



## CWSF 2005 - Vancouver, British Columbia



## **Brian Le**

Heart & Keystroke: Simulating the Human Circulatory System

Division: Health Sciences
Category: Intermediate
Region: Bay Area
City: Hamilton, ON

School: Westdale Secondary School

Abstract: To determine the optimal way to relieve arterial clogging using

patient-specific information, a computerized model was developed using the characteristics of the main arteries connecting the heart to the brain. This simulated human circulatory system provides doctors with an effective way to perform sensitivity analysis to determine optimal surgical procedures.



