

# CWSF 2012 - Charlottetown, Prince Edward Island



## Sarah Winsor

### Can Your Diet Prevent Alzheimer's? The effects of Lysine on APP Processing

**Challenge:** Health

**Category:** Senior

**Region:** Eastern Newfoundland

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

**School:** Bishops College

**Abstract:** For my project, I tested the effects of the amino acid lysine on the processing of Amyloid-Beta plaques that are known contributors to Alzheimer's Disease. I found that the neuron samples with Lysine applied released less of the Beta peptides, therefore they are less likely to form plaques, suggesting that increasing the nutritional load of lysine could act as a preventative measure for Alzheimer's disease.

#### Biography

My name is Sarah Winsor and I am a Grade 11 french immersion student at Bishops College, in St. John's, Newfoundland. In my school, I am part of the chamber choir, rugby team, youth action committee, as well as being a tutor for the Tutoring for Tuition program. Outside of school, I love being involved in music and dancing, as I have been playing piano for around 13 years (and working on the ukelele!) I am also a member of Shallaway-Newfoundland and Labrador Youth in Chorus, which has given me the opportunity to travel all around the world, from western Europe to China! I enjoy volunteering at local social justice seminars and leadership conferences, but I also volunteer at our local hospital. I am also working on my national lifeguard certification. I am so honored to have been chosen to represent the province at Canada Wide this year. My idea sparked from coming across some interesting research online, so I encourage any dedicated students to pursue an idea that they are passionate about, you never know what could develop from there!

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$300
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>\$2 300</b>