

## **Announcement:**

### **Biostatistical Methods: Repeated Measures**

**Instructor: University of California, San Francisco**

**Dates: May 26 – 30, 2014**

**Location: Hanoi school of Public Health, 138 Giang Vo, Ba Dinh, Hanoi**

#### **Prerequisite**

A prerequisite for this course is a good first course in statistics or biostatistics and an understanding of the basic tools: paired and independent samples *t*-tests, simple linear regression and one-way analysis of variance (ANOVA), contingency tables and  $X^2$  (chi-square) analyses. Experience with multivariable linear regression and logistic regression is also necessary, and students will be assumed to have an understanding of confounding, interaction, and mediation within these techniques.

Prior experience with Stata is also recommended.

#### **Content**

This course will cover repeated measures analysis

Repeated measures analysis will introduce techniques for regression analysis using data on subjects that are correlated or collected over time. The overall goal will be to provide instruction in the primary statistical methods which can be utilized to correctly analyze data in which repeated measures are made on the same subject, or in which cross-sectional data are collected over time. Two features of this type of data impact the type of statistical analyses which can be used: (1) the outcomes are correlated across observations and (2) predictor variables can be associated with different levels of a hierarchy. Two types of methods for dealing with correlation structures will be introduced and contrasted: generalized estimating equations (marginal models) and random effects models (conditional models).

#### **Course requirements:**

- Participants must have basic knowledge of epidemiology, biostatistics and quantitative research background.
- Besides, participants must have experience in using statistic software such as SPSS, STATA, SAS.
- Participants must bring their own laptop with installed software.
- Class time is from 8.00 am to 5.00 pm. Participants are required to fully take part in the course.

#### **Lecturers:**

This course will be taught by Dr. Nancy Hills from the School of Medicine, University of California, San Francisco. She is an expert in computer science, research, programming, and biostatistics, as well as academic and research support. More importantly, she has 3-year-

experience of teaching different training courses in Vietnam, so she could provide the most suitable explanations and examples that fit to context in our country.

Lecturers from the Department of Epidemiology and Biostatistics, Hanoi School of Public Health will join this course to assist Dr.Nancy to provide explanations for difficult theories in Vietnamese. In addition, they will enable to provide guidelines and technical supports for learners' projects.

**Support from HSPH/CDC project:**

Participants will be provided with tuition fee, travel expenses, accommodation during the training.

Please fill in the application form and send it back to Ms Nguyen Thuy Linh by May 4<sup>th</sup> to the following address:

*Ms Nguyen Thuy Linh*

*Address: Hanoi School of Public Health, 138 Giang Vo Street, Hanoi*

*Email: [ntl@hsph.edu.vn](mailto:ntl@hsph.edu.vn)*

*Phone: 04. 37365896*

*Mobile: 098.356.6698*