

IT for Health

1 - 14 February 2022



**2 Weeks
Workshop
for
Public Health
Researchers**

Professional
Development
Program



What to Expect ?

- Exposure to a wide range of topics but focusing on Information Technologies that are relevant to Health,
 - Learn interactively and engagingly,
 - Become expert on GIS software,
 - Learn to use satellite remote sensing images to map the risk areas and its land cover and land use maps
 - Continuous evaluation and report presentations,
 - Awarding of certificates upon completion and special awards for winners of activity competitions.

Information

- World class Professors, Research Scientists, and experts in their respective fields will be giving the seminars and conduct the hand-on sessions. Language will be Thai and English.

Teaching Arrangement

- Class mode: ZOOM online platform will be used
- GIS software applications will be used for hands-on activities

Duration

- 2-weeks with Sunday breaks

Registration Cost

- THB 15,000
- Above cost is for minimum 20 participants, If participants are more than 20 then there will be discount.

Certificate

- On successful completion

The aim of this workshop is to provide training to health researchers with the essential skills to map and analyze the data related to disease and health care on routinely basis. Participants will be trained on handling various kind of geospatial and health data records, visualise on the map and analyse to crested data analytic products. They will learn making disease pattern map and analyse them. They will be learning both concepts and hands on practice session on making hotspot maps, risk maps and various other advance visualisation infographics to assist in decision making and research. The training worskhop also aims to enhance the participants research writing and presentation skills.

Tentative Program

HealthGIS
Concept

DAY
01

GIS Data Base
Structure &
Development

DAY
02

Free Day Break

DAY
03

Spatial Modeling
for Health Data

DAY
04

Geo Crowdsourcing
using Epicollect

DAY
05

Remote Sensing
Data Processing

DAY
06

Integrating
Remote Sensing &
GIS Layers

DAY
07

Data Science, AI
& ML for Health

DAY
08

Machine Learning
Model for Health

DAY
09

Internet GIS
and Data Science

DAY
10

Free Day Break

DAY
11

Research
Methodology

DAY
12

Research Pitching

DAY
13

Writing a
Journal Paper

DAY
14

IT for
Health



**PART
01**

GIS for Health

The rapid availability of open source health data offers new opportunities to analyze them and monitor trends in disease and track outbreaks and epidemics. It also opens new pathways to assess how effectively health systems can address these trends. Epidemiologists, health professionals and policymakers increasingly utilize new analytical techniques and software to process and analyze the growing volumes and dynamic health data. This course trains health professionals with the essential skills to map and analyze routinely collected health data. In this training you will learn what data and methods are used to detect areas of high disease risk and to compare these with geographic patterns of health service delivery

**Data Science. AI
and ML for Health**

**PART
02**

The use of Artificial Intelligence (AI) has been a major development in healthcare. AI technologies are being applied to a wide range of problems, including detection of disease, management of chronic conditions, delivery of health services and many more. AI technologies are providing unprecedented opportunities by providing quality healthcare for all. With the availability of vast amounts of health data and the ever-increasing capabilities of data analytics AI provides an opportunities to solve the challenges.

**PART
03**

**Research Writing
and Pitching**

How to communicate their research findings more effectively?

Different types of writing skills will be explained based on the discipline and interest. Structuring and writing manuscripts for high success rate in getting it accepted will be explained. Participants will understand editorial processes and what editors look for in papers.