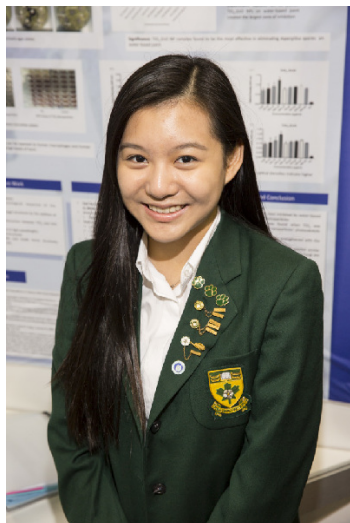


ESPC 2015 - Fredericton (Nouveau-Brunswick)



Ariana Auyeung

The Implementation of Nanoparticles to Eliminate Aspergillus Fungi

Défi: Innovation

Catégorie: Sénior

Région: Greater Vancouver

Ville: Vancouver, BC

École: York House School

Sommaire: Aspergillus fumigatus and Aspergillus flavus are two common fungi that emit mycotoxins - toxic compounds to vertebrates and animals. The toxins cause human infections, induce cancer, and food spoilage. A novel solution of titanium dioxide nanoparticles combined with zinc oxide nanoparticles was created to significantly decrease the amount of Aspergillus spores. This solution significantly reduces the incidence of Aspergillus-related diseases in the community.

Biographie

Hello! My name is Ariana and I am a grade 11 student at York House School in Vancouver, BC. I absolutely LOVE chemistry, biology, and sharing my passion for science by leading science organizations for youth across BC. When I am not at the lab running my experiments, I can be found fervently studying for exams, volunteering for different charitable organizations, playing music, and playing sports. I especially enjoy volunteering with Free the Children, which I began to work with since grade 7. My volunteer group has raised money to build a school, provide free healthcare, and build a water well for a village in Kenya. In music, I have completed my ARCT exam in piano and I have a newfound enthusiasm for the cajon. I also play badminton and ultimate. Before deciding to focus on my science fair endeavours, I had badminton training for a minimum of 15 hours every week - competing in provincial and national tournaments. These experiences have greatly shaped who I am. I am extremely excited to explore CWSF this year, to share my project that uses nanoparticles to eliminate human pathogenic fungi, and to meet young, like-minded scientists.

Prix

Valeur

Prix d'excellence - Sénior - Médaille d'argent Commanditaire: Sciences jeunesse Canada	
Bourses d'admission de la Faculté des sciences de l'Université Dalhousie Médaille d'argent, sénior - Bourse d'admission de 2 500 \$ Commanditaire: Université Dalhousie, Faculté des sciences	2 500,00 \$
Prix d'admission en sciences de UBC (Vancouver) Médaille d'argent, sénior - Bourse d'admission de 2 000 \$ Commanditaire: The University of British Columbia (Vancouver)	2 000,00 \$
Bourse d'admission de l'Université du Nouveau-Brunswick Médaille d'argent ? Bourse d'admission de 2 500 \$ Commanditaire: Université du Nouveau-Brunswick	2 500,00 \$
Bourse d'admission de l'Université d'Ottawa Médaille d'argent, sénior - Bourse d'admission de 2 000 \$ Commanditaire: Université d'Ottawa	2 000,00 \$
Bourse d'études de Western University Médaille d'argent - Bourse d'admission de 2 000 \$ Commanditaire: Université Western	2 000,00 \$
Total	11 000,00 \$