

# CWSF 2008 - Ottawa, Ontario



## Sarah Cheeseman

### Microbes At War

**Division:** Physical & Mathematical Sciences / None

**Category:** Senior

**Region:** Simcoe County

**City:** Meaford, ON

**School:** Pretty River Academy

**Abstract:** The purpose of this experiment was to determine the affects of four common antibiotics on Gram-negative and Gram-positive bacteria; and to study antibiotic resistance in bacteria which have been exposed to ultraviolet light. Bacterial vulnerability to antibiotics was measured in culture plates using susceptibility discs. It was concluded that the two classifications of bacteria reacted differently to the antibiotics tested due to dissimilar cellular structure.

### Biography

My name is Sarah Cheeseman and I am from Meaford, Ontario. I am a Grade 12 student of Pretty River Academy. My hobbies include horseback riding, school, scrapbooking, travel, and reading. I live on a small farm where I keep my two horses whom I ride and train regularly. I have participated in many community service activities such as working with nursing homes, volunteering at community events, and training horses and their riders. I participate in extra curricular activities at school including band and flute ensembles, working as the Editor of the yearbook, and joining the student council. I also participate in the Duke of Edinburgh Award Program, and am currently completing the Gold Level. I have a part time job at McGinty's Café in Meaford, where I have happily worked since May 2006. I have achieved various awards including the honour roll, pride awards, music, science and nutritional science cumulative awards, and various awards from science fairs. In the future, I will work in the field of forensic pathology. I will be attending Acadia University in Nova Scotia, with a Major in Biology. My goal is to apply to medical school and specialize in forensic pathology.

### Awards

### Value

The Canadian Society for the Weizmann Institute of Science Scholarships The Maurice Pollack Foundation Scholarship Sponsor: The Canadian Society for the Weizmann Institute of Science (Weizmann Canada)	\$9 400
Honourable Mention - Life Sciences - Senior Sponsor: Pfizer Canada	\$100
<b>Total</b>	<b>\$9 500</b>