



**SGH
PGAHI**

POSTGRADUATE
ALLIED HEALTH INSTITUTE

Restricted, Non-Sensitive

Biostatistics for Research (SPSS)

Advance

22 – 25 March 2021

Introduction

The course, an extension of Biostatistics for Research (Basic/Intermediate), provides participants with practical skills and deeper knowledge in biostatistical concepts and analyses techniques.

Prerequisites

- Participants who have previously completed the Biostatistics for Research (Basic/Intermediate) Course.
- SPSS software is required for participants to practice at their own time after the course.

Course Objectives

At the end of the course, participants will understand and apply common advance biostatistical analysis necessary for journal publications.

(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 participants.)

Course Outline

1) Numerical outcomes

- Linear Regression
- General Linear Models (GLM), Mixed Linear Models

2) Categorical outcomes

- Multinomial and Ordinal Regression

3) Matched Case Control

- Conditional Logistic Regression
- Direct vs Propensity matching

4) Generalized Linear Models

- Odds Ratios (OR) vs Relative Risk (RR)
- Modified Cox
- Poisson Regression

5) Generalized Linear Mixed Models (GLMM)

6) Repeated measures analysis

- General Linear Model, Mixed Model
- Generalized Estimating Equations

7) Count data: Poisson regression, Weighted regression

8) Principal Component analysis

9) Factor and Reliability analysis

Course Details

Date	: 22 – 25 March 2021
Duration	: 4 half-days
Time	: 9.00 am – 12.30 pm
Class size	: 30 participants
Device required	: Laptop/ Desktop (with microphone, speaker and webcam)
Platform	: Zoom Cloud Meetings (Meeting details will be provided at a later date)
Fee	: S\$510 (SingHealth) S\$570 (Regular) (inclusive of 7% GST)

Target Audience

Healthcare professionals, clinicians and researchers who wish to deepen their knowledge and skills in biostatistical concepts and analyses techniques, and/or publish in peer-reviewed journals.

Teaching Faculty

Dr. Shen Liang received her PhD in Statistics from the National University of Singapore (2006), and is currently the head biostatistician at the Biostatistics Unit in the Yong Loo Lin School of Medicine, National University Health System. She is actively involved in conducting research and statistical courses to help researchers in their aims of publication and to enhance their understanding of reading published articles. Co-authored more than 200 publications, she also serves as statistical reviewer for local and international medical journals, is 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 **1 March 2021, Monday**.



<https://tinyurl.com/y2vqbtqb>

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

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