

# **International Journal of Systems Biology and Biomedical Technologies**

## **Special Session: Spatial Epidemiology: theory and applications**

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The analysis of the spatial distribution of the incidence of disease and its relationship to potential risk factors has an important role to play in various kinds of public health and epidemiological studies. In general is referred to as "spatial epidemiology" and four broad areas of statistical interest are identified:

- *Disease Mapping* focusses on producing a map of the true underlying geographical distribution of the disease incidence.
- *Disease Clustering Studies* focus on identifying geographical areas with significant elevated risk of disease
- *Spatial Statistics* focus on analysing geographical areas with significant importance applying advance statistical techniques (like kriging, co-kriging, spatial correlation, geographical weight regression techniques)

In this special session, an introduction of theoretical and practical approaches would be analysed, the field of geographical variations in disease. Also it is concerned to understand the geographical distribution of disease and the effects of environmental exposures on human health.

Topics:

- Spatial Statistics
- Spatial Epidemiology
- Spatial Biostatistics
- Disease Clustering
- Disease Mapping
- Geographical epidemiology
- Geographical risk analysis
- Geographical weight regression techniques

Final Deadlines for papers: 28 May 2012

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