

# CWSF 2009 - Winnipeg, Manitoba



## David Skibinsky, Jordan Brears

### Stirling Engine: Thinking Outside the Gas Pump

**Division:** Health Sciences / None

**Category:** Senior

**Region:** Regina

**City:** Regina, SK

**School:** Winston Knoll Collegiate

**Abstract:** Our project is on the Stirling engine. A Stirling engine is a heat engine that runs on temperature difference. It has an air tight piston chamber, fly wheel, and a foam piston. As the hot air rises it contacts the denser, cooler air and sinks, pushing the piston up and down. We look at the power output and possible modern applications for the engine.

#### Biographies

David - My name is David Skibinsky. I live in Regina, Saskatchewan and attend Winston Knoll Collegiate in grade twelve. I plan on attending the University of Regina, faculty of engineering, when I graduate, and would like to continue my studies at MIT after that. I enjoy playing hockey (I'm a goalie) and all sports and outdoor activities. I also enjoy school and travelling. One of my dreams is to invent something that will change the world. I would also like to work at NASA some day.

Jordan - I am currently a grade 12 student at Winston Knoll Collegiate. I enjoy travelling, politics, chess, and sports-- more notably soccer. I have been on the handball, chess, and mock trial teams at my school. I was also invited and attended the annual Interchange on Canadian Studies Conference here in Regina last April. In this nation wide conference, youth discussed the theme: Energy and the future. I have also attended the national chess championship twice as a member of team Saskatchewan. I also play soccer in both the winter and the summer seasons. I also have a job at Best Buy as a customer service representative since November 2007. I also ...

#### Awards

#### Value

Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 000
The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$3000 Entrance Scholarship Sponsor: University of Ottawa	\$3 000
Silver Medal - Engineering - Senior Sponsor: Youth Science Canada	\$700
<b>Total</b>	<b>\$7 200</b>