

# CWSF 2007 - Truro, Nova Scotia



## Carlie Scalesse

### Catch me if you can!

**Division:** Physical & Mathematical Sciences / None

**Category:** Senior

**Region:** CDLS - Province du Québec

**City:** Iles Perrot, QC

**School:** Villa Maria

**Abstract:** This experiment was a simulation of the dynamics of predator - prey co-evolution. Autonomous robots were used for representing predator and prey organisms. A genetic algorithm was designed to simulate behavioral evolution including selection and reproduction.

### Biography

My main interests have always been sciences, animals and sports. I am captain of my school rugby team and coach of Villa Maria's midget team. I have been selected as the Most Valuable Player ? Interscholastic Rugby for the 2004-2005 and 2006-2007 season. I am also involved in volleyball and soccer. My interests in science have lead me to participate in various scientific events. Amongst others, I have won a gold medal at the 2003 Bell Regional Science Fair, a silver medal at the 2005 Sanofi Biotech Challenge for my experimentation on pancreatic conditioning, a silver medal and the Marianopolis Experimentation Award at the 2006 Bell Regional Science fair for alternate diagnostic methods of Varicella Zoster Virus. My passion for animals has brought me to work as a caretaker for one of North America's largest private reptile and crocodilian collection as well as being a member of the Montreal Herpetological Society. I wish to combine my passion for animals and sciences, by undertaking veterinary studies and ultimately specialize in epidemiology. I will be representing Quebec at the 2007 MILSET International Science Fair in Durban, South Africa next July. I will be presenting a robotic simulation of predator-prey co-evolution.

### Awards

### Value

University of Ottawa Undergraduate Research Scholarship Award Sponsor: University of Ottawa, Faculty of Science	\$10 000
The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
Bronze Medal - Life Sciences - Senior Sponsor: Pfizer Canada	\$300
<b>Total</b>	<b>\$11 300</b>