

## Instructor



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Bmaths(Hons), PGDip(AppStats), PhD  
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## Prerequisite



Have knowledge of basic/intermediate statistics and the SPSS application.

## Objectives



This workshop extends the intermediate Quantitative & Qualitative Data Analyses techniques. The following topics will be discussed:

1. Mixed Model, General Linear Model and Linear Regression
2. Repeated Measurement Analysis, Repeated ANOVAs & Generalized Estimating Equations for Repeated Binary Outcomes Categorical
3. Poisson Regression for count data
4. The concept of Weighted Logistic Regression
5. Risk Model Development using ROC Analysis
6. Use of Principal Component Analysis for natural setting data and solving multicollinearity issues
7. Reliability and Factor analyses for questionnaire

## Advanced Biostatistics Workshop

(3-day workshop)

16 – 18 May 2018  
Wednesday – Friday  
9am – 5pm

National University of Singapore  
Block MD1 (Tahir Foundation Building)  
Computer Lab 2, Level 8  
12 Science Drive 2  
Singapore 117549

**Organised By:**

NUHS Medical Publications Support Unit

CPE points are in process of accreditation

## Programme



Time	Topic
<b>DAY 1, 16 May</b>	
8.30am	<i>Registration</i>
9.00am	Basic Revision
10.00am	<i>Break</i>
10.30am	Intermediate Revision
12.00pm	<i>Lunch</i>
1.00pm	Multinomial, Ordinal, Conditional Logistic Regression - OR vs RR
3.00pm	<i>Break</i>
3.30pm	Exercises
5.00pm	<i>End</i>
<b>DAY 2, 17 May</b>	
8.30am	<i>Registration</i>
9.00am	Linear Regression vs GLM
10.00am	<i>Break</i>
10.30am	Mixed Model Analysis & Generalized Linear Models
12.00pm	<i>Lunch</i>
1.00pm	Repeated Measures GLM vs Mixed Models - Generalized Estimating Equations (GEE)
3.00pm	<i>Break</i>
3.30pm	Exercises
5.00pm	<i>End</i>
<b>DAY 3, 18 May</b>	
8.30am	<i>Registration</i>
9.00am	Poisson Regression & Weighted Logistic Regression
10.00am	<i>Break</i>
10.30am	ROC Analysis → development of risk score models
12.00pm	<i>Lunch</i>
1.00pm	PCA, Factor & Reliability Analyses
3.00pm	<i>Break</i>
3.30pm	Exercises
5.00pm	<i>End</i>

- Workshop will be held in a computer lab.
- Workshop materials will be provided in soft copies only.

## Registration Details



To register for the workshop, access the following registration website:

<https://itumed.nus.edu.sg/psu/registration/index.aspx>

### Fee

**S\$695.50 (with GST)**

### Closing

**25 April 2018, Wednesday**

*(Please register early as only a limited number of seats are available. Registration is on a first-come-first-served basis, and confirmed upon receipt of payment.)*

### Contacts

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### Cancellation Policy

Any cancellation must be conveyed to the Secretariat in writing. There will be no fee refund for any cancellation after 25 April 2018. The Organiser reserves the right to cancel the workshop and fully refund the participants should unforeseen circumstances necessitate it.