

APRU GLOBAL HEALTH CONFERENCE 2019

PRE-CONFERENCE WORKSHOP

Workshop 1

Date: 17 November 2019 (Sunday)

Time: 0900-1200

Venue: to be confirmed

Title: Basics of Geographic Information System for Urban Health

Language: English

Target Audience: Students, researchers, public health practitioners and community health workers of non-technical background and with **NO** prior experience in using GIS and spatial modelling.

Workshop Description

Built environment is one of the first causes of chronic disease and related sedentary behaviour. Objectively measuring the built environment is a challenge. Spatial data and Geographical Information Systems (GIS) are nowadays being employed to understand the linkages between specific exposure to built environment and their impacts on individual behaviour and health. The workshop will introduce GIS-based spatial analyses to public health practitioner and researchers. It is designed to provide an overview of basic concepts of GIS mapping as well as introduce skills via series of tutorials on mapping, visualization, classification and querying of data and basic spatial analyses. Basics of linking individual-level data with exposure data will also be introduced. All analyses will be conducted in ESRI ArcGIS software.

Learning objectives:

1. Introduce GIS as a method for representation and analysis of spatial data for urban health.
2. Introduce basics of GIS-based mapping, classification, querying data and basic spatial analyses.

Bio sketch of the chair

Dr Chinmoy Sarkar is an Assistant Professor of GIS, Urban Health and Environment at The University of Hong Kong. His research interest lies in the interdisciplinary domains of environment epidemiology, big data modeling in health and urban mobility, spatial design analyses for healthy cities, urban green and active travel, smart technologies for health and planning healthy cities.

Dr Sarkar is the concept lead, developer and PI of the [UK Biobank Urban Morphometric Platform \(UKBUMP\)](#) project which involves spatial modelling and development of the world's largest health-specific built environment data platform studying links between built environment and health. He is also the author of the book "Healthy Cities: Public Health Through Urban Planning. Cheltenham, UK:

Edward Elgar” which talks about planning and design of healthy cities. His goal is to develop more robust and causal models of associations between built environment and health and test them on some of the world’s leading epidemiological cohorts.