

# CWSF 2013 - Lethbridge, Alberta



## Alexandria Schraenkler

### Nyctalopia - Out of the Darkness

**Challenge:** Innovation

**Category:** Intermediate

**Region:** Renfrew County

**City:** Douglas, ON

**School:** Opeongo H.S.

**Abstract:** The purpose of my innovation is to design and create a light for dogs with night blindness (nyctalopia), which automatically turns on when they are moving and turns off when they are resting. My dog Penny, like many other dogs, experience nyctalopia, either as a result of a genetic defect (e.g. PRA, Retinal Dysplasia, or Congenital Stationary Night Blindness) or from the natural aging process.

#### Biography

I am Alexandria Schraenkler, studying in Grade 9 at Opeongo High School in Douglas, Ontario. I enjoy a variety of hobbies and interests such as sports, science, math, nature and hunting with my family. I am very involved in as many extra-curricular sports at school and within my community as I can. My favourite sport is soccer, which I have been playing for the past 10 years. This year I made my high school basketball, volleyball, badminton, and soccer team. The inspiration for my project this year is my dog Penny. I have always loved animals, and enjoy many hours playing and relaxing with Penny. She has made me realize I truly want to become a veterinarian. My advice for anyone thinking about doing a project is that they should come up with a project that relates to them personally and they will enjoy working on it. I also believe that you should never give up, if something unforeseen arises, you should work through it, doing additional research and seeking guidance from a mentor. Participating in my regional and Canada wide science fairs over the past couple years has been a life changing experience; I encourage everyone to participate.

#### Awards

#### Value

Excellence Award - Intermediate - Gold Medal Sponsor: Youth Science Canada	\$700
Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University	\$4 000
<b>Total</b>	<b>\$4 700</b>