



Quebec students win three of eight Ernest C. Manning Innovation Awards at

2013 Canada Wide Science Fair

LETHBRIDGE, AB, May 16, 2013 /CNW/ - Three Quebec projects captured Young Innovator prize money from the Ernest C. Manning Innovation Awards Foundation at the 52nd annual Canada Wide Science Fair held this week at the University of Lethbridge campus.

Ground-breaking projects by David Drouin, a 19 year old student at CGEP de Sainte Foy, and the team of Pierre Clapperton Richard and Francis-Olivier Couture, 16-year-old students at Seminaire de Chicoutimi, both earned \$4,500 for being named Manning Young Canadian Innovators. In addition, they will receive a trip to the Foundation's National Innovation Awards Gala to be held in Calgary October 16. Drouin also received a Silver medal in the Health Division while the Richard/Couture team earned a Gold medal in the Information category. The third Quebec project, a prototype glove with built in electronic devices to assist the blind, earned a \$500 Manning Award, and a Gold medal in the Innovation category for 18-year-old Yassine Buanane a student at CEGEP de Bois-de-Boulogne, Montreal.

The Canada Wide Science Fair this year attracted more than 480 Junior, Intermediate and Senior age exhibitors in 400 projects that showcased bright minds that are innovating for Canada.

"Canada's bright minds need the encouragement of organizations like Youth Science Canada and the Ernest C. Manning Innovation Awards Foundation if they are to help society realize the economic and social opportunities that innovative minds create for Canada, and indeed globally. We are pleased to begin our third decade of recognizing and fostering that mindset among Canadian youth," said John Read, Chairman of the Ernest C. Manning Innovation Awards Foundation's Board of Trustees.

David Drouin - St. Foy/Quebec City - \$4,500

David Drouin's innovative research employed a common spice to help solve the antibiotic problem. He has illustrated the potential of a relatively simple compound found in cinnamon, called cinnamaldehyde, in fighting off dangerous strains of E Coli bacteria. The difference between the compound Drouin has discovered and more typical antibiotics used against E Coli is that resistance to this alternative drug is very unlikely. Instead of killing off harmful bacteria that are susceptible to the compound, and at the same time causing the bacteria resistance to the antibiotic, Drouin's compound takes a different route. The compound appears to only affect the bacteria's secretion of a toxin known as the Shiga Toxin, the poison that makes the bacteria so dangerous to humans. In doing this, Drouin keeps the bacteria from damaging human cells without in fact killing the problematic pathogens. With no selective pressure encouraging resistance to cinnamaldehyde, resistance to the drug is highly doubtful. In combination with probiotic treatments, his drug has been shown to be very effective and selective in neutralizing pathogenic E Coli in cell culture.

Pierre Clapperton Richard and Francis-Olivier Couture, Chicoutimi - \$4,500

The Richard / Couture team focused their efforts on enhancing capabilities of the latest edition of the iPad, which is a growing popular classroom tool. "Observing the new iPad classes of our school, we noticed some flaws in this new concept. Thus, we have developed EffiClasse, a totally unedited iPad application that allows full management of these tablet-classes which eliminates the distractions that affects students and which allow continuation of exams on the electronic tablets. EffiClasse provides a concrete solution to the problems of iPad classes," the students explained.

Yassine Bouanane, Montreal - \$500

Yassine Bouanane's pre-teen passion for information technology and an empathy for the blind or near-blind led him to create a special sensory glove. The glove guides users through their surrounding environment by detecting heat, sound, distance and movement thereby increasing the the user's awareness of hazards in their daily lives. Visually similar to a wired golfing glove, his technology 'interprets' those sensory inputs through a companion computer program/circuit board to alert and guide the user. He has also added a mini-camera that will read, and vocalize, text within that surrounding environment.

The Ernest C. Manning Innovation Awards Foundation introduced its Young Canadian Program in 1992 to recognize innovative Canada-Wide Science Fair projects. Each year a judging team selects eight winning projects, four of which earn the \$4,500 Manning Young Canadian Innovator Awards, and four others earn \$500 Manning Innovation Achievement Awards. For more information about the Foundation and its awards visit www.manningawards.ca Follow on Twitter @ManningAwardsCA Like on Facebook/Manning Awards.