

# CWSF 2013 - Lethbridge, Alberta



## Neria Aylward

### Building a Better Horseshoe

**Challenge:** Discovery

**Category:** Senior

**Region:** Eastern Newfoundland

**City:** St John's, NL

**School:**

**Abstract:** Horses are the animal kingdom's most highly developed athletes. With such high performance, however, comes high risk - the hoof must withstand accelerations of up to 2000 meters/second, leaving horses liable to the skeletal fractures that account for 89% of casualties. Using a combination of evolutionary biology and material engineering, this project aims to improve the horseshoe and increase the safety of equine sport.

#### Biography

Neria Aylward is a grade 11 student at Holy Heart High School in St. John's, Newfoundland. An alumnus of the Shad Valley program, she attended the campus at Université Laval in 2012. Neria is a multiple-time recipient of the Tourism NL Arts and Letters Awards, and winner of the Engineers Without Borders Get Outside Your World national essay contest. She is a member of her school's student council, chamber choir and concert band, and is also principal oboist of the Newfoundland Symphony Youth Orchestra. She also looks forward to the Students on Ice Arctic expedition this summer. Neria's band, City on the Coast has been featured on CBC Radio, and she enjoys hiking, horse-riding and Fleet Foxes.

#### 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>