

# CWSF 2011 - Toronto, Ontario



## Melissa Chopcian

### Pacemaker Battery Improvements

**Challenge:** Innovation

**Category:** Intermediate

**Region:** Lambton County

**City:** Sarnia, ON

**School:** Northern C.I. & V.S.

**Abstract:** The purpose of this project is to develop an innovative technique for extending the life of a pacemaker battery. This would improve the quality of life for people who need pacemakers. This project proved that battery life may be improved by harvesting the kinetic energy and using it to recharge the battery in a pacemaker. This would have both human and commercial benefit.

#### Biography

My name is Melissa Chopcian. I am a grade 9 student at Northern Collegiate in Sarnia, Ontario. My science fair project is an innovation that can be used to recharge a pacemaker battery. I have many interests. I like to volunteer at our local hospital and nursing home. I also like to play the piano and alto saxophone. I really enjoy playing sports such as hockey, skiing, sailing, swimming, volleyball, and tennis. I have an older brother named Christopher. He is also competing in the CWSF this year in the senior category. My favorite subjects in school are math and science. I really enjoy solving equations and learning about neat things. When I grow up, I want to become a pediatrician. I truly like helping others, especially sick children.

#### Awards

#### Value

Excellence Award - Intermediate - Silver Medal Sponsor: Youth Science Canada	\$700
The University of Western Ontario Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Western Ontario	\$2 000
<b>Total</b>	<b>\$2 700</b>