

# CWSF 2016 - Montreal, Quebec



## Elizabeth Schulz

### It's Not Black and White: The Effect of Coloured Light on Lymnae Stagnalis

**Challenge:** Environment

**Category:** Senior

**Region:** Central Interior British Columbia

**City:** Fraser Lake, BC

**School:** Fraser Lake Elem-Secondary

**Abstract:** Lymnae stagnalis (pond snail) is a model used in neurological research. Studies show that various wavelengths of light can activate photoreceptors in the snail's eye producing an electrophysiological response. The purpose of this project was to determine if coloured light could elicit a behavioural response as observed in its movement. The conclusions drawn warrant further research into colour and mechanisms of learning and memory.

#### Biography

I am honoured to be participating in my fourth CWSF. As a Gr.11 honour roll student, doing well in my studies and contributing in my school and community is important to me. I am active in Student-Leadership and Student-Voice (liaison to the school board). I play Gr-8 RCM piano and also enjoy teaching piano. Last fall, I joined the Volunteer Fire Department as a Junior Firefighter and am happy to be serving my community in this role. As a senior Youth Group member, I organize projects to help children in developing countries. I enjoy many recreational activities especially curling and kayaking. I was thrilled to compete at the BC Winter Games this past February and was honoured to be awarded a Leadership Award for dedication to sport, academics and community enhancement. My science project was well-received at Regionals earning several special awards. I hope my research can contribute to the body of knowledge that is being gained through the use of the Lymnae stagnalis model in neurological research. My advice for students considering a science fair project is to take advantage of this great opportunity, you'll be amazed with all you'll learn! I plan to pursue a career in science.

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$2 000</b>