

## ESPC 2013 - Lethbridge (Alberta)



### Katie Brent

#### **MARTHA: Medication Automated Reminder Technological Health Assistant**

**Défi:** Information  
**Catégorie:** Intermédiaire  
**Région:** Bay Area  
**Ville:** Oakville, ON  
**École:** Notre Dame S.S.

**Sommaire:** The purpose of this project is to develop a computer controlled hardware device to hold and dispense medications in accordance with a user's prescribed schedule. I wrote the software in C# and used a digital input/output board to interface with my device. The unit offers audio guidance and visual indicators and is able to monitor a user's compliance, important for those with cognitive disabilities.

#### Biographie

I am 14 years old and in the ninth grade. This is my first time at CWSF, and I am beyond excited to have this amazing opportunity. I love academics, athletics, and the arts- I believe that it is important to have a balance of each. My favourite subjects are math and science- I love discovering and learning new things! In terms of sports, I play curling and badminton. As for the arts, I paint in acrylics, play the tenor saxophone, sketch and sew. During the summer, I love spending time at our family cottage north of Sault Ste. Marie where I boat, swim, fish, and hike. In the future, I would like to attend university for either computer or medical sciences. In fact, it was this year's science fair project that sparked my interest in these areas. I was inspired once I realized that many people struggle to remember to take their prescribed medications at the proper times. In the future, I plan to expand on both the electronic and software components of my project. My advice to students thinking about doing a project in the future is to try something new? you may just find a new passion!

#### Prix

#### Valeur

Prix d'excellence - Intermédiaire - Médaille de bronze Commanditaire: Sciences jeunesse Canada	100,00 \$
Bourse d'études de Western University Médaille de bronze - Bourse d'admission de 1 000 \$ Commanditaire: Université Western	1 000,00 \$
<b>Total</b>	<b>1 100,00 \$</b>