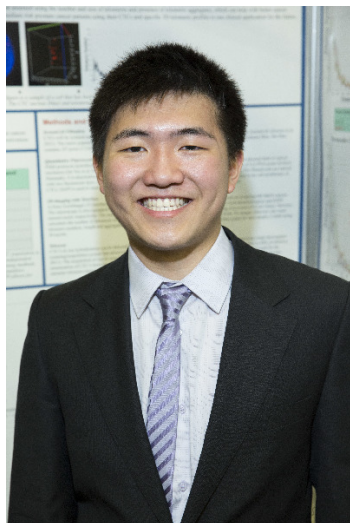


ESPC 2014 - Windsor (Ontario)



Michael Xu

Quantitative Analysis of Circulating Tumor Cells in Prostate Cancer Patients

Défi: Santé

Catégorie: Sénior

Région: Manitoba Schools Science Symposium

Ville: Winnipeg, MB

École: St. John's Ravenscourt School

Sommaire: This project isolates circulating tumor cells (CTCs) using a size-based filter device; the captured CTCs undergo three-dimensional (3D) nuclear telomere imaging and automated scanning (Teloscan). Using the quantitative analysis of 3D telomeric signatures of CTCs, it is possible to characterize intermediate risk prostate cancer, identify patient subgroups, and improve individualized treatment in the clinics for prostate cancer patients.

Biographie

As a grade 12 high school student from Manitoba, I've always had an interest in sports, music and science. Science particularly intrigued me with its practical applications to improve human health. At CancerCare Manitoba, I had the opportunity to be involved with prostate cancer research. My project uses circulating tumour cells as a biomarker in order to help identify steps of prostate cancer disease progression. Further investigation involves applying this diagnostic information in clinical trials with the goal of advancing individualized treatment. Science fairs allowed me to explore my interests and actively learn about a topic, with an emphasis on critical thinking. Moreover, presenting to judges also provided a great opportunity to improve through their constructive feedback. I encourage all students to participate in science fairs! It is an extremely rewarding experience.

Prix

Valeur

Prix de la Société canadienne des clinico-chimistes - Sénior Commanditaire: La Société canadienne des clinico-chimistes	1 000,00 \$
Prix d'excellence - Senior - Médaille d'argent Commanditaire: Sciences jeunesse Canada	300,00 \$
Bourses d'admission de la Faculté des sciences de l'Université Dalhousie Médaille d'argent, sénior - Bourse d'admission de 2 500 \$ Commanditaire: Université Dalhousie, Faculté des sciences	2 500,00 \$
Prix d'admission en sciences de UBC (Vancouver) Médaille d'argent, sénior - Bourse d'admission de 2 000 \$ Commanditaire: The University of British Columbia (Vancouver)	2 000,00 \$
Bourse d'admission de l'Université d'Ottawa Médaille d'argent, sénior - Bourse d'admission de 2 000 \$ Commanditaire: Université d'Ottawa	2 000,00 \$
Bourse d'études de Western University Médaille d'argent - Bourse d'admission de 2 000 \$ Commanditaire: Université Western	2 000,00 \$
Total	9 800,00 \$