

# CWSF 2016 - Montreal, Quebec



## Evan Sharma

### Poopalicious: Changing the Microbiome with FMT

**Challenge:** Health

**Category:** Junior

**Region:** Frontenac, Lennox & Addington

**City:** Kingston, ON

**School:** Calvin Park P.S.

**Abstract:** In this experiment, 16s ribosomal RNA bacterial sequencing was performed on the castings of 6 worms which were fed an unhealthy high carb diet (UHCD). A 650% increase in healthy bacteria (Firmicutes) and a 42% reduction in pro-inflammatory bacteria (Proteobacteria) was seen in 3 the worms randomized to FMT (p-value = 0.00088). These results are important as FMT may help people with autoimmune diseases.

#### Biography

Evan Sharma is a grade 7 student from Calvin Park Challenge Program in Kingston, Ontario. Evan is an acclaimed impressionist artist, recently having his work selected to appear in the Artist Project and being featured in Nuvo Magazine and Canada AM. His vibrant impressionist paintings are been purchased by collectors across the country. Evan is a competitive alpine ski racer who loves big mountain skiing, a competitive sailor, and volleyball player. Evan has thoroughly enjoyed presenting his scientific work in the past - looking at the effects of Red Bull on insect activity, developing a cooling system for a Hazmat suit and this year looking at the effects of fecal microbial transplant to change the microbiome. Evan is interested in careers in medicine and art and his inspiration for this project came from an article that he read on FMT online. He is planning to create and evaluate a customized FMT pill for human use. Evan offers this advice to future scientists looking to do a research project, "Try to do a project that you are very interested in and one that solves a big problem."

#### Awards

#### Value

Excellence Award - Junior - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 000