Programme

This 2-day course is centered around practical calculations in R, illustrating the concepts in analysis of real datasets and a fairly broad range of useful R tools useful in daily practise. All sessions will be alternating between lectures and practicals, most followed by a walk-through of the computing issues.

The last afternoon will be a demonstration of a real analysis (on a restricted dataset, though), which students are intended to do concurrently on their own computer in order to get a good grip of the practicalities of the analysis.

Please note the details of the computing requirements on the course web-site, http://bendixcarstensen.com/Epi/Courses/NNepi, including download of datasets and programs for the practicals.

Tuesday 11 August 2015

09:00 – 10:00	**Lecture:** Introduction to R. Reading data, data structures. Lanuage and basic graphics.
10:00 – 10:30	**Coffee break**
10:30 – 12:00	**Practical:** Basic R, Reading data Simple simulation (optional), Tabulation, Basic graphics
12:00 – 13:00	**Lunch**
13:00 – 14:00	**Lecture:** Introduction to rates and survival. Computing rates, RR and RD. Fitting a smooth curve and showing it
14:00 – 14:15	**Afternoon Tea**
14:15 – 16:00	**Practical:** Calulation of rates, RR and RD Fitting a smooth curve and showing it
16:00 – 16:30	Summary of the day.

Friday 14 August 2015

09:00 – 09:30	**Recap:** Rates, smooth curves, simple graphs.
09:30 – 10:15	**Lecture:** Representation of follow-up data: Lexis objects. Cox model and Poisson model.
10:15 – 10:30	**Coffee**
10:30 – 12:00	**Practical:** Cox and Poisson modelling using Lexis representation.
12:00 – 13:00	**Lunch**
13:00 – 16:00	**Lecture/demo:** Diabetes in Denmark: Mortality of Danish Diabetes patients. Timescales and SMR analysis.
16:00 – 16:30	Summary of the day.