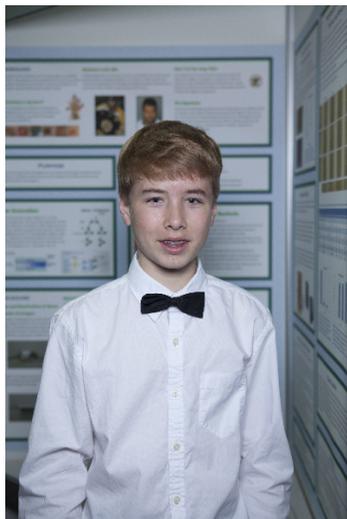


# CWSF 2013 - Lethbridge, Alberta



## Jack Lott

### Bench the Bacteria: A Radical Sanitizing System

**Challenge:** Innovation

**Category:** Junior

**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 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 Sponsor: Youth Science Canada	\$100
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 100