

## CWSF 2014 - Windsor, Ontario



### Liam Younger

#### Can You Hear Me Now? Effectiveness of Non-Electronic Bone Conduction Hearing Aid

**Challenge:** Innovation

**Category:** Intermediate

**Region:** Bay Area

**City:** Burlington, ON

**School:** Hillfield Strathallan College

**Abstract:** This project evaluates the effectiveness of easily constructed hearing aids that utilize jawbone conduction rather than electronics. Subjects with blocked natural hearing were asked to complete listening tasks using two hearing devices and two controls. Both hearing devices improved the ability to hear by conduction and one was superior, producing results close to natural hearing. Accessible devices could assist populations who lack access to technology.

#### Biography

I am honours grade 9 student at Hillfield-Strathallan College in Hamilton, Ontario. My favourite subjects are science, music and computer technology. I hope to pursue a career in research sciences and discovery and am currently interested in the field of genetics. I also love fitness and play on my school rugby and soccer teams; as well as on the Burlington Bayhawks U15 soccer team. I also play alto sax in our grade 9 concert and jazz bands and play the tenor drum for the HSC drum line. Since grade 7 I've participated in the Duke of Edinburgh Award program and will earn my bronze award this year. Besides the CWSF trip award, my project won: the ArcelorMittal Dofasco Quality Systems Award, McMaster University Science & Engineering Tuition Award and a Silver Merit award at BASEF. I was inspired to do my project because I wanted to create something, achievable at my age, that addressed an issue in our world. Hearing loss affects hundreds of millions of people, especially those in developing countries. I would like to continue working on practical innovations in science. My advice to others would be to research something that is important to you.

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