

CWSF 2018 - Ottawa, Ontario

Kendra Prasad, Hannah McInnis

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

Challenge: Health

Category: Senior

Region: Lambton County

City: Plympton-Wyoming , ON, Brights Grove, ON

School: St. Patrick's H.S.

Abstract: 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...

Awards

Value

Excellence Award - Senior - Gold Medal Sponsor: Youth Science Canada	
Carleton University Entrance Award Senior Gold Medallist - \$4,000 Entrance Award Sponsor: Carleton University	\$4 000
Dalhousie University Faculty of Science Entrance Scholarship Senior Gold Medallist - \$5000 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$5 000
UBC Science (Vancouver) Entrance Award Senior Gold Medallist - \$4000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$4 000
University of Manitoba Entrance Scholarship Senior Gold Medallist - \$5000 Entrance Scholarship Sponsor: University of Manitoba	\$5 000
University of Ottawa Entrance Scholarship Senior Gold Medallist - \$4,000 Entrance Scholarship Sponsor: University of Ottawa	\$4 000
Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University	\$4 000
Total	\$26 000

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