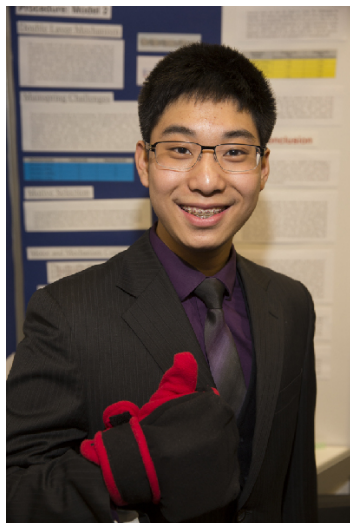


# CWSF 2016 - Montreal, Quebec



## Justin Tang

### Hand Function Recovery Device

**Challenge:** Innovation

**Category:** Intermediate

**Region:** York

**City:** Richmond Hill, ON

**School:** St. Theresa of Lisieux Catholic H.S.

**Abstract:** Two models of a rehabilitation glove were developed to aid patients with hand weaknesses or loss of functionality. It allows a patient to perform activities, but all the while, still rehabilitating the hand's function through exercise. Model one is composed of tensions springs and a mainspring mechanic to provide resistance exercises. Model two uses a motor and mainspring mechanic to provide automatic exercise and rehabilitation

#### Biography

I am a current student at St. Theresa of Lisieux Catholic High School in Richmond Hill Ontario. I am a grade 10 student that likes to get involved in the community, all the while, trying to use science as a solution to the issues that go on in the world. The project that I created this year was two models of a hand function rehabilitation device. As a volunteer at a senior home, many residents have asked me to design and craft a product that will help them increase grip strength. This inspiration pushed me to design, experiment, and manufacture the products that I am presenting at the 2016 Canada Wide Science Fair! My future is still a blur, and I have many things that I still must experince. However, as long as I continue to strive for success and be a better person, anything will be possible. To anyone who want to undertake their own project, do not lose that goal and push yourself forward. Be creative and make a change. As Albert Einstein puts it, "The true sign of intelligence is not knowledge. But imagination".

#### Awards

#### Value

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