# STATA WORKSHOP FOR REGISTRY SCIENCE

**Date** 

Wed 7 & Fri 9 December 2016 0900-1700 Venue

School of Public Health & Preventive Med

Monash University, The Alfred Centre

Level 5, Seminar room 2

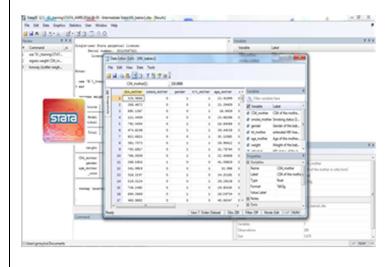
#### **Workshop Synopsis**

This two-day workshop is designed specifically for those interested in the use of Stata to analyse data from longitudinal studies such as clinical registries, routinely collected data and even cohort studies. The first day includes an introduction to Stata and data management topics such as recoding and computing variables, reshaping and merging datasets, etc. This will be followed by statistical tools and techniques that can be utilised to report data from registries. The second day would follow through with more advanced statistical models that would be useful for longitudinal data such as Generalised Estimating Equations (GEE) and time series analysis using Autoregressive Integrated Moving Average (ARIMA) models. Finally, advanced graphics such as risk-adjusted funnel plots, cusum plots will be taught. Simulated clinical registry datasets will be used to exemplify the statistical models and tools introduced in class. The lectures will be inter-dispersed with a number of practical sessions, where participants will get an opportunity to put to practice what they have been taught in class.

A basic knowledge of Stata would be helpful but is not a pre-requisite for this course.

The target audience would be anyone working on the analysis and reporting of data from clinical registries and other longitudinal study designs.

**Course Fee:** AUD\$750 GST inclusive for the two-day course. Bookings are essential. Course fee includes a printed Stata manual, catering for both days and a training license for Stata via thumb drive.



#### Trainer

#### **Arul Earnest**

Associate Professor, Biostatistics Unit Senior Biostatistician, Registry Sciences Unit Department of Epidemiology & Preventive Medicine School of Public Health & Preventive Medicine Faculty of Medicine, Nursing & Health Sciences Monash University

Arul's research interest is in Bayesian spatio-temporal models, longitudinal analysis and risk-adjustment models. For close to 20 years, Arul has provided consultative and collaborative methodological input to clinicians and hospital administrators. The outcome for some of this work has been more than 130 publications in a variety of peer-reviewed international medical journals, including BMC Health Services Research, BMJ and JAMA, mostly using Stata for the analysis. He has extensive experience in conducting talks on biostatistics and research methodology, and he particularly enjoys conducting Stata workshops. Arul will be assisted by Breanna Pellegrini in running the workshop.

#### **Payment and Registration**

There are a **limited number of places** available.

Payment by Monash University staff and students via internal transfer is GST exclusive i.e. \$681.81.

To organise payment please email Catherine at <u>crepatientsafety@monash.edu</u> with the cost centre and fund source eg. M15001 100000 and the transfer will be organised for you. Please advise if you have any dietary requirements. <u>Another method of payment for Monash colleagues is online via credit card.</u>

External parties (or those unable to pay via internal transfer) please click on the following link.

Pay and register: <a href="http://ecommerce.med.monash.edu.au/product.asp?pID=763&cID=2">http://ecommerce.med.monash.edu.au/product.asp?pID=763&cID=2</a>

Enquires: crepatientsafety@monash.edu ph: 03 9903 0891

Website: http://www.med.monash.edu.au/sphpm/creps/seminars.html

### **Stata Workshop for Registry Science**

#### **Program**

## Day 1: Wednesday 7th December 2016

Time	Topics
0900	Registration & software installation
0930	Importing data into Stata, label variables, recode and compute variables, merging and reshaping datasets, simple descriptive statistics
1030	Practical session
1115	Tea break (catering provided)
1130	Reporting data from registries
1300	Lunch (catering provided)
1400	Reporting data from registries (cont'd)
1500	Tea break (catering provided)
1530- 1700	Practical session

## Day 2: Friday 9th December 2016

Time	Topics
0900	Longitudinal analysis of registry data- generalized estimating equation (GEE) modelling
1000	Practical session
1100	Tea break (catering provided)
1130	Longitudinal analysis of registry data- ARIMA modelling
1230	Lunch (catering provided)
1330	Practical session
1430	Advanced graphics using registry data- funnel plots, cusum charts, etc
1530	Tea break (catering provided)
1600- 1700	Practical session
1700	End of Course

On the day: please bring your laptop with Stata pre-loaded. Otherwise, you can load a training copy of Stata in the morning of the first day, which will be provided to you free of charge. This training version of Stata will have full functionality but a limited time validity. Mac users; please ensure that you have Stata pre-loaded as we may not be able to provide IT support.