

CWSF 2012 - Charlottetown, Prince Edward Island



Maya Burhanpurkar

Uncovering the Cardiac and Gastrointestinal Safety of Two Amyloid- β Inhibitors

Challenge: Discovery

Category: Junior

Region: Simcoe County

City: Shanty Bay, ON

School: Codrington P.S.

Abstract: The cardiac and gastrointestinal biosafety of two promising Alzheimer's drugs was assessed through a novel set of in-vivo and in-vitro assays in which Alpha Lipoic Acid and Melatonin were tested on *Daphnia magna* and *Lactobacillus acidophilus*. It was discovered that both are cardio-protective and Alpha Lipoic Acid is gastrointestinally toxic. These findings will impact the treatment of Alzheimer's populations sensitive to cardiac and gastrointestinal insults.

Biography

I am a 13 year old grade 8 student. My life has been filled with amazing experiences such as receiving the Junior Citizen of the Year Award from the Lieutenant Governor of Ontario, being a TVO Super-Citizen and being the student mayor of Barrie. The two most memorable experiences in my life have been a 3 month trip to India which included volunteering in a rural hospital for 10 weeks and the 2011 CWSF in Toronto. I maintain an A+ academic average in the gifted program and First Class Honours with Distinction at the Royal Conservatory of Music for piano. I also enjoy being a member of the Ontario Education Minister's Student Advisory Council, reading, playing the flute, being on debate teams, public speaking, skiing and playing on several sports teams.

Awards

Value

Awards	Value
The Actuarial Foundation of Canada Award - Junior	\$500
Challenge Award - Discovery - Junior Sponsor: Youth Science Canada	\$500
Excellence Award - Junior - Gold Medal Sponsor: Youth Science Canada	\$1 500
Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University	\$4 000
Platinum Award - Best Junior Project Sponsor: Research In Motion	\$5 000
Total	\$11 500