### 13TH INTERNATIONAL SYMPOSIUM ON GEOSPATIAL HEALTH



## **GNOSISGIS 2019**

# 16 SEPTEMBER

The International Society of Geospatial Health (GnosisGIS) announces the 13<sup>th</sup> International Symposium of Geospatial Health to be held in Liverpool, UK prior to the 11<sup>th</sup> European Congress on Tropical Medicine and International Health (ECTMIH).

The theme of this year's meeting is:

Geospatial Health: surveillance and response systems

#### **SPATIAL STATISTICS WORKSHOP – 15 SEPTEMBER**

The International Society of Geospatial Health is hosting a workshop on spatial statistics, taught by Dr. Donal Bisanzio, a Research Epidemiologist at RTI International involved in projects aiming to reduce the burden of tropical diseases in low-resource countries. This GnosisGIS workshop is designed to provide an introduction to spatial statistics tools to public health researchers. The workshop will be held on 15 September from 1:00-5:00 pm in the Wolfson Room at LMII.





#### **VENUE**

Liverpool Medical Institution (LMI) Conference Centre 114 Mount Pleasant Liverpool L3 5SR

#### **ABSTRACT DEADLINE**

10 May 2019

#### **REGISTRATION**

GnosisGIS Member \$150/\$200
NonMember \$250/300
Spatial Statistics Workshop Member \$75
Spatial Statistics Workshop NonMember \$100
Accomp. Persons \$50

\*Early Bird rate before 15 July 2019

Registration includes welcome reception, participation in conference and conference materials, coffee breaks, and lunch.

Register and submit abstract on **GnosisGIS website**.

#### **ORGANIZING COMMITTEE**

Laura Rinaldi, Donal Bisanzio, Jen McCarroll (gnosisgis@gmail.com)





### **GnosisGIS Workshop on Spatial Statistics**

#### **ANNOUNCEMENT**

The International Society of Geospatial Health – GnosisGIS is pleased to host a workshop on spatial statistics, taught by Dr. Donal Bisanzio, a Research Epidemiologist at RTI International involved in projects aiming to reduce the burden of tropical diseases in low-resource countries. The workshop is held prior to the 13<sup>th</sup> International Symposium on Geospatial Health – GnosisGIS 2019 and is open to the public.

#### **WORKSHOP DESCRIPTION**

The use of spatial statistics continues to increase in public health to answer questions linked with plant, animal, and human health. This GnosisGIS workshop is designed to provide an introduction to spatial statistics tools to public health researchers. The workshop includes frontal and practical lessons. Our aim is to lead the attendees through the process of investigating spatial heterogeneity in their data. Additionally, the frontal lessons include examples showing real studies where spatial statistics were applied to answer public health questions. Practical sessions will be performed using Opensource software, GeoDa, to improve knowledge and skills of attendees in applying statistical methods to analyzing geodata. At the end of the workshop the attendees will have a good knowledge of the concept of spatial autocorrelation, how to identify spatial heterogeneity in their data, and how to apply baseline spatial statistics using GeoDa.

#### **INSTRUCTOR**

Dr. Bisanzio is a senior epidemiologist at RTI International. He holds a degree and PH.D in veterinary medicine. His research focuses on the study of vector-borne and parasitic diseases in humans and animals with major public health impact. His multi-disciplinary research projects have included studies of West Nile virus in the USA and Italy, Lyme disease in Italy, malaria and poly-parasitism in Kenya, Dengue in Americas. Dr. Bisanzio's studies are performed using field and satellite data, results of laboratory studies, and sophisticated statistical/mathematical analyses to construct static and dynamic models to identify risk factors for the introduction, persistence, and spread of vector-borne and parasitic infections.

#### **AGENDA**

- Introduction to spatialautocorrelation
- Foundation of spatial statistics
- Identify spatial autocorrelation at global and local scale
- Spatial regression
- Break
- Introduction to GeoDa with practical examples
- Spatial analysis lab
- Question session

#### **WORKSHOP DETAILS**

**DATE:** Sunday, 15 September

**TIME:** 1-5 pm

**VENUE**: Wolfson Room

Liverpool Medical Institution Conference Centre

114 Mount Pleasant Liverpool L3 5SR

**COST**: \$75 GnosisGIS Members

\$100 NonMembers

Register on the GnosisGIS website:

www.gnosisgis.org



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