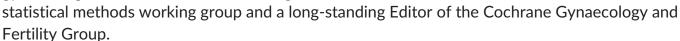
## SPEAKER PROFILE

Professor Andy Vail Professor of Clinical Biostatistics, University of Manchester, UK

Andy leads the Centre for Biostatistics at the University of Manchester and directs the Greater Manchester office of the NIHR Research Design Service.

He has been producing and editing systematic reviews of ART interventions since the early 1990's, when he worked closely with gynaecologists in Leeds. He is a founding member of Cochrane's





Andy has published numerous papers encouraging critical consideration of design and reporting of randomised trials. Recent work includes reviews undertaken for the HFEA to inform their patient information materials.

## LECTURE ABSTRACT: The Science of evidence-based practice 14:30 - 15:00

Gynaecology has come a long way since Archie Cochrane famously awarded his own discipline the wooden spoon for being the least evidence-based of all medical specialties. Decision-makers need high quality evidence. This presentation will describe and explain the criteria for individual studies of any intervention strategy, laboratory or clinical, to be considered 'high quality'. It will similarly describe criteria for assessment of the totality of evidence concerning that strategy. Examples will be drawn from work for the Cochrane Gynaecology and Fertility Group and from reviews undertaken to inform the HFEA traffic light system for 'treatment add ons'.

The complex stages of assisted reproduction cycles lead to complex data. There are several potential pitfalls in trial design that have complicated and even precluded interpretation of published results over the last 40 years. This presentation will describe some of the better-recognised issues such as misuse of cross-over designs. It will also highlight some issues that persist in the published research literature. These include unit of analysis errors, improper subgroups and reporting bias. Efforts are ongoing to circumvent historical poor practice and facilitate better practice moving forwards.