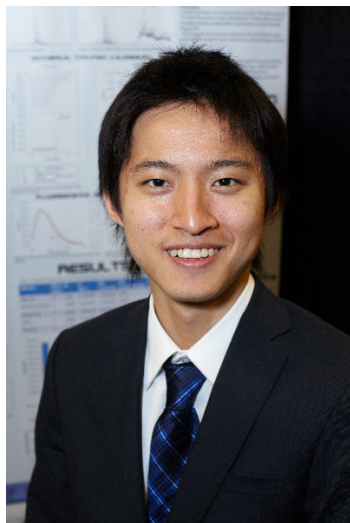


# ESPC 2012 - Charlottetown (Île-du-Prince-Édouard)



## Weige Zhao

### Enhancing Chemotherapy

**Défi:** Santé

**Catégorie:** Sénior

**Région:** Toronto

**Ville:** Toronto, ON

**École:** A.Y. Jackson S.S.

**Sommaire:** This investigation assays the phospho-regulation of the eIF4E/4E-BP2 interaction, a system implicated in many cancer types. Residues on 4E-BP2 were progressively phosphorylated and its binding with eIF4E was assessed using isothermal titration calorimetry. Phosphorylating 2 sites on 4E-BP2 significantly weakened affinity and increased enthalpy and entropy. These results will lay the ground work for further investigation of this interaction as a drug target.

### Biographie

Change has been a big part of my life. I was born in Beijing, but have lived in London, Singapore, Vancouver and Toronto. In fact, I've changed schools every single year since Grade 8! Similarly, my areas of interest have varied quite a bit, oscillating from politics to finances. That was until 2 years ago, when a trip to the zoo inspired me into Biology, and my passion took over. From then, I became the leader of science clubs, took part in science competitions, organized science-related events, worked in science labs, went to school in the Ontario Science Centre...You name anything "nerdy", I've probably done it! My current project regarding cancer stemmed from my last project about neurology. The same system that governs cellular mechanisms in the brain is implicated in many cancers. The realization of conserved patterns throughout Nature's many intricacies inspired and awed me, and hence the project was born. If I were honored with the opportunity to provide advice for students who want to do a similar project, I would say: Be confident! I went through lists of professors and faced countless rejections before securing this opportunity. But in the end, it's worth it!

### Prix

### Valeur

Prix du défi - Santé - Sénior	1 000,00 \$
Commanditaire: Instituts de recherche en santé du Canada	
Prix d'excellence - Sénior - 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 \$
Médaille 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 \$
Médaille 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 \$
Médaille d'or, sénior - Bourse d'admission de 5 000 \$	
Commanditaire: Université du Manitoba	
Bourse d'admission de l'Université d'Ottawa	4 000,00 \$
Médaille d'or, sénior - Bourse d'admission de 4 000 \$	
Commanditaire: Université d'Ottawa	
Bourse d'études de Western University	4 000,00 \$
Médaille d'or - Bourse d'admission de 4 000 \$	
Commanditaire: Université Western	
Total	24 500,00 \$