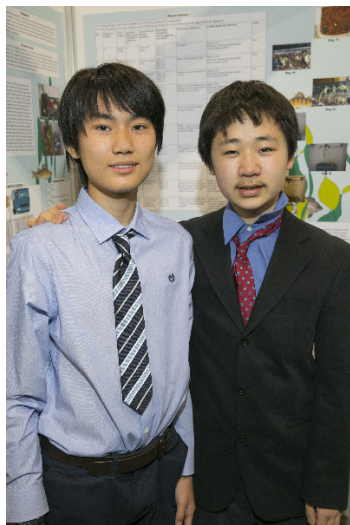


# CWSF 2017 - Regina, Saskatchewan



## Andrew Li, Jeremy Xie

### Self-Sustaining Aquaponics System

**Challenge:** Environment

**Category:** Junior

**Region:** Toronto

**City:** Toronto, ON

**School:** Forest Hill Jr. & Sr. P.S.

**Abstract:** We did this project wishing to improve the efficiency of existing aquaponics by removing the need to feed the fish, which solves the issue that prevents aquaponics from being self-sustaining. Making the system self-sustaining could vastly increase the possible uses for aquaponics, especially in poorer areas as it offers a constant supply of food at minimum cost. Our prototype successfully demonstrates the possibility of self-sustainability.

#### Biographies

Andrew - My name is Andrew Li and I am a student at Forest Hill Junior and Senior Public School. I am interested in biology, engineering and electronics. When I am older, I most likely would want to become either a engineer or a biologist. I got the inspiration for my science fair topic because I had always been interested in fish keeping, the environment and nature. One day, I stumbled across aquaponics and became interested in the idea. My partner Jeremy and I decided to create an innovation on that idea. For other students thinking about doing a project, I would suggest them to pick something they are currently interested in and try to think of w...

Jeremy - My name is Jeremy Xie and I am a Grade 8 student at Forest Hill Junior and Senior Public School in Toronto. If I were to choose three words to describe myself, I would choose honesty, perseverance and friendliness. My interests include electronics prototyping, game coding, playing the oboe. When I grow up, I would like to be a defense engineer, working for BAE. The project I am presenting with my partner Andrew is a self-sustaining aquaponics system that grows plants using animal-plant symbiosis. If I were to give advice to anyone wanting to start a project, I would tell them to plan ahead and know their capability. When we were assigned our ...

#### Awards

#### Value

Excellence Award - Junior - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 000