

# CWSF 2009 - Winnipeg, Manitoba



## Kyle Schole

### More to Light Than Meets the Eye Phase III

**Division:** Physical & Mathematical Sciences / Environmental Innovation

**Category:** Intermediate

**Region:** Edmonton

**City:** Pickardville, AB

**School:** Richard F Staples Secondary School

**Abstract:** LED light has been utilized as a superior energy source for both bacteria and animal cells. Various varieties of these lights were investigated and the LED-growth and LED-oxygen emission relationship was examined in a controlled lab setting using the algae strain *Chlorella kessleri*. After testing, it was determined that 625nm was most efficient as it boosted oxygen produced per algae under this light.

### Biography

Kyle Schole lives on a farm located about one hour northwest of Edmonton, Alberta. His family consists of his mother, father, younger sister and brother, and a variety of farm animals. Attending Grade Ten at RF Staples Secondary School, in Westlock, his favorite pastimes include playing the flute, cooking, reading, playing soccer, running the theater lights for the drama class, and of course, working on his latest science fair project. This year, Kyle is running for a position on the Student's Union, participated in "Mr. Speaker's MLA For A Day" program, as well as the model UN. Kyle has been in the science fair since the third grade, and is privileged to attend the Canada Wide Fair for a third time. Upon graduation, Kyle hopes to enter the field of microbiology, or teach. In addition to science fair, he has also been in 4-H for three years with a beef project. In his last year, he also filled the roll of club secretary. Kyle has had a lot of fun with all of his past science projects and feels that the experience gained from them will aid him later in life, whether he enters a profession in science or elsewhere.

### Awards

### Value

Australian National Youth Science Forum Award	\$2 500
<b>Total</b>	<b>\$2 500</b>