

## ESPC 2016 - Montreal (Québec)



## Biographie

My name is Amit Scheer, and I am a Grade 12 student at Colonel By Secondary School in Ottawa, Canada. I have been very involved in science throughout high school. For my nanobiotechnology research projects, I have won national and international awards from the Google Science Fair, the Sanofi Biogenius Canada, the Canada-Wide Science Fair (CWSF), and the Intel International Science and Engineering Fair (ISEF). I am currently developing a novel scaffold vaccination platform at the National Research Council Canada (NRC) and the University of Ottawa. In addition, I am actively promoting a passion for science among youth, as student leader and national Ambassador Program Coordinator for the Foundation for Student Science and Technology (FSST). In the future, I plan to study immunology and chemistry to eventually become a scientist in the related disciplines. I continue to be inspired by several Nobel laureates who I was thrilled to meet over the past two years at ISEF, including J. Michael Bishop and Harry Kroto. Pursuing research throughout high school was an experience that has profoundly influenced my character, and I plan to continue developing my innovations, which I am currently working to patent and publish, throughout my undergraduate degree and beyond.

## **Amit Scheer**

## ImmunoBEAM: A Novel Biomaterial Conjugate as a Therapeutic Vaccination Platform

Youth Science Canada Sciences jeunesse Canada

Défi:	Santé
Catégorie:	Sénior
Région:	Ottawa
Ville:	Ottawa, ON
École:	Colonel By S.S.
Sommaire:	Current therapeutic
	delivery and low bio
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mmaire: Current therapeutic vaccinations are limited in their efficacy by inefficient delivery and low bioavailability. A novel biomaterial matrix and poly(amidoamine) (PAMAM) dendrimer conjugate, ImmunoBEAM, was developed as a peptide vaccination platform to overcome these challenges and enhance therapeutic effects against diseases including cancer.
Vaccination platform components were synthesized and characterized, and therapeutic efficacy was demonstrated in cell-based assays. This platform

Prix	Valeur
Le Prix Manning en innovation - Sénior	500,00 \$
Commanditaire: Ernest C. Manning Awards Foundation	
Le Prix Manning en innovation	
Commanditaire: Ernest C. Manning Awards Foundation	
Prix d'excellence - Sénior - Médaille d'or	
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'admission de l'Université d'Ottawa	4 000,00 \$
Médaillé d'or, sénior - Bourse d'admission de 4 000 \$	
Commanditaire: Université d'Ottawa	
Bourse d'études de Western University	4 000,00 \$
Médaillé d'or - Bourse d'admission de 4 000 \$	
Commanditaire: Université Western	
Total	26 750,00 \$

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