

ESPC 2013 - Lethbridge (Alberta)



Biographie

My name is Cathy Tie and I'm a Grade 11 student enrolled in the International Baccalaureate Diploma Program at Glenforest Secondary School in Mississauga, Ontario. My passion for the sciences began as early as the sixth grade, and was triggered by hands-on experiments outside of textbook science. I delve further into scientific research in tenth grade when my partner and I investigated alternative sources for bio-ethanol production, and successfully competed in the Canada-Wide Science Fair in PEI. During the summer of 2012, I studied at the University of Pennsylvania which enabled me to advance my studies in the sciences. It's been a pleasure working at the Martin laboratory at the University of Toronto for my project this year. Though, outside of the lab, I enjoy taking on leadership roles in my community. I currently hold presidency in the school-wide science club and math club, and I actively partake executive roles in youth philanthropies such as Tumai for Tomorrow. In the future, I wish to continue research in molecular biology and further discoveries made in the subject of antibody diversification.

Cathy Tie

Characterizing RNF20 and RNF40 in Class Switching of B Cells

Défi:	Santé
Catégorie:	Sénior
Région:	Peel
Ville:	Mississauga, ON
École:	Glenforest S.S.
Sommaire:	The roles and function
	recombination proce

mmaire: The roles and functions of proteins RNF20 and RNF40 in the class switch recombination process of B cells were investigated. Through polymerase chain reaction (PCR) and PCR clean-up, the PCR products were ligated into an expression vector for flow cytometry. Results revealed the efficiency of over fourteen primers, consequently advancing the research towards an effective antibody response that is critical in protective immunity.

Prix	Valeur
Prix d'excellence - Senior - Médaille de bronze	100,00 \$
Commanditaire: Sciences jeunesse Canada	
Bourse d'admission de l'Université d'Ottawa	1 000,00 \$
Médaillé de bronze, sénior ? Bourse d'admission de 1 000 \$	
Commanditaire: Université d'Ottawa	
Bourse d'études de Western University	1 000,00 \$
Médaillé de bronze - Bourse d'admission de 1 000 \$	
Commanditaire: Université Western	
Total	2 100,00 \$



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