

## CWSF 2014 - Windsor, Ontario



### Ethan Bickford

#### Magnetorheological Fluid: Can It Save Us From Earthquakes?

**Challenge:** Innovation

**Category:** Senior

**Region:** Eastern Newfoundland

**City:** St. John's, NL

**School:** Holy Heart High School

**Abstract:** Cheaply creating an effective defense against natural disasters such as earthquakes and floods, through the use of physics, chemistry, and innovative and creative engineering. By using magnetorheological fluid, your house will be suspended upon shocks which provide a solid foundation--until an earthquake hits.

#### Biography

Sometimes it takes a young, creative mind to solve big problems. Being a huge theatre kid and imaginative photographer, I have a very creative mind and used that to my advantage when creating my project which hopefully solved a big problem. Before attending my first science fair this year, I will be on another trip as part of a speak off I won earlier this year as well.