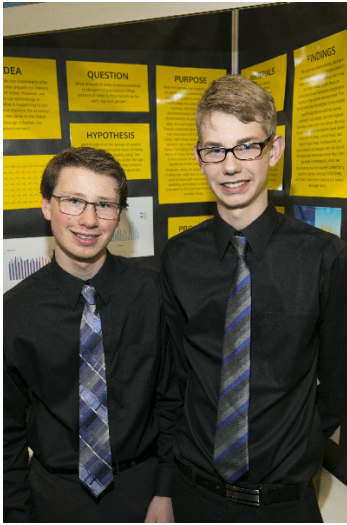


## CWSF 2017 - Regina, Saskatchewan



### Benjamin Jud, Kirk Rieberger

#### Hitting the Sack: Analyzing Your Sleep Pattern

**Challenge:** Health

**Category:** Intermediate

**Region:** Central Alberta

**City:** Innisfail, AB

**School:** Innisfail Junior Senior High School

**Abstract:** Our project is recording and analyzing sleep patterns within a human population. We tested 26 individuals for one week each. In the end we collected over 1,300 hours of sleep, and almost 1.5 million steps. We recorded each individual's light, deep and R.E.M. sleep in order to see which age group and biological gender of people get the best overall sleep quality.

#### Biographies

Benjamin - Hi, my name is Benjamin Jud, I am from Innisfail Alberta and I go to Innisfail Jr. Sr. High School. This year is my second time going to CWSF. I play quite a few sports including Cross Country Running, Basketball, Badminton, Skiing, Soccer, Track and Field. I am also a level 2 Hockey Alberta Official. I am also fully fluent in German. Besides sports, I spend my free time and weekends by working part time or relaxing (Which doesn't happen to often). I, along with my project partner have always been interested in the science behind sleep. Our project last year inspired us to keep investigating this fascinating piece of our life. We have tested ...

Kirk - I am a grade 10 student looking to achieve high academic success and move into the field of Computer Engineering. The inspiration for our project came from the project we did last year; in which we separated our participant's sleep into 2, 4 hour blocks separated by 2 hours of wakefulness. However, this year, we decided to further the use of technology to record each participant's R.E.M. sleep, light sleep and deep sleep.