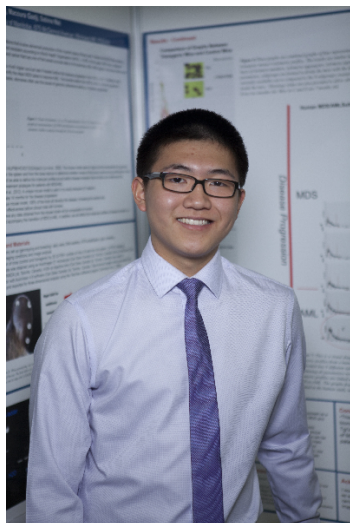


ESPC 2013 - Lethbridge (Alberta)



Michael Xu

A Unique Mouse Model to Understand Human Disease Progression from MDS to AML

Défi: Santé

Catégorie: Sénior

Région: Manitoba Schools Science Symposium

Ville: Winnipeg, MB

École: St. John's Ravenscourt School

Sommaire: MDS are medical conditions involving the abnormal production of blood cells. In 30% of cases, MDS has a malignant transformation into AML, a deadly blood cancer. A unique mouse model is used to compare 3D telomeric profiles in mice to create an accurate diagnostic tool for assessing disease progression, providing the opportunity for early diagnosis and improved individualized treatment for MDS/AML in humans.

Biographie

As a grade 11 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 leukemia research. My project uses a unique mouse model to create a new diagnostic tool that can identify steps of blood cancer disease progression in mice. With this diagnostic tool, further investigation involves applying this diagnostic tool in clinical trials with humans with the goal of advancing individualized treatment. My experience with science fair has been like none other. Working on a research project 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. In the future, I plan to continue pursuing sciences with an interest in practical applications. I am really grateful to have participated in science fairs and I am looking forward to presenting in Lethbridge.

Prix

Valeur

Prix d'excellence - Senior - Médaille d'or Commanditaire: Sciences jeunesse Canada	700,00 \$
Bourses d'admission de la Faculté des sciences de l'Université Dalhousie Médaille d'or, sénior - Bourse d'admission de 5 000 \$ Commanditaire: Université Dalhousie, Faculté des sciences	5 000,00 \$
Prix d'admission en sciences de UBC (Vancouver) Médaille d'or, sénior - Bourse d'admission de 4 000 \$ Commanditaire: The University of British Columbia (Vancouver)	4 000,00 \$
Bourse d'admission de l'Université du Manitoba Médaille d'or, sénior - Bourse d'admission de 5 000 \$ Commanditaire: Université du Manitoba	5 000,00 \$
Bourse d'admission de l'Université d'Ottawa Médaille d'or, sénior - Bourse d'admission de 4 000 \$ Commanditaire: Université d'Ottawa	4 000,00 \$
Bourse d'études de Western University Médaille d'or - Bourse d'admission de 4 000 \$ Commanditaire: Université Western	4 000,00 \$
Total	22 700,00 \$