

## ESPC 2019 - Fredericton (Nouveau-Brunswick)



### Graydon Strachan

#### MAC-2: Estimation of Weight Using a Modified Blood Pressure Cuff

**Défi:** Innovation

**Catégorie:** Intermédiaire

**Région:** Winnipeg Schools

**Ville:** Winnipeg, MB

**École:** Grant Park High

**Sommaire:** Knowing an unconscious child's weight in a medical emergency is an important detail to calculate and administer medications. Using the CDC National Health And Nutrition Examination Survey data set, I have developed a method of using a modified blood pressure cuff to estimate weight more rapidly and accurately than current estimation methods.

#### Biographie

My name is Graydon Strachan. I am a grade 9 student in the AP program at Grant Park High School in Winnipeg. Some things I enjoy doing in my spare time include playing soccer, hockey, Roman-Greco wrestling, simulation games, science fair, and cross country running, (which I do better than anything else). I have been doing the science fair for the last 5 years, and my past projects have ranged from videotaping myself jumping in elevators, estimating foot growth, drought-proofing my parent's garden, and even creating artificial muscle from nylon fishing line. As you may guess, I get my ideas for projects from all sorts of places. This year I was particularly interested in the estimation of weight using biometrics after seeing a poster at a medical conference in South Africa that my dad took me to. Every year, I learn a little bit more about the scientific process and how to present my ideas. In the future I plan to continue working in the biomedical field, and perhaps even elaborate upon my existing project ideas.

#### Prix

#### Valeur

Prix de La Fondation actuarielle du Canada - Intermédiaire Commanditaire: La fondation actuarielle du Canada	750,00 \$
Prix d'excellence - Intermédiaire - Médaille d'argent Commanditaire: Sciences jeunesse Canada	
Bourse d'études de Western University Médaille d'argent - Bourse d'admission de 2 000 \$ Commanditaire: Université Western	2 000,00 \$
<b>Total</b>	<b>2 750,00 \$</b>