



CWSF 2013 - Lethbridge, Alberta



Jack Lott

Bench the Bacteria: A Radical Sanitizing System

Challenge: Innovation Category: Junior

Youth Science Canada

PO Box 297

416-341-0040

Region: Frontenac, Lennox & Addington

City: Kingston, ON School: Calvin Park P.S.

Abstract: Protective equipment worn by hockey players is a breeding ground for

harmful bacteria that pose a serious threat towards a player's health. My project explored the use of hydrogen peroxide and ozone in eliminating these bacteria. Ozone and hydrogen peroxide delivery systems were devised and microbiology experiments were conducted to test their

effectiveness. Two sanitizing systems were developed integrating these two

technologies.

Biography

I am from Kingston, Ontario. I am in grade eight and currently attending Calvin Park Public School. I enjoy team sports and competed on the school cross-country and frisbee teams, as well competitive volleyball and hockey teams. I am an avid golfer and tennis player and spend most of my summers at our family cottage in the Eastern Townships in Quebec. I attended CWSF last year in Prince Edward Island and my partner and I were fortunate enough to win a silver medal and the CSSE Engineering Innovation Award (Junior). The inspiration for my project came from my keen interest in both health and sports. Many gaps remain in terms of safety in sports. As a hockey player myself, the idea that lethal bacteria may lurk in my hockey equipment inspired me to a pursue a scientific investigation into this problem. I would love to see my innovations put into play. My career goal is to become an engineer or pursue medicine. I will carry with me, my experiences at Regional and Canada Wide Science Fairs.

| Awards | Value |
|--|---------|
| Excellence Award - Junior - Bronze Medal | \$100 |
| Sponsor: Youth Science Canada | |
| Western University Scholarship | \$1 000 |
| Bronze Medallist - \$1000 Entrance Scholarship | |
| Sponsor: Western University | |
| Total | \$1 100 |





