

# CWSF 2009 - Winnipeg, Manitoba



## Sarah Langer

### A Model for Human Decomposition in Fresh Water and Salt Water

**Division:** Physical & Mathematical Sciences / Environmental Innovation

**Category:** Senior

**Region:** Peterborough

**City:** Buckhorn, ON

**School:** Lakefield District Secondary & Intermediate

**Abstract:** The stages and sub-stages of pig tissue decomposition in an aquatic environment (fresh water and salt water) were investigated with a goal of modeling human decomposition in an aquatic environment. The model developed shows the same stages and sub-stages of decomposition with a delay in salt water decomposition. Bacteria, pH, and mass/volume ratio in the process of decomposition were also studied.

#### Biography

My name is Sarah Langer, and I am an active student in my school. Last year I was on the Student Advisory Council, and this year I am on the yearbook committee. I also participated in fundraisers involving the gorilla conservation fund. I enjoy being able to help out in my school as well as my community. For as long as I have remembered, I have been interested in the mystery behind death. Whether it be the mummies of ancient civilizations or the recent mystery's of our time. This high interest both inspired and motivated me to continue with my investigation into human decomposition.

#### Awards

#### Value

Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 000
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$3000 Entrance Scholarship Sponsor: University of Ottawa	\$3 000
Silver Medal - Life Sciences - Senior Sponsor: Pfizer Canada	\$700
<b>Total</b>	<b>\$9 200</b>