

AY JACKSON CHEMISTRY STUDENTS WIN THIRD PLACE AND HONORABLE MENTION AT UNIVERSITY OF TORONTO LAUREATE EVENTS

High school students had the opportunity to attend the 6th annual “Ask A Laureate Lectures” on May 8, 2015, where professors from University of Toronto gave insightful presentations of their scientific studies, followed by interactive Q & A sessions, to help students learn and explore more about the world of Chemistry.

The featured lectures included *The Chemistry of Global Atmospheric Change* by Jonathan Abbatt, *Harmony From Discord: Novel Combinations of Incompatible Functional Groups* by Andrei Yudin, *The ABCs of controlling potassium movement out of the cell* by Voula Kanelis, *Catalysis: Energy, Environment & Drugs* by Jik Chin, and *Chemical Sleuthing: Nanomaterials in the Detection of Disease* by Shana Kelley.

One of the more memorable talks was Kelley’s research on the technological advancement of disease detection. Using nano-materials, Kelley and her team, Xagenic, developed an easily-accessible and lab-free molecular device that delivers diagnostic results in 20 minutes. With this new innovation, more precise molecular testing will be able to be performed in the convenience of the physician office without expensive lab equipment and personnel; as well, critical needs that are unmet can be addressed almost immediately in the healthcare system.

At the end of the event, a number of students who entered the chemistry essay competition were recognized for their work on their research. I am honoured to say that **Aaron He** and I, **Ashley Lai**, chemistry students representing A.Y. Jackson Secondary School, had the privilege to receive



honourable mention and third place award, respectively, in the category of “The Contributions of a Canadian Chemist To Combating Disease”. Coincidentally, we both had written our essay on Michael Smith, a biochemist behind the discovery of site-directed mutagenesis, which is a technique wherein a chosen specific section of a gene sequence is deliberately altered, thus assisting scientists in correlating the effects of specific mutations on the functions of genes with human inherited genetic disorders.

This event was not only educational, but it also provided me with the experience to discover more about chemistry as well as possible career pathways. Therefore, I would like to thank the Chemistry department for giving this essay assignment to our class, providing us with the chance to learn more about science, something that incessantly surrounds us in our everyday lives.

