

SEMINAR

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Thursday, April 18, 2019

AVC Lecture Theatre B

3-3:45 pm

(Followed by CVER Coffee Social in AVC 343N)

Ambient Light at Night and Breast Cancer Risk: A Case-Control Study in Canada

Recent studies suggest that light at night (LAN) exposure disrupts circadian rhythm, which can increase breast cancer risk. This talk will discuss an ongoing study exploring this possibility through use of data from a population-based case-control study that was conducted in Vancouver, British Columbia, and Kingston, Ontario. Our analyses include 778 cases and 830 controls with complete residential history. Outdoor LAN exposure for study participants is being estimated based on their residential history by using time-weighted average measurements of light at night derived from three sources: 1) satellite imagery from the International Space Station, 2) Visible Infrared Imaging Radiometer Suite Day-Night Band data (DNB), and 3) the U.S. Defense Meteorological Satellite Program (DMSP) imagery data. We are also interested in the potential impact of the measurement error inherent in the differing levels of resolution across the images from these three sources.