

## CWSF 2016 - Montreal, Quebec



### Emily Rutledge, Amy MacFarlane

#### Counteracting Cataracts

**Challenge:** Health

**Category:** Intermediate

**Region:** East Parry Sound

**City:** Burk's Falls, ON, South River, ON

**School:** Almaguin Highlands H.S.

**Abstract:** Cataracts affect more than 2.5 million Canadians alone. Currently the only possible treatment options for cataracts are surgical procedures. Our ultimate goal for this project is to test possible solutions on a synthetic cataract we engineered. For this year, we formed our own cataract within a cow's lens by denaturing the crystallin proteins.

#### Biographies

Emily - Emily Rutledge is a grade 9 honour's student at Almaguin Highlands Secondary School. She is enrolled in the French Immersion program and her favourite subjects are English, Science, Media Arts, and Gym. Emily has a love for many sports including long distance running and volleyball. Spending time staying fit and hanging out with her friends is Emily's favourite pass-time. Emily is also passionate about women's empowerment and education. Through the "Me-to-We" organization, Emily has travelled to India and Ecuador (Summer 2016) to aid these causes. Emily lives in Burk's Falls, Ontario with her family and her chocolate lab, Duke. Emily hopes to...

Amy - Amy MacFarlane is a fourteen year old honour student, at Almaguin Highlands Secondary School. She is actively involved in her school and village community. Amy is very academically motivated, she has been enrolled in the extended french program for the previous five years. Amy also participates in a variety of extracurricular activities such as figure skating, cross country running as well as track and field. Amy loves to volunteer at her local figure skating club and enjoys coaching children. Amy aspires to attend the University of Ottawa for her undergraduate studies. She then strives to attend McGill University for her Doctor of Medicine d...

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