



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

## **Population Informatics: Applying Data Science to Big Data about People to Advance Population Health**

**Speaker: Dr. Hye-Chung Kum**

**Friday, September 7, 2018 - 12:00 to 12:50 p.m.  
G500 - Health Sciences Centre, 3330 Hospital Dr NW**

The first part of the talk gives a quick overview on what is Data Science and how it differs from traditional statistics, and how it can be applied to big data about people to advance population health including brief descriptions of real projects (e.g., sequential pattern mining, measurement in secondary data). The talk will conclude with potential collaborative research between public health and computer science that is required to move the nascent field forward.

Dr. Hye-Chung Kum is an associate professor at the School of Public Health at Texas A&M. She holds joint appointments in the Department of Computer Science & Engineering, Industrial Systems Engineering. She received her Ph.D. (2004) in Computer Science and MSW (1998) in Policy and Management from University of North Carolina at Chapel Hill. She is the founder and director of the Population Informatics Lab which applies informatics, data science, and computational methods to the increasingly large digital traces available about people to advance public health, social science, and population research by bringing together domain experts and computer science students. Her vision paper on population informatics was published in the IEEE Computer Special Outlook Issue in January 2014.

### **Objectives:**

1. To understand how data science is different from traditional statistics
2. To understand how data science is applied to big data about people for population informatics
3. To understand what kinds of collaborative projects between public health and computer science are possible

**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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