

# CWSF 2006 - Saguenay, Québec



## Ted Paranjothy

### Novel Tumour-Specific Apoptosis-Inducing Peptide Derivatives of Apoptin

**Division:** Biotechnology

**Category:** Senior

**Region:** Manitoba Schools Science Symposium

**City:** Winnipeg, MB

**School:** Fort Richmond Collegiate

**Abstract:** The objective of this project was to design small cell-penetrating peptide molecules, based on the amino acid sequence of the viral protein apoptin, that possess the ability to induce tumour-specific apoptosis. Sequences from amino acids 76-91, 82-110, and 77-121 of apoptin were found to independently induce tumour-specific apoptosis in human leukemia, lung, prostate, and breast cancer cells, when conjugated to a poly-arginine cell penetrating peptide.

Awards	Value
The Manning Innovation Achievement Award and \$4000 Manning Young Canadian Innovation Award Sponsor: Ernest C. Manning Awards Foundation	\$4 000
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
Silver Medal - Biotechnology & Pharmaceutical Sciences - Senior Sponsor: Rx&D Health Research Foundation	\$700
<b>Total</b>	<b>\$8 200</b>