

Victorian Centre for Biostatistics**Seminar**

**Thursday 31st October
9.30am to 10.30am
Ella Latham Auditorium
Royal Childrens Hospital
Flemington Road, Parkville**

Handling incomplete multilevel data using multiple imputation and meta-analysis

Dr Ian White
University of Cambridge

Multilevel data are often incomplete, and may be missing either at individual level or at cluster level. For example, in an observational meta-analysis of individual participant data exploring the association between carotid intima media thickness and subsequent risk of cardiovascular events, some relevant confounders were recorded in only 3 of 8 studies, and sporadic missingness also occurred. I will describe methods for tackling systematically missing covariates in this study by combining partly adjusted and fully adjusted analyses in a multivariate meta-analysis. I will also describe algorithms for multilevel multiple imputation which exploit two-stage meta-analysis methods.

Dr Ian White is an international leader in clinical trials methodology and is an outstanding teacher. He is a Programme Leader at the MRC (Medical Research Council) Biostatistics Unit at the University of Cambridge, his main biostatistics research areas are statistical methods for handling missing data and heterogeneity in meta-analyses.

www.vicbiostat.org.au

***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 Molecular, Environmental, Genetic & Analytical Epidemiology (MEGA) at The University of Melbourne.*