

CWSF 2007 - Truro, Nova Scotia



Brian Krug

Ames Test: Chemicals to Cancer

Division: Physical & Mathematical Sciences / None

Category: Junior

Region: Waterloo-Wellington

City: Guelph, ON

School: King George P.S.

Abstract: This research used the Ames test, a standard reverse mutation assay, to assess environmental pollutants for mutagenic activity, mutagens being potentially carcinogens. Literary articles had previously found correlations between environmental pollutants and increased cancer incidence. The Ames test uses 6 strains of *Salmonella typhimurium* to detect reverse mutations in a his- mutant population. A positive response was observed and confirmed testing bus exhaust.

Biography

I was born on May 12th 1993. I moved to Guelph when I was 3 years old. I attend French Immersion in Grade 8 at King George Public School. I am a competitive cross-country skier during the winter, but I also enjoy tennis, swimming, biking, badminton, and playing my clarinet. I was grade 6 valedictorian and won the award of academic excellence. This year I won the French Public Speaking Award. I've participated for 2 years in the regional science fair, WWSEF, this year qualifying for CWSF. My future plans are to remain in science, particularly in my interest, molecular genetics.

Awards

Value

The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
Silver Medal - Life Sciences - Junior Sponsor: Pfizer Canada	\$700
Total	\$2 200