



**The O'Brien Institute for Public Health &  
the Department of Community Health Sciences present:**

## **Integrating Local Spatial Analysis and Dynamic Simulation to Model Childhood Obesity**

**Speaker: Rizwan Shahid**

**Friday, November 25<sup>th</sup>, 2016 - 12:00 to 12:50 p.m.**

**G500 – Health Sciences Centre, 3330 Hospital Dr NW**

Spatial models generally do not deal with simulation over time, making it cumbersome for health planners and policy makers to effectively design and implement interventions and to quantify their impact over time. This presentation will provide a framework to fill this gap by integrating geographically weighted regression, which identifies vulnerable neighbourhoods and critical factors for childhood obesity, with simulation modeling, which evaluates the impact of the suggested interventions on the targeted neighbourhoods. This approach allows for spatially detailed simulations over time.

**Dr. Rizwan Shahid** is a Geographic Information Scientist in the department of Health Service Research and Innovation, Primary Health Care, Alberta Health Services. He has over 20 years of professional experience in GIS and over 10 years in Health Geography. He is also Adjunct Assistant Professor in the Department of Geography, University of Calgary. Rizwan is also GIS Certified Professional and GIS Chartered Geographer. He has served on Communication Committee of GeoAlberta and on URISA (Urban and Regional Information System Association) Education Board.

### **Objectives:**

1. To introduce the association of childhood obesity with local environment and neighborhood characteristics
2. To understand relationships that vary over space, through the use of geographically weighted regression
3. To introduce a framework to identify vulnerable neighborhoods for targeted interventions and to evaluate the impact of those interventions over time and space

**This event 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. This seminar is also available via an online**

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