

# CWSF 2014 - Windsor, Ontario



## Kiri Daust

### Finding the Sweet Spot: the Violin-Player-Listener System

**Challenge:** Discovery

**Category:** Senior

**Region:** Pacific Northwest

**City:** Telkwa, BC

**School:** Smithers Secondary

**Abstract:** What makes a violin sound beautiful? Experienced violinists played and listened to violins and rated each for preference and timbre elements. Violinists liked their own violins best, because of familiarity and sound, but did not play them better. All factors in the violin-player-listener system were significant. Different timbres had different correlations with preference across people. Objectively, violins had different patterns of harmonics.

#### Biography

I love music, science and baking. Interactions between musicians and their instruments have always fascinated me, and this year turned into my project. I've participated in the Smithers science fair for nine years now, and each year it's exciting. The last four CWSFs were amazing. This year, I had the honour of participating in the Taiwan International Science Fair. It was so neat to see how science is a universal passion. I think that science should be used to understand nature and the world around us. I have taken grade 10 violin, and love classical music, especially Sarasate. I play with some local orchestras, and am attending the National Youth Orchestra of Canada this summer. Baking is also a passion. I love the science and feel (and taste) of bread, and am trying to improve my gluten-free baking. I lived the first eight years of my life in a 300 square foot log cabin on François lake two hours from town, with no running water or electricity, which I think has made me appreciate nature. I'm currently planning on pursuing science, perhaps as a teacher or professor. Music, science and baking will always be in my life.

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$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>

Youth Science Canada  
PO Box 297  
Pickering ON L1V 2R4  
www.youthscience.ca / info@youthscience.ca  
416-341-0040