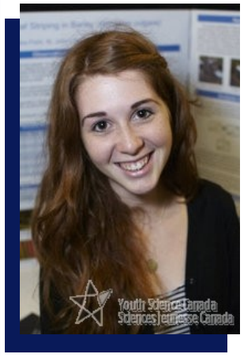
Canada-Wide Science Fair

Prince Edward Island…



Alexandra Ficht, Cambridge, St. John's-Kilmarnock School

A Study of the Leaf Striping in Barley

Alexandra's project aimed to determine whether the variegated leaf striping in barley was controlled by the cytoplasmic genome, nuclear genome, or both. Further investigations were made regarding the number of chloroplasts in normal versus defective leaves to identify the difference in energy production by photosynthesis.

Awards: Excellence Award – Senior - Gold Medal ($1500), Scholarship offers to U of Ottawa ($4000), Dalhousie ($5000), UBC ($4000), U of Manitoba ($5000), and Western ($4000).

Ronald Vuong and Ian Harold Rodgers, Guelph, Centennial Collegiate & Vocational Institute

Electricity from Fluorescent Protein Solar Cells

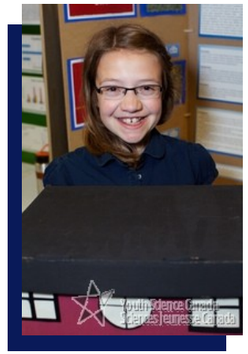
Ronald and Ian's project examined dye-sensitized solar cells that had been supplemented with fluorescent proteins to allow absorption of UV light. As a result, this increased the efficiency of the cells.

Avinash Pandey, Waterloo, Waterloo Collegiate Institute.

Improving Compliance to Lifesaving Medications

Avinash's project sought to alleviate non-compliance in following medical prescriptions through forgetfulness. He created a novel automatic computer program to send reminder text messages to the cell phones of participants. This method showed a significant improvement in compliance in healthy volunteers, stable patients and post-heart attack patients taking critical medications.

Awards: Challenge Award - Health, Intermediate ($750), Excellence Award- Intermediate - Gold Medal ($1500), Scholarship offer, Western ($4000).



Juliana Gallas, New Hamburg, Forest Glen PS

Let's Make Some Noise ... Or Not!

As technology and society continue to change and improve, there has been a marked increase in the amount of sound and noise. However, do we always want to hear the constant noise of technology? Juliana experimented to minimize noise with sound-absorption. She sought to discover which of cork, carpet, carpet underlay, curtains, bubble wrap, or polystyrene foam (Styrofoam) has the best capabilities to

Janelle Tam, Waterloo, Waterloo Collegiate Institute.

Nanocrystalline Cellulose: A Renewable Antioxidant

Janelle's project examined the antioxidant properties of nanocrystalline cellulose (NCC). NCC surface grafted with fullerenes was more effective, and both were more effective than synthetic materials. Janelle also described the role of microstructure in free radical scavenging reactions. Use of NCC, a 'green resource', will reduce our dependence on conventional carbon sources.

Awards: Excellence Award – Senior – Silver Medal ($700), Scholarship offers to U of Ottawa ($2000), Dalhousie ($2500), UBC ($2000) and Western ($2000).

Andrew Ilyas and Nikhil Patil, Waterloo, Centennial PS

Optical Illusions – Does Colour Affect the Illusion?

Andrew and Nikhil's project studied the effect of colour modifications in optical illusions. First, they discovered that vision level doesn't affect susceptibility to the illusion. Their primary focus on colour modifications showed that if the modifications maintained the relationship on the colour wheel then the illusion endured. However, if the colours were assigned randomly, the illusion lost its effectiveness.

Awards: Excellence Award – Junior- Bronze Medal ($300), Scholarship offer to Western ($1000).