Introduction and Advanced on Bayesian Disease Mapping using WinBUGS (and R)

Professor Andrew B. Lawson (MUSC, USA)

09th -10th July 2012 (IBDM) & 12th -13th July 2012 (ABDM)

11th July - half day open revision tutorial

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Course Evaluation
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Overview

The course focused on a Bayesian approach of some pioneer topics and methodology in Romania which included: disease mapping and its role in health surveillance and public health policy decisions; ecological analysis; risk estimation and cluster detection in epidemiology with remarks on environmental causes of diseases; development of spatial and spatio-temporal models and use of dedicated software packages (WinBUGS, R-INLA). Theoretical issues were accompanied by comprehensive examples and applications move toward problem solving. Participants also gained hands-on experience in the use of WinBUGS and INLA.

The lectures were split in two parts: an introduction module attended by 18 participants with background in biostatistics, computer science and medicine, followed by an advanced module carried on by 9 of the attendees.

	Course content	Lectures	Documentation	Applications
No. participants at IBDM through which 9 continue with ABDM	18	18	18	18
N=9 (participants only at IBDM, 9-11 July) Average evaluation score of IBDM[*)]	4.89	4.78	4.78	4.67
N=9 (participants at IBDM & ABDM, 9-13 July) Average evaluation score of IBDM & ABDM[*)]	4.78	4.78	4.67	4.44

[*)] 5 – Excellent, 4 – Very good, 3 – Good, 2 – Satisfactory, 1 – Poor

The IBDM module was attended by 18 participants; half of them took part only in the introduction module while the other half joined also the advanced module, the choice for one module or both concerned the attendee further research interests and expertise required in projects development:

• 8 of 9 participants in IBDM asserted that their **expectations** where **met** while 1 considered them **exceeded**; 8 of 9 participants also estimated that the introduction module had a **correct length,** while 1 participant considered it **too short**.

• 9 participants attended both IBDM & ABDM modules; all of the attendees estimated a **correct length** of the course; 7 participants asserted that their **expectations** where **met** while 2 considered them **exceeded**.

• All 18 participants recommend the course to be attended. The quality and importance of information provided by Professor Andrew B. Lawson was highly valued and opened a door to novel approach in Romanian health and health care related research projects.

Technical aspects

The course had the online option at the request by participants from Romania and Portugal. The evaluations received from the online participants were similar with the attendees in the conference hall. The transmission was very good and the communication between professor and the online participants was very well synchronized. The broadcast was supervised by me and the Mediaec Platform coordinator.

Final conclusions

It was an excellent course, the ground of some important projects on nutrition epidemiology, cancer related issues and mental health disorders which ISCB-RNG research team in collaboration with its partners will develop starting with this autumn. Details about the projects will be presented in August at the ISCB-NGs meeting in Bergen (Norway).

ISCB-RNG will organize each September thematic Autumn Camps for Ph.D. students: the topic for 2013 being "spatial epidemiology".