

CWSF 2011 - Toronto, Ontario



Charlotte Donaldson, Megan Smith

Extreme Immobilization

Challenge: Innovation

Category: Senior

Region: Chignecto West

City: Elmsdale, NS, Nine Mile River, NS

School: Hants East Rural High School

Abstract: This project's aim was to design an aquatic-rescue spinal board that would improve immobilization adequacy, particularly for children. After researching the spine and surveying local first responders, a new spinal board template was constructed and tested. Based on collected data, the degree of immobilization was improved for both adults and children in real-life situations, resulting in reduced likelihood of paralysis for the victim.

Biographies

Charlotte - I am Charlotte Donaldson. I am 17 years old and attend grade 11 at Hants East Rural High, in Elmsdale, NS. My favourite classes have always been sciences but I also have a love for art. I am a part of the integrated French program at the school and enjoy the challenge it presents. When not at school I can often be found at the swimming pool which is also my place of work. At work I hold a ton of responsibility as a head lifeguard and swimming instructor. I also coach diving and synchronized swimming. For my summer job I'll be traveling to different areas in my region to teach outdoor swimming lessons. In my spare time I keep busy by practicing...

Megan - I am a Grade 11, Integrated French student in rural Nova Scotia. At school, I am a flautist for the Concert Band, a member of Crochet for Cancer and math league, play rugby, and am a grade rep. for Student Council. I work as a lifeguard and swimming instructor. My week's highlight is usually my time volunteering as an assistant coach for the local Special Olympics swim team. For the past 8 years I've been an active 4-H member. When not marinating in chlorine, I'm likely at a 4-H rally, conference or project meeting. Currently I am club president, county hostess, and was the canoeing counselor at Cape Breton's 4-H camp summer 2010. Thi...

Awards

Value

The Manning Innovation Achievement Award Sponsor: Ernest C. Manning Awards Foundation	\$500
The Manning Innovation Achievement Award and \$4000 Manning Young Canadian Innovation Award Sponsor: Ernest C. Manning Awards Foundation	\$4 000
Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	\$300
The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Total	\$6 800