

Biostatistics Seminars Fall 2017



James Young, PhD

Senior Biostatistician, Basel Institute for Clinical Epidemiology and Biostatistics, University Hospital Basel, Switzerland

Propensity scores and the Bayesian approach to emulating randomised trials

Tuesday, 26 September 2017 3:30 pm – 4:30 pm - Purvis Hall, 1020 Pine Ave. West, Room 24

ALL ARE WELCOME

Abstract:

There is renewed interest in using observational data to emulate randomised trials. This interest reflects the development of new statistical methods that use inverse probability weighting. The Bayesian approach to this problem uses propensity scores and has become known as the Rubin Causal Model.

In this seminar, I will explain the Rubin Causal Model, some of its strengths and weaknesses and how it might be used to emulate trials in small patient subgroups. Personalised medicine is creating an environment where measures of relative effectiveness are wanted for ever smaller patient subgroups. I'll discuss an example comparing two different antivirals for the treatment of hepatitis C in patients co-infected with HIV. This is joint work with Professor Marina Klein of the McGill University Health Centre, funded by the Canadian Institutes of Health Research.

Rio

Jim Young is a senior biostatistician who lives in New Zealand, works in Switzerland for the Basel Institute of Clinical Epidemiology and Biostatistics (www.ceb-institute.org/en/ceb) and hates flying.