

## **RSB Training Programme: R Statistical Software workshop**

A half day course on the R Statistical Software Environment with Cardiff Business School

### **Who is the course aimed at?**

For those who would like a basic introduction to the R Software, whether or not they have used other packages such as SPSS. Participants need only a fairly minimal statistical knowledge in order to benefit from it.

### **What does the course cover?**

This half-day course on the **R Statistical Software Environment** is designed to get participants to a point where they can:

- Start up the software and input data
- Carry out some exploratory operations on data e.g. making histograms, bar charts, boxplots, tables, statistical summaries
- Run some simple analyses/tests e.g. linear regression, t-tests, chi-squared tests
- Save the results in text/graphical form

Participants will be shown how specialist packages, such as those for cluster analysis and 3-D graphics can be downloaded and activated.

Data of biological interest will be used to illustrate the various features of the program and data input will be covered, as well as simple statistical tests and procedures, downloading additional packages and how to find help.

R is a statistical programming environment which is free and Open Source. Thanks to a large online community of R Users and Developers, there is little doubt that it is one of the best available statistical packages. Its flexibility, wealth of available packages and graphics capacity are but a few of its notable features.

Following this half day course, participants should be able to start up R, format and input some data, summarise and plot it, download additional packages, run some statistical tests and more structured analysis such as a regression and know how to look for help on a topic and access online examples and assistance.

### **Further information**

Course tutor Peter Morgan is reader in quantitative analysis at Cardiff Business School; teaching quantitative methods and researching into neural networks and other adaptive data analysis techniques. He originally trained as an industrial chemist and worked in the School of Chemistry at Cardiff - researching into catalysis and electron paramagnetic resonance. Peter is also a member of the Violence and Society Research Group at Cardiff and is committed to interdisciplinarity - believing that interesting things happen where established subject areas grind together. He is also co-author of a text on computational methods for the chemical sciences.

### **Contact**

For more information and to register your interest, please [contact](#) our training officer.