

Summary Report of the 3rd International Symposium on Geospatial Health, held in Vietri sul Mare, Italy, September 3-5, 2009

After Lijiang, China in September 2007 and New Orleans, USA in December 2008, the 3rd International Symposium of the Global Network for Geospatial Health (GnosisGIS) was held in the Campania region of southern Italy from 3 to 5 September 2009. The venue was Vietri sul Mare, the pearl of the Amalfi coast near Capri and Sorrento just south of Naples.

It is now nine years since GnosisGIS started as a team residency at the Bellagio Conference Center of the Rockefeller Foundation. The network has grown from just a few members then to over a 100 devoting its resources to the study and dissemination of geospatial methodologies for monitoring, control and prevention of communicable diseases and applications in the social sciences.

The participants met in Vietri sul Mare under the banner “Geospatial Climate Change and Health”, a theme that was chosen with the aim of increasing our knowledge about how a changing climate influences the distribution and intensity of air-borne and vector-borne infectious diseases. The symposium attracted the participation of about 50 scientists from five continents who listened to 30 plenary and research reports dealing with medical and veterinary applications of geospatial tools, including technical topics such as new technologies in risk-mapping and remote sensing. Some highlights of the proceedings follows below.

The symposium consisted of six sessions, each initiated by a keynote speaker. The first session, dedicated to climate change and disease distribution, was introduced by Dr. Archie Clements from Australia, who emphasized that the vector-borne diseases would be the first to reflect an increase in the global mean temperature. In the second session, devoted to veterinary aspects, Dr. Guy Hendrickx from Belgium presented a new tool for early warning and rapid control of disease outbreaks. Session three addressed the theme of disease-mapping and Dr. Yves Tourre from France illustrated the work done on recording the global dynamics and risks of the Rift Valley fever in Senegal. The fourth session was dedicated to spatial analysis and Dr. Annibale Biggeri from Italy opened it with an overview of cutting-edge statistical approaches to the field of multivariate disease-mapping, while session five covered the topic of the distribution of organisms and diseases with Dr. Frederic Beugnet from France explaining the use of meteorological models to monitor and predict the risks presented by fleas and ticks in Europe. The final, sixth session dealt with the development and application of novel geospatial tools and Dr. Robert Bergquist from Sweden read his compatriot Dr. Ewert Linder’s paper on the evolution and practi-

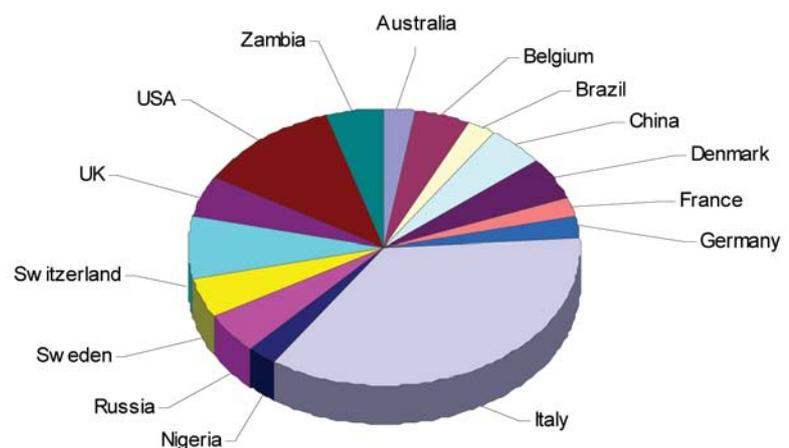


Fig. 1. The distribution of participants at the 3rd International Symposium on Geospatial Health, held in Vietri sul Mare, Italy on September 3-5, 2009.

cal use of web-based microscopy opening up remote diagnosis via the Internet in the field of parasitology.

The discussion of topics on the agenda for the business meeting resulted in plans to expand the courses normally given as part of annual meetings and symposiums in the past and create an International Academy for Geospatial Health that would not only offer courses on an *ad hoc* basis but be developed into a formal school with standard credits. It was further decided to distribute the Minimum Medical Database resource data free of charge over the Internet. A wider mail distribution of *Geospatial Health*, the *GnosisGIS* journal which is now indexed in the Web of Science and obtained its initial impact factor (1.5), and the possibility of presenting new projects were other discussion topics.

As usual, the Symposium was preceded by a pre-meeting GIS short course. The course objective this time was to teach the application of both vector and raster data in mapping, how to find sources for new data, to produce proprietary datasets and how to correct/regularize and integrate geospatial information. The ten participants came from different parts of the world and different fields. They were, for example, medical doctors, analytic biologists, informatics engineers and parasitologists. All of them came with the aim to learn skills in the field of geospatial representations and analysis for their field of work. Additional details can be found at www.GnosisGIS.org.



Fig. 2. The opening ceremony of the 3rd International Symposium on Geospatial Health in Vietri sul Mare, Italy on September 3-5, 2009.



Fig. 3. The pre-meeting short course offered in Vietri sul Mare, Italy on September 2-3, 2009.