**An Introduction to Statistical Data Analysis Software Stata 11**

*2-day workshop conducted by Dr Ayoub Saei*

**Thursday 9 and Friday 10 December, 2010**

9.00am—5.00pm

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**About the Workshop**

Stata is one of the most commonly used statistical software packages in many research disciplines including medicine, health and social sciences. It is a completely integrated software package which means there are no additional modules to purchase. It is easy-to-use and runs on Windows, Macintosh and UNIX platforms. While many statistical packages lag behind statistical developments, Stata offers reasonable speed by incorporating the user-written commands facility, which are commands that extend Stata’s functionality. It has a rich system for graphical representation of data. With Stata’s Graph Editor, users can change almost anything on their graph, and they can add text, lines, arrows and markers wherever they would like. The log file facility enables users to keep a record of their results windows. It records all commands and all output as it happens. This protects users from any kind of disastrous failure, computer crash, or power failure. The aim of this workshop is to introduce participants to Stata data manipulation, analysis and graphic capabilities.

**About the Presenter**

Dr Ayoub Saei is a statistician and holds three degrees in statistics (BSc, MSc and PhD). He has contributed to statistical theory and method development, in particular, the methods for discrete response data since 1993. The mixed model/multilevel model in particular, generalized linear mixed model (GLMM) and small area estimation are his main research interest areas. Dr Saei has taught statistics courses at both undergraduate and postgraduate levels and has contributed to a wide range of practical statistical problems through involvement in different projects. Dr Saei has more than 15 years of consultancy experience on statistical methodology. The small area estimation of labour force with the Office of National Statistics in the UK via Southampton University, is a more recent project, and he has experience with many statistical softwares through his education, teaching and research. Dr Saei has not only used the statistical software but also developed some codes/programs to implement very complex models, eg, small area estimation.

**Pre-requisites**

It is assumed that participants are familiar with the Windows environment. A very elementary statistical knowledge is required. No prior Stata experience is assumed.

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<th>Day 2</th>
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<td>8.30am - 9.00am</td>
<td>Registration</td>
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<tr>
<td>9.00am - 10.30am</td>
<td>Welcome and introduction to Stata</td>
<td>Exploring Data</td>
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<td>10.30am-11.00am</td>
<td>Morning tea</td>
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<td>11.00am - 12.30pm</td>
<td>Reading data in Stata</td>
<td>T-test, Chi-square and graphics</td>
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<td>12.30pm-1.30pm</td>
<td>Lunch</td>
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<td>1.30pm - 3.00pm</td>
<td>Data management (1)</td>
<td>Linear models (regression, multilevel, ...)</td>
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<td>3.00pm-3.30pm</td>
<td>Afternoon tea</td>
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<td>3.30pm - 5.00pm</td>
<td>Data management (2)</td>
<td>Generalised linear model (logistic regression, ...)</td>
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Detailed Program

Introduction
Getting started; Getting help; Using Stata as a calculator; Inputting data from keyboard; Inputting data using the Stata data editor; Copying and pasting data into Stata

Reading data in Stata
Reading non-Stata data files by using insheet, infile and infix; Opening and saving Stata data files; Importing/exporting data into/from Stata

Data Management in Stata (1)
Labelling; Creating and recoding variables; Sub-setting variables and observations; Logical and relational statements; Finding and dropping duplicate observations; Data types and missing value codes

Data Management in Stata (2)
Creating numeric variables from string variables; Sorting observations; Combining Stata data; Reshaping data from wide to long and vice versa; Collapsing data; Using if Stata command; By Stat command/ Repeating commands over different subgroups; Writing and running your own command files (do-files); Working across variables using foreach

Exploring Data (summarize, tabulate, table)
Describe a dataset; List the contents of a dataset; Codebook; Summarize quantitative data and creating tables; Log files and Tips for organising your work

Graphics
Introduction to graphics; Overview of graph histogram; Bar charts (graph bar); Dot charts (graph dot); Box plots (graph box); Scatter and two-way plots; Combining more than one two-way plot on the same graph; Plots of confidence intervals

Review some of the classical data analysing methods in Stata
T-test; Chi-square test; Linear models; Generalized linear model in particular logistic regression

Cost
Institute member and PhD students (affiliated): Free
Other Griffith PhD students and staff: $100.00
Full catering provided each day

Venue
Griffith University, Mt Gravatt campus, Technology Building (M07), Room 2.28

To book
Seats are limited, so please complete the registration form and return to Susan Lockwood-Lee, before 26 November: 3735 6996 or s.lockwood-lee@griffith.edu.au
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Registration Form

Return form to Susan Lockwood-Lee, Griffith Institute for Social and Behavioural Research
Griffith University, Mt Gravatt campus, M10, 5.05, Mt Gravatt, Qld 4122,  fax: 07-3735 6985
s.lockwood-lee@griffith.edu.au

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Institute member and PhD students (affiliated)* | Free ☑

Other Griffith PhD students and staff | $100 ☑ please complete payment details below

*If you are unsure whether or not you are associated with the Institute, contact Susan Lockwood-Lee on 07-3735 6996 or s.lockwood-lee@griffith.edu.au

PAYMENT DETAILS: Please transfer funds from the following speedtype / class:

Speedtype: __ __ __ __ __ __ __ __ __ __
Class: __ __ __ __
(payment will not be transferred from your account until after the workshop)