

# CWSF 2018 - Ottawa, Ontario



## Jude Victoria

### Enhancing SRD of Self-Assembling Polymeric Nanocarriers for Drug Delivery

**Challenge:** Health

**Category:** Senior

**Region:** Montreal

**City:** Saint Laurent, QC

**School:** Collège Marianopolis

**Abstract:** Polymers are large molecules of repeating simple chemical units. By linking a hydrophobic, water hating, and a hydrophilic, water loving, block together, an Amphiphilic Block Copolymer is created. When this polymer is dissolved into a polar liquid, it will form Micelles. These micelles have a hydrophilic exterior and a hydrophobic interior which can contain drugs and deliver them to cancer cells using stimuli responsive degradation.

#### Biography

I am an eighteen year old second year CEGEP student, in Health Sciences, at Marianopolis College in Montreal. While focusing on my studies I love to play sports such as rugby, badminton and I also love to swim. As such I am a lifeguard and a swimming instructor. After CEGEP, I plan on continuing to study in the Health Science field and become a doctor. However I will still be doing research on the side. Which has allowed me to win numerous awards and given me amazing opportunities such as being on the news and radio stations. I am particularly interested in the field of Nano-biotechnology. It is a new and upcoming field that has promising results in the field of medicine and pharmaceuticals. Which lead me to investigate about Polymer based Nano-carriers as drug delivery systems. I would like to continue working and researching in this field and find more advantages to this particular method of drug delivery.

#### Awards

#### Value

Excellence Award - Senior - Silver Medal Sponsor: Youth Science Canada	
Carleton University Entrance Award Senior Silver Medallist - \$2,000 Entrance Award Sponsor: Carleton University	\$2 000
Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2500 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 500
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Ottawa	\$2 000
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
<b>Total</b>	<b>\$10 500</b>