



## CWSF 2006 - Saguenay, Québec



## **Mark Shearer**

Heads or Tails: A Return to Chemical Memory

**Division:** Physical & Mathematical Sciences

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

City: Lion's Head, ON

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

**Abstract:** ?Heads or Tails? examined the possibility of storing specific memories

chemically. Planaria were used as test subjects. The Planaria were successfully conditioned through controlled stimuli which proved that they had the ability to learn. The Planaria were divided and observed. The divided Planaria displayed evidence of chemical memory when the

regenerated specimens responded in similar fashion, as their predecessors

had, to the controlled stimuli.

Awards	Value
UBC Science (Vancouver) Entrance Award	\$2 000
Senior Silver Medallist - \$2000 Entrance Scholarship	
Sponsor: The University of British Columbia (Vancouver)	
The University of Western Ontario Scholarship	\$1 500
Silver Medallist - \$1500 Entrance Scholarship	
Sponsor: University of Western Ontario	
Silver Medal - Life Sciences - Senior	\$700
Sponsor: Pfizer Canada	
Total	\$4 200



