

# Biostatistics for Research (SPSS) Basic and Intermediate 24 - 27 July 2023

## Introduction

Participants will be introduced to biostatistics and conducting quantitative clinical research using SPSS, the industry-standard statistical software package.

## **Pre-Requisites**

- Participants should be proficient in statistics, Microsoft Windows and Excel, and had experience with using SPSS.
- SPSS software is required for participants who wish to practise 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

#### **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 & Blindling
- 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

#### **Quick Links**

FAQs | PGAHI Programmes | Training Calendar and Directory

#### **Course Details**

Date : 24 - 27 July 2023

Duration : 4 half-days

Time : 9.00 am - 12.30 pm

Class size : **30 participants**Device required : **Laptop/ Desktop** 

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(with microphone, speaker and webcam)

Platform : **Zoom Cloud Meetings** 

(Meeting details will be provided at a later

date)

Fee : **\$\$ 560** (SingHealth)

**\$\$ 620** (Regular)

(the prevailing GST applies)

# **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). He is 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 29 June 2023, Thursday.



https://www.form.gov.sg/6412b954571b180012b8a906

Upon registration, you agree to the <u>Terms & Conditions</u> of PGAHI.