



## ESPC 2019 - Fredericton (Nouveau-Brunswick)



## **Christopher Lamont**

## Creation of an Intravenous Fluid Administration System for Low Income Countries

Défi: InnovationCatégorie: JuniorRégion: Bay AreaVille: Hamilton, ON

**École:** St. Margaret Mary E.S.

**Sommaire:** In low and middle income countries, intravenous fluid pumps are not

available due to cost and the need for electricity. This project describes the design and development of an innovative, affordable, 3D printed, mechanical intravenous fluid delivery system (IV FDS) for use in under resourced countries. The IV FDS is the first of its kind and has the potential

to save millions of lives worldwide.

## **Biographie**

David Christopher Lamont is a Grade 8 student at St. Margaret Mary School in Hamilton, Ontario. This is Christopher's second CWSF; he attended the CWSF in Ottawa in 2018 where he received a Silver Medal and the Youth Can Innovate Award. This year, Christopher was motivated to complete a project that would have broad reaching implications. After learning from the World Health Organization that diarrhea and dehydration causes death in almost 1,500 children less than 5 years of age per day in low and middle income countries, he decided to design and build a mechanical intravenous fluid delivery system (IV FDS) for use in children. Christopher's low cost, innovative, 3D printed IVFDS is the first of its kind in the world and has the potential to save millions of children's lives in under resourced countries. Christopher is passionate about math, computer sciences and engineering. Outside of school he spends most of his time playing competitive hockey. Participating in Science Fairs at various levels has given Christopher the opportunity to explore new interests, develop ideas and gain confidence and skill in communicating his work to others.

Prix	Valeur
Prix S.M. Blair Family Foundation	500,00 \$
Commanditaire: S.M. Blair Family Foundation	
Prix d'excellence - Junior - Médaille d'or	
Commanditaire: Sciences jeunesse Canada	
Bourse d'études de Western University	4 000,00 \$
Médaillé d'or - Bourse d'admission de 4 000 \$	
Commanditaire: Université Western	
Prix Jeunesse innovante - Junior	500,00 \$
Commanditaire: La Fondation Gwyn Morgan et Patricia Trottier	·
Total	5 000,00 \$





