



# Biostatistics for Research (Basic/ Intermediate)

## 25 – 28 January 2021

### Introduction

Participants will gain a good introduction to biostatistical concepts and learn the essential statistical considerations in clinical trials, particularly in the context of clinical trials and other aspects of clinical research.

### Prerequisites

- Participants should have statistical knowledge, used SPSS and have computer literacy skills such as Microsoft Windows and Excel.
- SPSS software is required for participants to practice at their own time after the course.

(This course is not suitable for beginners in statistics.)

### Course Objectives

To equip participants with the knowledge and skills to:

- design a database and perform basic data processing and analysis using SPSS; and
- use SPSS for both qualitative and quantitative analysis

(NB: Navigation of the SPSS live will not be available during the course. SPSS step-by-step guide will be included in the course notes for all course participants.)

### Target Audience

Healthcare professionals, clinicians and researchers who wish to gain a good grounding in database design and biostatistical skills.

### Course Outline

- Set up a database in SPSS and Import Excel into SPSS
- Basic descriptive, Graphs, Computing and Recoding
- Randomised Controlled Trials
  - Parallel vs Crossover, Randomisation & Blinding
- Epidemiological Studies
- Sample size calculations
- Univariate analysis
  - Quantitative Data analysis
    - Parametric vs Non-Parametric tests
  - Qualitative Data analysis
    - Chi-square & Fisher's exact tests
    - McNemar test
  - Correlation
    - Pearson's vs Spearman's
- Multivariate regression
  - Linear regression, Logistic regression
  - Survival analysis: Kaplan Meier & Cox regression

### Course Details

Date	: 25 – 28 January 2021
Duration	: 4 half-days
Time	: 9.00 am – 12.30 pm
Class Size	: 30 pax
Device required	: Laptop/ Desktop (with microphone, speaker and webcam)
Platform	: Zoom Cloud Meetings (Meeting details will be provided at a later date)
Fee	: S\$400 (SingHealth) S\$440 (Regular) (inclusive of 7% GST)

### Teaching Faculty

**Dr Chan Yiong Huak** received his PhD in Mathematics from the University of Newcastle, Australia (1993) and presently is the mentor of the Biostatistics Unit in the Yong Loo Lin School of Medicine, National University Health System, of which he was the head (2004 – 2015). Prior to his previous appointment, he was the head of Biostatistics and Data Management (1997 – 2004) in the Clinical Trials & Epidemiological Research Unit (CTERU), National Medical Research Council (NMRC). Actively involved in conducting research and statistical courses to help researchers in their aims of publication and to enhance their understanding of statistical knowledge. Authored/co-authored more than 500 publications, he also serves as the Specialty (Biostatistics) editor for the Singapore Medical Journal, a committee member of both the Product Vigilance Advisory Committee (PVAC) and the Medicines Advisory Committee (MAC), Health Science Authority (HSA) of Singapore.

### Registration

To register, scan the QR code or click on the web link. Registration closes on **14 December 2020, Monday**.



<https://form.gov.sg/5f7bf0266bb11a0011db21b0>

Upon registration, you agree to the [Terms & Conditions](#) of PGAHI.

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