

EcoHealth Net Disease Mapping and Modeling workshop  
June 13, 2011 – June 17, 2011  
Johns Hopkins Bloomberg School of Public Health  
Room W3017

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*Note – each lecture is approx 45 minutes with 15 minutes questions and discussion*

**Overview:** Sunday arrival, Mon-Tue spatial analysis/mapping; Wed-Thur disease modeling and workshop; Friday AM journal club; Sat departure

### **Detailed Agenda**

#### **Sunday June 12<sup>th</sup>**

Participants arrive at Johns Hopkins Homewood Campus dorms

#### **Monday June 13<sup>th</sup>**

- 8:30 – 9:00      Opening remarks / Introduction to the use of GPS, GIS, and spatial analysis in Public Health (Jon Epstein, EcoHealth Alliance, Gregg Glass, Hopkins)
- 9:00 – 9:30      Participant and instructor Introductions (all)
- 9:30 – 10:00     Break
- 10:00-11:00     Overview and discussion of urban rat surveillance program (Greg Glass, Johns Hopkins)
- 11:00-12:00     Health Map – monitoring and mapping disease outbreaks globally (Anne Gatewood Hoen, Harvard University)
- 12:00 – 1:00     Lunch – 9<sup>th</sup> Floor Jay’s Cafeteria – in order to receive a 10% discount you must tell the cashier that you are a student
- 1:00 – 4:30      GPS lab – collecting GPS data in the urban landscape (travel to tick project site)

Free evening

#### **Tuesday June 14<sup>th</sup>**

- 8:30 – 9:30      Global Hotspots of Emerging Infectious Disease (Carlos Zambrana-Torrel, EcoHealth Alliance)
- 9:30—10:30     Healthscapes: demonstration of online spatial analytical tools for environmental factors and health (Nico Preston, University of Wisconsin)
- 10:30 – 11:00    Break
- 11:00 – 12:45    Computer lab: intro to Arc GIS and spatial analysis (using data collected during field trip) (Greg Glass, Johns Hopkins)

**Support for the EcoHealthNet Disease Mapping and Modeling Workshop is provided by a National Science Foundation Research Coordination Network Grant awarded to EcoHealth Alliance.**

- 12:45 – 2:00 Lunch – 9<sup>th</sup> Floor Jay’s Cafeteria
- 2:00 – 4:00 Write Shop, sponsored by *EcoHealth* journal
- 4:15 – 4:30 Break
- 4:30 – 6:00 Participant group A presentations (5 min each + discussion); refreshments

Free evening

### **Wednesday June 15<sup>th</sup>**

- 8:30 – 9:30 Introduction to mathematical disease modeling (Parvieg Hosseini, EcoHealth Alliance)
- 9:30 – 10:30 Understanding the disease dynamics of SARS and rotavirus (Virginia Pitzer, NIH Fogarty Center)
- 10:30 – 11:00 Break
- 11:00 – 12:00 Using phylogeny to target wildlife disease surveillance (Carlos Zambrana-Torrelío)
- 12:00 – 1:00 Lunch – 9<sup>th</sup> Floor Jay’s Cafeteria
- 1:00 – 3:00 R and model demonstration lab; database structure and use (Parvieg Hosseini)
- 3:00 – 3:15 Break
- 3:15 – 4:45 Participant presentations Group B (5 min each + discussion); refreshments

Free evening

### **Thursday June 16<sup>th</sup>**

- 8:30 – 9:30 Monkeypox dynamics; Seth Blumberg (UCLA )
- 9:30 – 10:30 Nipah virus emergence in Malaysia (Jon Epstein, EHA)
- 10:30 – 11:00 Break
- 11:00 – 12:30 Journal club (Parvieg Hosseini and Nico Preston) (2 spatial analysis and 2 modeling paper)
- 12:30 – 1:30 Lunch – 9<sup>th</sup> Floor Jay’s Cafeteria
- 1:30 – 4:30 Continuation: Ecological Niche Modeling: using ecological characteristics to predict distribution of hosts and pathogens (Carlos Zambrana-Torrelío, EHA)

**6:00PM Banquet**

### **Friday June 17<sup>th</sup>**

- 9:00 – 10:00 Location-specific patterns of exposure to recent pre-pandemic strains of influenza A in southern China: the Fluscape project (Derek Cummings, Johns Hopkins)

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10:00 – 12:00 facilitated small group work on participant research (Epstein, Hosseini, Preston, Cummings, Glass, Carlos Zambrana-Torrelío)

12:00– 1:00 Lunch – 9<sup>th</sup> Floor Jay’s Cafeteria

End of Workshop