

**CHANGE OF VENUE****1 DAY WORKSHOP**

Presented by Professor Elizabeth Stuart, Johns Hopkins University

**Propensity score methods for estimating causal effects in non-experimental studies**

**14<sup>th</sup> November 2017**

**University of Melbourne, Tin Alley  
Redmond Barry Building, Latham Theatre Room 102**

Propensity scores are an increasingly common tool for estimating the effects of interventions in observational (“non-experimental”) settings and for answering complex questions in randomized controlled trials. This 1 day short course will discuss the importance of the careful design of observational studies, and the role of propensity scores in that design, with the main goal of providing practical guidance on the use of propensity scores to estimate causal effects.

Topics covered will include:

- How to specify and estimate the propensity score model
- Selecting covariates to include in the model
- Diagnostics
- Common challenges and solutions.

The methods will be illustrated using a case study using large-scale administrative data from Denmark to estimate the effects of a suicide prevention program on suicide attempts. Software for implementing analyses using propensity scores will be briefly discussed, including resources for Stata and R.

The course will also highlight recent advances in the propensity score literature, including prognostic scores, covariate balancing propensity scores, methods for non-binary treatments (such as dosage levels of a drug or when comparing multiple programs simultaneously), and approaches to be used when there are large numbers of covariates available (as in claims or other “big” data).

See [www.vicbiostat.org.au](http://www.vicbiostat.org.au) for further details including registration and Trybooking process.

*VICBiostat is a Centre of Research Excellence in biostatistics funded by Australia’s National Health & Medical Research Council (NHMRC). The Centre is a collaboration between biostatistical researchers at the Murdoch Childrens Research Institute, the Department of Epidemiology & Preventive Medicine at Monash University, and the Centre for Epidemiology & Biostatistics (CEB) at The University of Melbourne.*