



CWSF 2014 - Windsor, Ontario



Kiri Daust

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

Challenge: Discovery Category: Senior

Youth Science Canada

PO Box 297

Pacific Northwest Region: 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	\$100
Sponsor: Nuclear Waste Management Organization	
University of Ottawa Entrance Scholarship	\$1 000
Senior Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Ottawa	
Western University Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: Western University	
Total	\$2 100





