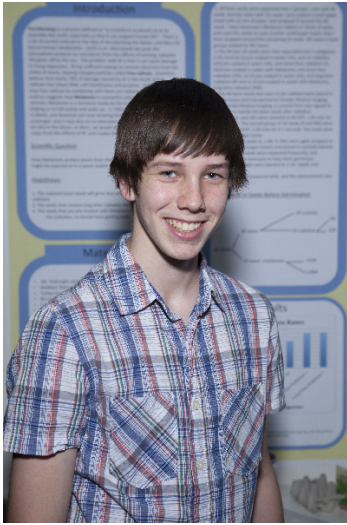


## CWSF 2013 - Lethbridge, Alberta



### Noah Smith

#### Ray, Mel, and the Beanstalk!

**Challenge:** Discovery

**Category:** Junior

**Region:** Bay Area

**City:** Dundas, ON

**School:**

**Abstract:** Does pre-treatment with Melatonin protect irradiated seeds from damage? 2 dosages of radiation were compared. Results: the radiated group grew worse than the control group. Also, in the short-time radiation group, plants pretreated with Melatonin were much taller than the no Melatonin plants, and almost as tall as control plants. Melatonin also seemed protective in the long-time radiation group, but plant deformities were more common.

#### Biography

My name is Noah Smith, and I am 14 and I've lived in Dundas, Ontario with my parents and 3 siblings for most of my life, except for the 3 years we lived in the middle east. I am in grade 8 at Hamilton Academy of Performing Arts where I take the usual subjects, plus drama, singing, violin, and Ballet. I've studied Ballet for many years, and I have been really lucky to be in the National Ballet of Canada's Nutcracker for five years! I also love sports and play soccer and hockey, and spend time scootering at our local indoor skate park. I am interested in the idea of Terraforming and I had read that ionizing radiation was one of the main barriers to it. I researched things that might protect against ionizing radiation, and came across Melatonin, which I then saw in the drug store causing me to think up my experiment with bean plants. I might look at different plants, or change the radiation dose next year. For future contestants, do a project in the area that interests you, and don't be afraid to think big. I am very happy to be on team BASEF at CWSF.

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