

# CWSF 2013 - Lethbridge, Alberta



## Emily Chemnitz

### Rat Vocalization in Social Encounters

**Challenge:** Discovery

**Category:** Senior

**Region:** Niagara

**City:** St. Catharines, ON

**School:** Sir Winston Churchill

**Abstract:** Rats emit vocalizations at an ultrasonic level. I put seven rats into two situations: a double rat and single rat situation. After recording and analyzing their vocalizations I was able to complete statistical analysis that showed a significantly higher frequency in the second call emitted in a social encounter as well that rats vocalize significantly more when together.

#### Biography

Emily Chemnitz is currently enrolled at Sir Winston Churchill Secondary School. She enjoys being active physically and in her school life. Emily is active at her school where she is a prefect, on the hockey team, softball team as well as yearbook club. Emily has been playing the trumpet in the brass choir at her church since grade 5 and continues to volunteer there. She loves to run and is always interested in learning new things. Emily hopes to enter a neuroscience program next year at Brock University or University of Guelph. She began her research project when she entered the Brock Mentorship program where she completed her experiments involving rat vocalizations. This inspired a career in neuroscience. Emily is very excited to pursue this dream and loves to keep working.

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	\$100
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>\$2 100</b>