

# CWSF 2012 - Charlottetown, Prince Edward Island



## Elizabeth Suen

### What's Holding you Back?

**Challenge:** Innovation

**Category:** Junior

**Region:** Greater Vancouver

**City:** Richmond, BC

**School:** York House School

**Abstract:** For my project, I compared the speeds of different swimsuits through the water. Suits varying from technical racing suits down to board shorts were tested. Initial trials were done using a 25m training elastic and hand-held stopwatches. Since this system was not very accurate, I did two other experiments using pulleys and weights with me being dragged through the water wearing the suits.

### Biography

My name is Elizabeth and I currently attend York House School. My favourite subjects are Science and Math. I have been a member of the school swim team since Gr. 3, coming first in every event. I also swim competitively outside of school, winning gold medals last year at Provincials. I also play the piano for our school choirs. I won the Pythagorus and the Gauss math contests in my school. I have been to Global Finals for Destination ImagiNation for two years in a row. Being only in Gr. 8, I have not thought about my future career plans. I was inspired for my project from my competitive swimming and wondering whether expensive suits really had that much of an effect on your time. I want to test Speedo's Hydro Form Compression System, but I am still thinking of a way to do so without introducing swimmer bias. If another student wanted to do the project, I would tell them to find a variety of different suits to test and find the most accurate way to calculate the average velocity. This is my first science fair and CWSF and I am very excited to be going.

### Awards

### Value

Excellence Award - Junior - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$300
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 300