

June 2017 (PRINNOV-17) Competition Awarded Prevention Innovation Grants

Listed in alphabetical order

Cotterchio, Michelle

Cancer Care Ontario

Investigation of novel risk factors to understand the etiology of young-onset colorectal cancer and the alarming increasing incidence

Colorectal cancer, a disease that primarily affects older adults, has been on the rise among young adults. Understanding risk factors for colorectal cancer among young adults would be the first step toward prevention in the future. Dr Michelle Cotterchio will be evaluating novel risk factors (e.g. diet, use of certain supplements or medications) between healthy young adults and those newly diagnosed with colorectal cancer in Ontario. This research could offer insight on what causes colorectal cancer in young adults and how this disease can be prevented.

Demers, Paul

Cancer Care Ontario

Innovations for assessing occupational exposure to carcinogens in population based studies
Many people may be exposed to cancer-causing substances in their workplace. New strategies for
measuring the levels of cancer-causing substances in the workplace can help guide the development of
targeted prevention strategies. Dr Paul Demers will be evaluating 2 new technologies to measure
exposure to flame retardants (often found in electronic devices and home furnishings and linked to
cancer) in firefighters and workers who deal with electronic waste. The results of this project could support
the use of these new technologies to measure exposure to flame retardants in the general population to
further study their link to cancer.

Frohlich, Katherine

Université de Montréal

Exploring the effects of Quebec's legislation "An Act to Bolster Tobacco Control" on social inequalities in smoking

Tobacco control laws have helped to reduce smoking in the general population, yet levels of smoking are not equal between different social groups. How and why tobacco control laws contribute to differences in smoking, exposure to second-hand smoke and number of smoking-related cancers among underprivileged and more affluent people are not entirely clear. Dr Katherine Frohlich will study how a law in Quebec affects different social groups and how peoples' behaviours changed after the law was passed. This research could help decision-makers create more effective policies that could reduce smoking and prevent cancer across all social groups.

Murphy, Rachel

University of British Columbia

Metabolomics as a new strategy to understand modifiable factors for cancer prevention Certain healthy lifestyle behaviours, like being active and eating well, can reduce a person's risk of cancer. Yet the biological explanation for this has rarely been explored. These behaviours might change the types and levels of molecules in the body, which may impact cancer development. Using advanced technologies, Dr Rachel Murphy will study levels of hundreds of types of molecules in blood from healthy people and determine how cancer-preventing behaviours relate to them. As one of the largest Canadian studies in this field, these results could provide insight on how healthy behaviours can modify a person's biology, and how this might prevent cancer.

Parent, Marie-Elise

Institut national de la recherche scientifique

Social deprivation and environment, and risk of prostate cancer

Social factors can influence all aspects of health, including experiences with cancer. However, there have been few studies of how social factors like isolation affect the risk of prostate cancer, the most common cancer in men. Dr Marie-Elise Parent plans to examine how social factors at the personal, workplace and neighbourhood levels affect the risk of prostate cancer over men's lives. As the first long-term study to examine multiple social factors that affect prostate cancer risk, this will provide necessary information for the development of prostate cancer prevention strategies.

The writing of these summaries was supported by a BioCanRx research communications internship.