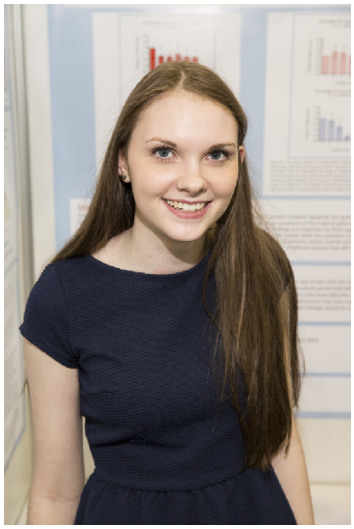
ESPC 2015 - Fredericton (Nouveau-Brunswick)



Alyssa Young

Childhood Cancer Chemotherapy: The promise of non-genotoxic options

Défi: Santé
Catégorie: Sénior
Région: Eastern Newfoundland
Ville: St. John's, NL
École: Holy Heart High School
Sommaire: Childhood cancers are treated with chemotherapeutic regimens that may incorporate DNA-damaging, or genotoxic, drugs. To shift away from genotoxic options, I examined the efficacy of a growth factor receptor inhibitor, lapatinib, in a juvenile-onset ovarian cancer cell line (COV434) versus the DNA-damaging agent cisplatin. COV434 cells were sensitive to growth inhibition with lapatinib treatment, suggesting growth factor signaling is an alternative target for effective therapy.

Biographie
My name is Alyssa Young and I'm currently enrolled in 11th grade at Holy Heart High School, completing the IB program. Aside from academics, I am involved in many extracurricular activities at school revolving around STEM topics as well as social justice and arts, such as the Green Leaf club and Choir. I have a high interest in science, and have been accepted into the Da Vinci Engineering Enrichment Program's summer academy for July 2015. In University I plan on studying various sciences and continuing with medical research, eventually specializing in oncological research. This is where the inspiration for my project began. As I have always had an interest in cancer research, I knew I wanted to explore beneficial treatments for cancer. The results of my experiment were positive but the opportunities to expand on this knowledge are endless, including a survey of all rare childhood cancers that still have genotoxic chemotherapy as their current standard of care in clinic, and pursuit of the options for other targeted therapies. I recommend to anyone planning on doing a project that they do something they are truly interested in as it makes the research very enjoyable and personal.

Prix	Valeur
Prix d'excellence - Senior - Médaille de bronze Commanditaire: Sciences jeunesse Canada	
Bourse d'admission de l'Université d'Ottawa Médaillé de bronze, sénior ? Bourse d'admission de 1 000 $ Commanditaire: Université d'Ottawa	1 000,00 $
Bourse d'études de Western University Médaillé de bronze - Bourse d'admission de 1 000 $ Commanditaire: Université Western	1 000,00 $
Total	2 000,00 $

Sciences jeunesse Canada
B.P. 297
Pickering (Ontario) L1V 2R4
www.youthscience.ca / info@youthscience.ca
416-341-0040