



CWSF 2010 - Peterborough, Ontario



Johnathon Butler

Aquifer Recovery

Division: Earth & Environmental Sciences

Category: Junior

Region: Quinte

City: Stirling, ON

School: Stirling Senior P.S.

Abstract: A model of an aquifer was built and contaminated with red food dye. Water was then used to flush the contaminate from the aquifer until it came out clear. Various amounts of contaminate were used to find the ratio of water to contaminate.

Biography

I am a kid that is involved with everything. Weather it is cross-country, soccer, basketball, swimming, chess, piano or science fair. I used to be on a swim team, but now I regularly participate in triathlons. I am a straight A student an with these makes I am hoping to become an engineer, just like my grandfather was. When I was in grade 6 I came 3rd in a national remembrance day poster contest. That same year i got a visit from my town's mayor presenting me with our towns redesigned pin. I was the first person to get one.





CWSF 2010 - Peterborough, Ontario



Justin Whitaker

Bio-Binding: A Microbial Precipit-Action

Division: Earth & Environmental Sciences

Category: Senior

Region: Quinte

City: Belleville, ON

School: Moira S.S.

Abstract: An artificially induced particle cementation via microbial induction of soil samples was produced using specific urease positive microbes. In a calcium rich, water prone soil environment these urease positive microbes work effectively under harsh pH conditions and room temperatures to produce a binding particulate matrix in the soil. This system can eliminate liquefaction susceptible soil deposits during cyclic loading produced by earthquakes.

Biography

Greetings from Justin Whitaker! I am a Grade 12 student at Moira Secondary High School in Belleville, Ontario. Science is my great passion! The pursuit of higher education is an endeavor that I intend to fully participate in, with marked enthusiasm. The key to realizing this journey, for me, is to focus not only upon scientific achievements, but also to appreciate the vast wealth of community opportunities to discover all new things; in theory and application. I have actively contributed to school events such as the 30 Hour Famine and Moira River Clean-up, which focus on earthly-proactive projects. Through my high school, I am doing a semester rotation through Quinte Health Care, and I am in an outdoor education program; allowing me to enjoy a healthy active lifestyle. I love to mentor others. I am currently a senior mathematics and science tutor to fellow students. My passion is rooted in science with an eventual goal to enrich, those in need, as a cardiac surgeon. I have interests in life sciences and engineering. I may, one day, build a robotic heart! The pursuit of scientific knowledge inspires me to explore and expand on innovative science that will enrich our future.

Awards

Value

Dalhousie University Faculty of Science Entrance Scholarship Senior Gold Medallist - \$4000 Entrance Scholarship Sponsor: Dalhousie University	\$4 000
UBC Science (Vancouver) Entrance Award Senior Gold Medallist - \$4000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$4 000
University of Ottawa Entrance Scholarship Senior Gold Medallist - \$20,000 Entrance Scholarship (\$5,000 each year for 4 years) Sponsor: University of Ottawa	\$20 000
The University of Western Ontario Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: University of Western Ontario	\$4 000
Gold Medal - Earth & Environmental Sciences - Senior Sponsor: Suncor Energy Inc.	\$1 500
EnCana Platinum Award - Best Senior Project Sponsor: EnCana Corporation	\$5 000
EnCana Best in Fair Award Sponsor: EnCana Corporation	\$10 000
Total	\$48 500





CWSF 2010 - Peterborough, Ontario

**Emmanuelle Bérubé****Comparing the Efficiency of Paper-Based and Computer-Based Approaches for Memorization****Division:** Life Sciences**Category:** Junior**Region:** Quinte**City:** Belleville, ON**School:** Albert College

Abstract: This experiment was conducted to determine the efficiency of paper-based and computer-based studying methods. Primary school students were given Hebrew letters to memorize from study sheets, flash cards or a computer chart. Their test results indicate that paper-based approaches are much more efficient than computer-based approaches for short-term memorization.

Biography

I spent the first five years of my life in Northern Québec, growing up in a village of 35 people, where my father was a bush pilot and an outfitter. My house was the former school and we were the only children, so my older brother and sister, Louis and Gabrielle, were taught by my mother. After my father passed away, I moved with my family to Ontario. I started going to school there so my brother, my sister and I could learn English. However, I continued speaking French at home and still do. I am a returning participant at the Canada Wide Science Fair. I enjoy horse-back riding, long distance running, writing, the arts and spending time with my family and my cat. When I am older, I want to be either a chef or a journalist.

Awards**Value**

Honourable Mention - Life Sciences - Junior	\$100
Sponsor: Pfizer Canada	
Total	\$100





CWSF 2010 - Peterborough, Ontario



Emilie Leneveu

Dice it up!

Division: Physical & Mathematical Sciences

Category: Junior

Region: Quinte

City: Quinte West, ON

School: École secondaire publique Marc-Garneau

Abstract: My project is about non transitive dice. Non transitive dice are counter-intuitive dice that trick your opponent. When using non transitive dice correctly, you can win the majority of the time when rolling the dice. This means that you will roll the highest number most of the time. Non transitive dice are a great example of the non transitive relationship where $A > B > C > A$ etc.

Biography

My name is Emilie Leneveu. I am 12 years old and attend Marc Garneau Secondary School in Trenton Ontario. I love both mathematics and the sciences and also enjoy geography. I participate in several extracurricular activities such as piano, sports (i.e. Volleyball and basketball) and theatre. I hope to continue to do well academically and later go on to University. When I am older I wish to be a mathematician, but there is also the possibility of becoming a marine biologist. I also consider myself an author, I have written 3 small books and hope to publish them someday. I am both excited and honoured to be a part of the Canada Wide Science Fair 2010.





CWSF 2010 - Peterborough, Ontario



Dan Manning

The Effect of Music On Milk Production (The Moosic Project)

Division: Life Sciences

Category: Intermediate

Region: Quinte

City: Belleville, ON

School: Albert College

Abstract: The main objective of a dairy farm is to produce as much milk as possible from their herd. Interested in the factors that produce a great amount of milk, I put a possible variable to the test. I tried different genres of music to see if it would change the amount of milk given.

Biography

My name is Danny Manning. I'm 14 years old and I live in Belleville, Ontario. I am involved with drama programs, and I play goalie for a local rep hockey team as well. I enjoy helping out in school classrooms with the younger grades. I also work on a dairy farm throughout the year, particularly in the summer; dairy farming has become a passion of mine. I haven't decided what I want to pursue as a career as I'm more of a "spur of the moment kinda guy".

