

**SEMINAR****Victorian Centre for Biostatistics****Thursday 26<sup>th</sup> October 2017****9.30am to 10.30am****Royal Children's Hospital, Vernon Collins Lecture Theatre, Level 1, HELP Centre  
50 Flemington Rd, Parkville.****Crosses, wedges, parallel lines and dog-legs:  
Designs, methods and issues arising in cluster randomised trials****Professor Andrew Forbes  
School of Public Health & Preventive Medicine  
Monash University**

Cluster randomised trials have been implemented increasingly over the past 30 years or so. More recently, design variants such as stepped wedge and crossover designs have been gaining favour (and flavour) due to emerging results that they have efficiency advantages over conventional parallel arm cluster randomised trials. This talk will describe a number of variants of cluster randomised designs, placing analysis of data from these designs under a relatively simple statistical model commonly used in the literature. This model is amenable to analytical decomposition of treatment effect estimators, leading to optimality considerations, and highlights the need for careful extensions to account for treatment effect heterogeneity.

*Andrew Forbes is a Professor of Biostatistics in the School of Public Health and Preventive Medicine at Monash University. His research interests involve investigating methodological issues arising from clinical and public health research studies, and has a particular interest in cluster randomised trials, causal inference methods, and non-randomised intervention studies.*

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