

## ESPC 2011 - Toronto (Ontario)



### Jaclynn Wong, Danny Huang

#### O-GlcNAcylation: Suppressing Cancer Progression

**Défi:** Santé  
**Catégorie:** Sénior  
**Région:** Edmonton  
**Ville:** Edmonton, AB  
**École:** Harry Ainlay School  
**Sommaire:** O-GlcNAcylation is a novel post-translational modification that occurs on a very potent cancer-promoting protein called beta-catenin. In our investigation, we have shown that O-GlcNAcylation inversely regulates beta-catenin's nuclear localization, thereby increasing its interaction with E-cadherin at the plasma membrane, and decreasing its interaction with TCF in the nucleus. This hinders cancer progression as cancer cells become more stable and less likely to proliferate.

#### Biographies

Jaclynn - I am currently in grade 12 at Harry Ainlay High School in Edmonton, Alberta. Next year, I will be going to the University of Alberta in the Faculty of Science. I hope to have a medical career in the future, but I still dream of being a singer/dancer someday. One of my most notable experiences include representing Canada in the 2008 Chinese Bridge Competition in China, and placing sixth out of forty-two teams from around the world. Another notable experience of mine was We day in Vancouver in October 2010, where speakers inspired me to take action as a global citizen. My dream is to travel and to never stop learning about the world and trying ...

Danny - As a Grade 12 students from Harry Ainlay High School in Edmonton, Alberta, I have a variety of interests. In school, I am a member of the Student Council Executive that plans for numerous school events throughout the year. In particular, my current role is to act as a liaison between the school staff and the student body. Additionally, I have been part of the Dance Club for three years. In Grade 12 year, I became an choreographer as well as an instructor, working to create a routine that will be featured in a year end showcase. Also, in the community, my contributions include being a Youth Ambassador for the Canadian Blood Service and a volun...

#### Prix

#### Valeur

Prix du défi - Santé - Sénior	1 000,00 \$
Commanditaire: Instituts de recherche en santé du Canada	
Prix d'excellence - Senior - Médaille d'or	1 500,00 \$
Commanditaire: Sciences jeunesse Canada	
Bourses d'admission de la Faculté des sciences de l'Université Dalhousie	5 000,00 \$
Médaillé d'or, sénior - Bourse d'admission de 5 000 \$	
Commanditaire: Université Dalhousie, Faculté des sciences	
Prix d'admission en sciences de UBC (Vancouver)	4 000,00 \$
Médaillé d'or, sénior - Bourse d'admission de 4 000 \$	
Commanditaire: The University of British Columbia (Vancouver)	
Bourse d'admission de l'Université du Manitoba	5 000,00 \$
Médaillé d'or, sénior - Bourse d'admission de 5 000 \$	
Commanditaire: Université du Manitoba	
Bourse d'études de l'Université Western Ontario	4 000,00 \$
Médaillé d'or - Bourse de début d'études de 4 000 \$	
Commanditaire: Université Western Ontario	
Bourse d'admission de l'Université d'Ottawa	4 000,00 \$
Médaillé d'or, sénior - Bourse d'admission de 4 000 \$	
Commanditaire: Université d'Ottawa	
Prix Platine - Meilleur projet senior	5 000,00 \$
Commanditaire: Sciences jeunesse Canada	
Prix du meilleur projet	10 000,00 \$
Commanditaire: Sciences jeunesse Canada	
Total	39 500,00 \$

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