

## ESPC 2018 - Ottawa (Ontario)

### Kendra Prasad, Hannah McInnis

#### A Preliminary Study: Relationships Between Cannabis, Brain Injury and Sleep

**Défi:** Santé

**Catégorie:** Sénior

**Région:** Lambton County

**Ville:** Plympton-Wyoming, ON, Brights Grove, ON

**École:** St. Patrick's H.S.

**Sommaire:** Currently, there are no studies that indicate as to whether or not individuals with brain injuries should use marijuana to help them sleep. Our project used Fitbits to determine the sleep stages of subjects that used and did not use marijuana and had and did not have a brain injury. We specifically found that Rapid Eye Movement sleep, essential for memory and mood, was affected.

#### Biographies

Kendra - I am a grade 11 student at St. Patrick's Catholic Secondary School. I enjoy reading, playing the piano, travelling and attending school. I have received the Ontario Service Volunteer Award from the Brain Injury Association. My partner and I wanted to choose a relevant issue and decided with the legalization of cannabis in July, to research information on the topic. We found that there was not a lot of information and since I volunteer for the Brain Injury Association, we decided to orient our research to that. Using Fitbits we analyzed the sleep stages of our subjects, focusing on REM. For further investigation, we would like to assess other ...

Hannah - The inspiration for this project came from a news broadcast late last year. In the broadcast it was stated that marijuana reduced REM sleep, since the circumstances involving the legalization of marijuana we decided the topic was important. My partner and I decided the topic would be both interesting and relevant, especially if we investigated the relationship marijuana had on Brain Injured individuals and their sleep patterns. If possible, my partner and I would be more than willing to continue research on this topic, as it has been both informative and educational. For all other individuals considering creating a project for the Science Fair...

#### Prix

#### Valeur

Prix d'excellence - Sénior - Médaille d'or Commanditaire: Sciences jeunesse Canada	
Bourses de l'Université Carleton Médaille d'or, sénior - Bourse d'admission de 4 000 \$ Commanditaire: Université Carleton	4 000,00 \$
Bourses d'admission de la Faculté des sciences de l'Université Dalhousie Médaille d'or, sénior - Bourse d'admission de 5 000 \$ Commanditaire: Université Dalhousie, Faculté des sciences	5 000,00 \$
Prix d'admission en sciences de UBC (Vancouver) Médaille d'or, sénior - Bourse d'admission de 4 000 \$ Commanditaire: The University of British Columbia (Vancouver)	4 000,00 \$
Bourse d'admission de l'Université du Manitoba Médaille d'or, sénior - Bourse d'admission de 5 000 \$ Commanditaire: Université du Manitoba	5 000,00 \$
Bourse d'admission de l'Université d'Ottawa Médaille d'or, sénior - Bourse d'admission de 4 000 \$ Commanditaire: Université d'Ottawa	4 000,00 \$
Bourse d'études de Western University Médaille d'or - Bourse d'admission de 4 000 \$ Commanditaire: Université Western	4 000,00 \$
<b>Total</b>	<b>26 000,00 \$</b>