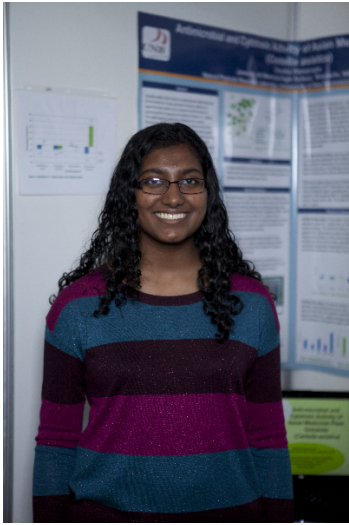


CWSF 2013 - Lethbridge, Alberta



Dimalka Ranasinghe

Antimicrobial and Cytotoxicity Activity of Centella asiatica

Challenge: Health

Category: Senior

Region: River Valley

City: Miramichi, NB

School: James M. Hill Memorial High School

Abstract: An experiment was performed to evaluate the antimicrobial and cytotoxic activity in extracts of *Centella asiatica*. The tested pathogens were *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Mycobacterium tuberculosis* and *Candida albicans*. The methanol extract inhibited the *M. tuberculosis* growth by 73.63%. A bioassay was performed for anti-cancer effects against MB 231 human breast cancer cells. The aqueous extract induced apoptosis approximately 60% of the PAC-1 positive control.

Biography

My name is Dimalka Ranasinghe. I'm currently in grade 11 attending James M. Hill Memorial High School, Miramichi, New Brunswick. My favourite subject is Biology, which has always been my fascination. I love to study living things. Volunteering is probably one of my favourite past times. I volunteer at the Miramichi Regional Hospital. Talking and interacting with patients is something I find enjoyable. I love reading and playing sports. I play field hockey and track and field. I'm also the President of the Sierra Club of our school. The environmental club attempts to make our school more eco-friendly and raise eco-awareness in the community. I'm also a member of our school's Interact Club and Student Council. I work as a cashier at the Miramichi Supervalu. My project is on the health benefits of *Centella asiatica*, an herbal plant. I conducted my project with mentoring from UNB Saint John. This is my first year in the CWSF.

Awards

Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	\$100
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$2 100