

## CWSF 2011 - Toronto, Ontario



### Jacquie Gulevich

#### From Green to Gold

**Challenge:** Energy

**Category:** Senior

**Region:** Northern British Columbia

**City:** Fort St. John, BC

**School:** North Peace Secondary

**Abstract:** This project involved the harvesting of cyanobacteria from a local lake to create biofuel. Many methods including microfilters, photobioreactors, and centrifuges were tested. It was discovered that the cyanobacteria have the potential for biofuel production, although harvesting in large quantities proved difficult; therefore, no biofuel was produced. Cyanobacteria are photosynthetic; therefore, the biofuel would be a carbon neutral fuel that doesn't use a food source.

#### Biography

I was born and raised in Fort St. John, BC and I am a grade 11 student at North Peace Senior Secondary. Recently, in grade 7, 8 and 9, I was awarded Top Academic Student for my grade as well as top math, science, french and accounting student in grade 10. I have been awarded the BC Hydro, Peace Cooperative, BC Innovation, SCWIST, and BCIC Young Innovators scholarship awards at my regional science fair level. I attended CWSF 2008 and 2009 where I won a honourable mention for my health sciences project in 2009. I have enjoyed competing and performing Irish dance for nearly 10 years and continue to pursue this sport. My other hobbies include outdoor activities such as river boating, fishing, hunting and snowmobiling. I actively volunteer at my local library for the reading buddies program as well as I am a member of my schools student advisory team. I plan to attend university to study sciences or kinesiology with the goal to becoming a medical doctor. I enjoy living in the North with the many opportunities the area has to offer.

#### Awards

#### Value

Challenge Award - Energy - Senior Sponsor: Youth Science Canada	\$1 000
Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	\$300
The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
<b>Total</b>	<b>\$3 300</b>