



## CWSF 2007 - Truro, Nova Scotia



## **Mark Shearer**

¿Heads or Tails? II: Memory at its Finest

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

**Category:** Senior **Region:** Bluewater

City: Lion's Head, ON

**School:** Bruce Peninsula District S.S. & E.S.

Abstract: ¿Heads or Tails? II examined the possibility of chemical memory being

transferred from one Planarian to another. Untrained specimens were fed a paste of tail sections of trained specimens. Evidence of chemical memory was observed when the untrained specimens were able to recall the

training without having been exposed to the original stimuli. This experiment

provides convincing support for the theory of chemical memory.

## Biography

For the last 17 years of my life I have spent very few months off of the Bruce Peninsula in Southern Ontario. This region is one of the largest green spaces left in Southern Ontario and is situated on the Niagra Escarptment. It is a Biosphere Reserve whose committee I Vice-Chair. The outdoors is my hobby where I do anything from four-wheeling to kayaking. 50 kilometres North of my home town Lion's Head, is Tobermory, which is home to the ferry the Chi-Cheemaun, Bruce Peninsula National Park, and Fathom Five National Marine Park. At school, very few sports teams exist as there are only 150 students in my high school. However, our school has developed an excellent badminton program of which I am apart of, playing around 7 hours a week. The program starts at our school in grade 4. My school consists of JK to grade 12. This summer after completing my OSSD, I am going to the Czech Republic for a twelve month Rotary Exchange. Upon my return, I am as of now not sure about my post secondary and career paths, but I have enrolled in, and plan to study either Forestry or International Business at University.

Awards	Value
The Manning Innovation Achievement Award	\$500
Sponsor: Ernest C. Manning Awards Foundation	
The University of Western Ontario Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Western Ontario	
Bronze Medal - Life Sciences - Senior	\$300
Sponsor: Pfizer Canada	
Total	\$1 800



