

# CWSF 2018 - Ottawa, Ontario



## Mitchell Clapperton

### Automated Pill Bottle Opener? A Solution for Avoiding Repetitive Strain Injuries

**Challenge:** Innovation

**Category:** Junior

**Region:** Bay Area

**City:** Dundas, ON

**School:** Guy B. Brown Elementary School

**Abstract:** My project is an Automated Pill Bottle Opener. There are over 640 million prescriptions written in Canada each year and to fill many of these, pharmacy workers must open and close child proof pill bottles. The pushing and turning motion required has led to many workers developing Carpal Tunnel Syndrome. My machine is designed to automatically remove pill bottle lids and avoid worker injury.

#### Biography

My name is Mitchell and I'm a Grade 7 student at Guy B. Brown School. My favourite activities are putting things together to make something useful or tearing things apart to see how they work. I enjoy playing almost all sports. In the summer, I work as a baseball umpire. Someday I think I'd like to work as a scientist, engineer or maybe an architect. The inspiration for my project was my friend's mom. She developed carpal tunnel syndrome opening pill bottles at the pharmacy where she works. I wanted to build a machine that would do that job for her. I plan to make my machine smaller, lighter, stronger and faster to better help the people that need it. My advice to other students would be to pick a topic that they're really interested in and want to learn more about. They're going to be spending a lot of time working on their project so make sure it's something they enjoy.

#### Awards

#### Value

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|---|---------|
| Excellence Award - Junior - Silver Medal<br>Sponsor: Youth Science Canada                                       |         |
| Western University Scholarship<br>Silver Medallist - \$2000 Entrance Scholarship<br>Sponsor: Western University | \$2 000 |
| Total   | \$2 000 |