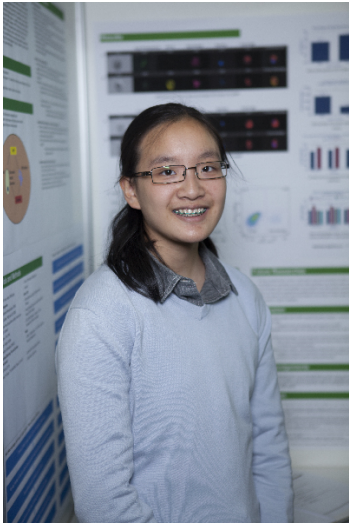


CWSF 2013 - Lethbridge, Alberta



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
Total	\$6 200