

SHORT COURSE ON ADVANCED QUANTITATIVE METHODS

23 to 27 Jan 2017 (course ends at 1pm on last day)

COURSE OBJECTIVES

This course is designed to introduce participants to the principles of statistical modelling, and equip them with the basic skills and knowledge needed to apply commonly used statistical models to a variety of clinical outcomes.

The course will present the principles of statistical modelling and statistical analysis, using practice-based examples. The emphasis will be on the understanding and the application of concepts and methods rather than on mathematical details.



WHO SHOULD ATTEND

Applied statisticians, clinicians, public and environmental health professionals, para-medical research professionals, scientists as well as laboratory-based researchers who would like to equip themselves with the skills to critically read, interpret and analyse research data using regression methods.

Participants should have experience with statistical software, particularly STATA.

TEACHING FACULTY

This course will be taught by academic staff of the Saw Swee Hock School of Public Health, National University of Singapore, and a guest lecturer with extensive research and teaching experience in the discipline of biostatistics.

Our guest lecturer is **Professor David Machin (DSc, PhD, CStat)**. He is Emeritus Professor of Clinical Trials



Research at the University of Sheffield and Emeritus Professor of Clinical Statistics at the University of Leicester. He was the Foundation Director of the National Medical Research Council, Clinical Trials & Epidemiology Research Unit, Singapore (1996-1999) and Head of the MRC Cancer Trials Office, Cambridge (1988-1998).

His earlier experiences included teaching at the Universities of Wales, Leeds, Stirling and Southampton, a period with the European Organisation for Research and Treatment of Cancer, Brussels, Belgium and the World Health Organization in Geneva. He was an editor of *Statistics in Medicine* from 1988-2003 and has published more than 250 articles and several books on a wide variety of topics in statistics and medicine. These include: *Survival Analysis – A Practical Approach*; *Medical Statistics: A Textbook for the Health Sciences*; *Quality of Life Assessment, Analysis and Interpretation*; *Sample Size Tables for Clinical Studies*; *The Design of Studies for Medical Research and Randomized Clinical Trials: Design, Practice and Reporting*, as well as *Regression Methods for Medical Research*, the recommended text for this short course.

COURSE CONTENTS

The course will introduce participants to the principles of statistical modelling. Participants will have the opportunity to apply commonly used statistical models to a variety of practical medical problems. The course comprises:

- ✓ Lectures covering the following topics:
 - Multiple Linear Regression
 - Multiple Logistic Regression
 - Analysis of Survival Data using Cox Proportional Hazards Regression
 - Methods for Analyzing Repeated Measures Data
- ✓ Practicals in which participants will learn to build statistical models, as well as analyse and interpret real life data using STATA.

COURSE FEES

SGD1,337.50 (including prevailing GST)

Course fees include lecture materials and the textbook, *Regression Methods for Medical Research*.

Closing date for registration: **23 DECEMBER 2016**

Applications are on “first-come-first-serve” basis. Successful applicants will be informed no later than **30 DECEMBER 2016** and course fees must be received by **6 JANUARY 2017** to secure a place.

CANCELLATION

Any cancellation must be conveyed to the course administrator in writing via email.

A cancellation charge of 50% of fee will be levied if the cancellation is received before **11 JANUARY 2017**

NO REFUNDS WILL BE GIVEN FROM 11 JANUARY 2017 ONWARDS but replacement with another name is permissible.

ACCOMMODATION

The course is non-residential. Participants who require accommodation may contact the Course Administrator for information.



CONTACT INFORMATION

Course Coordinator:

Associate Professor Tai Bee Choo
[T] (65) 6516 4973
[E] bee_choo_tai@nuhs.edu.sg

Course Administrator:

Ms Ai Li Quake
[T] (65) 6601 2324
[E] ailli_quake@nuhs.edu.sg

REGISTER AT: [HTTP://TINYURL.COM/AQEM2017](http://tinyurl.com/AQEM2017)



Address: MD1, 12 Science Drive 2, #10-01, Singapore 117549

URL: <https://www.sph.nus.edu.sg/public-health-professionals>