



EPIDEMIOLOGY SEMINAR SERIES Winter 2017

**THE DEPARTMENT OF EPIDEMIOLOGY, BIOSTATISTICS AND OCCUPATIONAL HEALTH, - SEMINAR SERIES IS A SELF-APPROVED GROUP LEARNING ACTIVITY (SECTION 1) AS DEFINED BY THE MAINTENANCE OF CERTIFICATION PROGRAM OF THE ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF CANADA **

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Physical Activity, Sedentary Behaviour and Cancer Control: Epidemiologic and Biologic Insights

Monday, 27 March 2017

4:00 pm - 5:00 pm – McIntyre Medical Building

3655 promenade Sir William Osler – Meakins Amphitheatre - Room 521

ALL ARE WELCOME

SYNOPSIS: Since the mid-1980s, there have been over 400 observational epidemiologic studies published that have examined the association between physical activity and cancer risk and there is now consistent and strong evidence for this association for more than 10 cancer sites. In addition, research has focused on the role of physical activity in improving coping with cancer treatment, rehabilitation and survival after cancer. More recently, research has focused on the role of sedentary behaviour as a risk factor for both cancer incidence and survival. Evidence is accumulating that too much sitting is an independent risk factor for cancer. In addition, research is now examining the underlying biologic mechanisms that might explain how physical activity and sedentary behaviour are related to both cancer risk and survival.

OBJECTIVES: At the end of this seminar, participants will be able to:

- 1) understand the level of evidence regarding the strength, consistency, coherence and close-response relation between physical activity, sedentary behaviour and cancer risk and survival
- 2) understand the main biologic mechanisms that may be operative between physical activity and cancer risk and survival
- 3) understand the gaps in evidence and the areas for future research required in the association between physical activity, sedentary behavior and cancer risk and survival

BIO: Dr. Friedenreich is a cancer epidemiologist with the Department of Cancer Epidemiology and Prevention Research of CancerControl Alberta, Alberta Health Services and an Adjunct Professor in the Faculties of Medicine and Kinesiology of the University of Calgary (U of C). She holds a Health Senior Scholar career award from Alberta Innovates-Health Solutions and in 2012 was named the Alberta Cancer Foundation's Weekend to End Women's Cancers Breast Cancer Chair at the University of Calgary. Dr Friedenreich is the Scientific Director for CEPR and the Division Head for the Division of Preventive Oncology, Department of Oncology, Cumming School of Medicine, University of Calgary. Dr. Friedenreich completed her doctorate in Epidemiology at the University of Toronto in 1990 and postdoctoral work at the International Agency for Research on Cancer (IARC) in Lyon, France and at the U of C between 1990 and 1994. In 2004-5, Dr. Friedenreich was the Visiting Scientist at the IARC. In 2013, Dr Friedenreich was a co-recipient of the Canadian Cancer Society's O. Harold Warwick Prize and in 2016 was named a Fellow of the Canadian Academy of Health Sciences. Dr Friedenreich's research is focused on understanding the role of physical activity in reducing the risk of developing cancer and in improving quality of life and survival after cancer diagnosis. She has conducted over 40 observational epidemiologic and randomized controlled intervention trials in this area.

<http://epi-research.org/research-scientists/dr-christine-friedenreich>