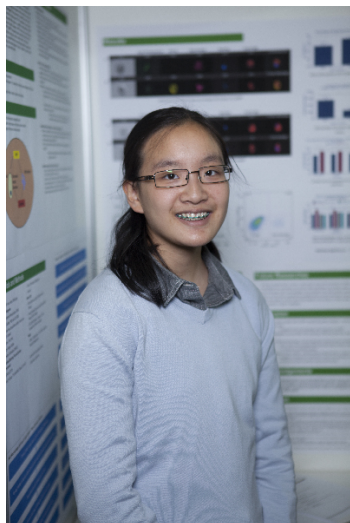


# CWSF 2013 - Lethbridge, Alberta



## Janice Pang

### Inflammation in Pancreatic Islets: Contribution of Islet Macrophages

**Challenge:** Health

**Category:** Intermediate

**Region:** Greater Vancouver

**City:** Coquitlam, BC

**School:** Pinetree Secondary School

**Abstract:** Pancreatic islets were treated with IAPP to identify whether IAPP activates caspase-1 in pancreatic islets. The effects of islet macrophages on insulin secretion and production was also investigated. This study provides a better understanding of the pathogenesis of type 2 diabetes and suggest a therapeutic treatment in which the stimulus of inflammation can be targeted, to improve insulin secretion and beta cell function.

#### Biography

My name is Janice Pang, and I'm currently in grade 9. In school, I actively take part in the grade 9 advisory council and is a member of the volleyball team. Outside of school, I enjoy going curling and competing in the Optimist Junior Curling League. Previously, I have participated in the 2012 Canada-Wide Science Fair. This year microbiology continues to be an interest of mine. To have the opportunity to continue conducting experiments in a research lab was amazing. The passion I had for learning about the pathogenesis of type 2 diabetes had inspired me to do this project. In the future, I hope to continue researching about type 2 diabetes. As well, if students are thinking about doing a project, starting early will be the key to success.

#### Awards

#### Value

Statistical Society of Canada and Biostatistics Section Award Sponsor: Statistical Society of Canada and Biostatistics Section	\$750
Challenge Award - Health - Intermediate Sponsor: Canadian Institutes of Health Research	\$750
Excellence Award - Intermediate - Gold Medal Sponsor: Youth Science Canada	\$700
Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University	\$4 000
<b>Total</b>	<b>\$6 200</b>