

# CWSF 2015 - Fredericton, New Brunswick



## Grant Mansiere

### Being Fair Isn't Fair: circadian resetting by electronic light and eye colour

**Challenge:** Discovery

**Category:** Intermediate

**Region:** Central Okanagan

**City:** Summerland, BC

**School:** Summerland Secondary

**Abstract:** A complement on eye colour prompted my study of eyes. I learned of cells in the eye that detect your circadian rhythm with certain frequencies of blue light. I wondered, do blue eyes take in more light including the circadian resetting light. Because electronic devices emit "circadian" light, this could mean that blue-eyed people need to be more careful with electronic light at night.

#### Biography

My name is Grant Mansiere and I am a grade 9 student. I enjoy learning very much and I am a studious student. I am always trying to expand my knowledge and science fair is essential to this. I'm interested in electronics and chemistry at school and I also am in French Immersion. Also at school I play the tenor sax in my school stage band and participate in the fly tying club. I would like to go on to a career in business. Presenting is a strong interest of mine. To keep myself active I primarily ride my bike around my district. My project idea came from a complement on my eyes. Someone mentioned that my eyes were interesting and this lead me to do some research on eye colour origins and their benefits. This, combined with some knowledge from my last years' project about the harmful affects of light, I combined to create my project. To further my study I intend to expand my electronic device spectras. My advice to students considering science fair, is this: If you put the effort in, it will show and you will have a chance at moving on to great things.

#### Awards

#### Value

Challenge Award - Discovery - Intermediate Sponsor: Youth Science Canada	
Excellence Award - Intermediate - Gold Medal Sponsor: Youth Science Canada	\$250
Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University	\$4 000
<b>Total</b>	<b>\$4 250</b>