



McGill

Department of
Epidemiology, Biostatistics
and Occupational Health

Biostatistics Seminars
Winter 2019



MIN QIAN, PhD

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Columbia University

**Constructing Personalized Decision Algorithm for
mHealth Applications**

Tuesday, March 12, 2019

3:30 pm – 4:30 pm – Purvis Hall, 1020 Pine Ave. West, Room 24

All are Welcome

Abstract:

Mental illnesses affect tens of millions of people each year. However, only half of those in need actually receive treatment. This is partly due to the substantial barriers associated with accessing office-based mental health care. As such, there are great needs for providing those who are in need of help with access to efficacious therapies. The use of mobile applications can fill the gap by delivering personalized treatments to patients who will otherwise not have access to the traditional treatments. In this work, we proposed a new analytical framework to develop personalized mobile decision algorithms to optimize immediate goals, such as response to a pushed notification or reminder. The method is evaluated using simulation studies and illustrated using data from a recent mobile health study.

Bio:

Dr. Qian is an Assistant Professor of Biostatistics at Columbia University. She conducts innovative research on reinforcement learning methods for decision making applications and high-dimensional data, statistical inference for precision medicine and after variable selection in high-dimensional settings.