

## **Session Title:**

### **Advanced Methods in Probabilistic Sensitivity Analysis**

**Course overview:** The objective of the course is to introduce the delegates to advanced methods of probabilistic sensitivity analysis, with particular reference to the appropriate methods for incorporating correlations between input parameters and methods for bridging evidence gaps; such as that between efficacy and effectiveness.

The workshop will be computer based and delegates will be required to bring their own laptop computer with Microsoft Excel, including the Excel Solver Add-in, already loaded.

**Course Faculty:** Professor Anthony O'Hagan and Dr. Jeremy Oakley, both of the Department of Probability and Statistics, University of Sheffield, and Mr. Alan Brennan of the School of Health and Related Research (ScHARR), University of Sheffield. The faculty are members of CHEBS, the Centre for Bayesian Statistics in Health Economics at the University of Sheffield.

**Learning Objectives:** Delegates should understand the importance of correlations and evidence gaps in Probabilistic Sensitivity Analysis; and know how to utilise multivariate distributions, exchangeability and hierarchical models to address these issues.

**Expected Audience:** Post-graduate students, academic staff and pharmaceutical industry employees involved in the construction and critical appraisal of cost effectiveness models would benefit from attendance at this course. Delegates are expected to have a basic appreciation of statistics and probability, and should already be familiar with simple probabilistic sensitivity analyses. It would be feasible to run the course for up to 25 delegates.