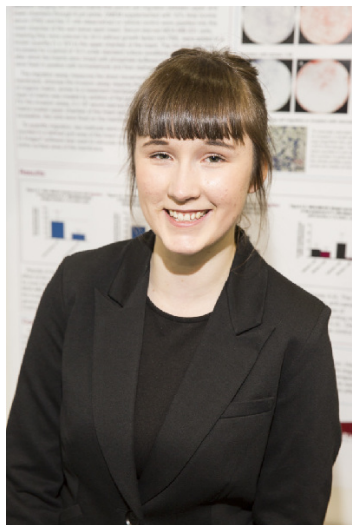


CWSF 2015 - Fredericton, New Brunswick



Grace King

Extracts of partridgeberry (*V. vitis-idaea*) contain potent anti-cancer compounds

Challenge: Health

Category: Senior

Region: Eastern Newfoundland

City: St. John's, NL

School: Holy Heart High School

Abstract: The partridgeberry plant (*Vaccinium vitis-idaea*) was investigated as a new therapeutic option for patients with aggressive breast cancer. When added to a cellular microenvironment, the plant extract was not cytotoxic to cells, but reduced migration and invasion of MDA-MB-231 triple negative breast cancer cells. The inhibitory effect suggests that a chemical constituent of the extract shows potential as an anti-metastatic agent in breast cancer treatment.

Biography

Although born in Hamilton, Ontario, I consider my first home to be Mount Desert Island in Maine, U.S.A., where I moved at age one. Eight years later, I moved again to St. John's, Newfoundland, where I am currently enrolled in the International Baccalaureate full diploma program. I am an active member of student council, social justice club, Rotary Interact and choir. As a mental health advocate, I am the head of a student group for mental health awareness within my school and a member of the youth mental health committee for St. John's. An interest in plant-based medicines combined with personal research on the native Newfoundland partridgeberry plant inspired me to investigate the plant's therapeutic potential in breast cancer treatment. In the future, I plan to work towards identifying which novel compound in partridgeberry leaves is exhibiting anti-cancer activity.