

## **Course: Introduction to Epidemiology and Clinical Research**

**Location: Faculty of Associated Medical Sciences, Chiang Mai University**

**Dates: 14-18 May, 2013 (3 credits)**

### **Objective**

The course is intended to provide training on the basic concepts in Epidemiology and Clinical Research. It is targeted toward students and professionals from various backgrounds such as associated medical sciences, statistics, and medicine.

### **Program**

- Objectives of epidemiology and clinical research
- Sources of data and types of experimental and observational surveys according to objectives
- Measures of frequency (prevalence, incidence)
- Measures of association (Odds Ratio, Relative Risk)
- Concept of bias
- Basic statistical concepts; percentages, mean, median, variance, confidence intervals, statistical tests, statistical power
- Interpretation of results and causality

No specific statistical background is necessary to follow the course. It will be provided in English. It will be interactive and will include several practical sessions on the computer.

At the end of the course, the students will be able to clearly define the research objective, to choose a study design adapted to these objectives, such as case-control, cohort, cross sectional study, or randomized control trial, to anticipate selection and information bias, to discuss confounding and causality.

Practical exercises with excel software will be organized to create a database for analysis, and to estimate and to compare means, percentages, relative risk and odds-ratio.

### **Pre-requisites**

- Knowledge of Scientific English (understanding and reading)
- At least Bachelor degree or equivalent
- Currently involved (or specific plans to be involved) in medical research
- Full time availability during the course

### **Registration**

Please send your Application Form to [epidemiology@phpt.org](mailto:epidemiology@phpt.org), before March 17, 2013. Acceptance will be issued by April 1, 2013.

Participation in the Course is free of charge and lunch will be provided.

**Organizers:** Paris 11 University France; Faculty of Associated Medical Sciences, Chiang Mai University; and IRD-PHPT in collaboration with the Department of Statistics, Faculty of Science, Chiang Mai University

**Support:** The 5% Initiative of the Global Fund, France

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