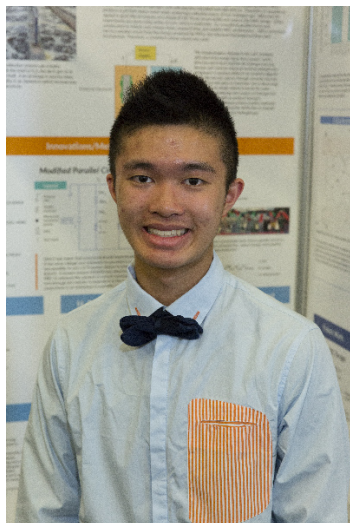


# CWSF 2018 - Ottawa, Ontario



## Andy Jia Kang Luo

### Waste Nothing: A Future for the Microbial Electrolysis Cell

**Challenge:** Environment

**Category:** Intermediate

**Region:** Greater Vancouver

**City:** Vancouver, BC

**School:** Gladstone Secondary

**Abstract:** The project involves using bacteria, a glass serum bottle, and a power source to clean wastewater while producing hydrogen fuel. The goal is to use wastewater and convert it to hydrogen gas instead of electricity, so in the future we may adapt hydrogen gas into cars or carbon emitting technologies to cut down on our carbon foot-print.

#### Biography

Ever since I was young, I always enjoyed challenging myself and thinking about how to use my brain to make different things. I went from solving math equations and doing math competitions to doing my first science fair this year! I am also a team BC volleyball player and have played for 4 years. Volleyball has been a big part of my life, and I hope that I will continue to play as long as I can. I enjoy everything I do, and when I'm older I want to be some sort of engineer or doctor. In the future, I hope my passion for science only grows because these science fair experiences have already been a blast!

#### Awards

#### Value

Excellence Award - Intermediate - Silver Medal Sponsor: Youth Science Canada	
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
Total	\$2 000