



Leptospirosis Modeling NIMBioS Working Group April 8-10, 2015

Wednesday, April 8

- 8:00-8:45 Breakfast at NIMBioS
8:45-9:00 Introduction to NIMBioS
9:00-9:30 Introduction of Participants
9:30-10:15 Review of the overall Plan of Work and Objectives of the Working Group

LEPTOSPIROSIS CASE STUDIES (field studies)

- 10:15-10:35 "Leptospirosis ecology in Argentina" by Andrea Previtali
10:35-11:05 "TBD " by Vincent Herbreteau
11:05-11:20 Break
11:20-11:50 "Drivers of human leptospirosis in rural Brazil / Leptospirosis outbreaks and emergency preparedness programs" by Cristina Schneider
11:50-12:10 "TBD" by Alejandro de la Peña-Moctezuma
12:10-12:40 Open discussion

- 12:40-1:40 Lunch at NIMBioS

MODELING STUDIES

- 1:40-2:10 "Understanding dog ecology and domestic/wildlife interface" by Matthew Gompper
2:10-2:40 "Leptospirosis in Sri Lanka" by Matteo Convertino
2:40-3:10 "Application of mathematical models to public health policy making" by Zhilan Feng
3:10-3:25 Break
3:25 – 5:30 Open Discussion: Selection of specific modeling studies for the WG

Thursday, April 9

- 8:00-9:00 Breakfast at NIMBioS
9:00-11:00 Work by groups (by modeling studies)
11:00-11:15 Break
11:15-12:30 Report from groups

- 12:30-1:30 Lunch at NIMBioS

- 1:30-2:30 Data gaps identified
2:30 – 3:30 Filling the gaps/ studies and resources needed / proposal submission
3:30-3:45 Break

3:45-5:30 Filling the gaps/ studies and resources needed / proposal submission

Friday, April 10

8:00-9:00 Breakfast at NIMBioS

9:00-11:00 Work by groups (by modeling studies)

11:00-11:15 Break

11:15-12:30 Conclusions and discuss goals by next meeting

Participants

	Name	Institution	Expertise	Email
1	Jorge Velasco-Hernandez, PhD*	Institute of Mathematics, Universidad Nacional Autonoma de Mexico	PhD in Mathematics	jx.velasco@im.unam.mx
2	Matteo Convertino, PhD	Assistant Professor; Division of Environmental Health, University of Minnesota	PhD Civil and Environmental Engineering; numerical modeling of natural phenomena, fractals and spatial-temporal stochastic processes, complex networks.	matteoc@umn.edu
3	Matthew Gompper	Professor. Department of Fisheries and Wildlife Sciences, University of Missouri	PhD in Ecology; disease ecology, behavioral, population, and conservation ecology, conservation biology, dog/mammalian disease ecology	gompper@missouri.edu
4	Suzanne Lenhart, PhD	Mathematics, University of Tennessee	PhD Mathematics; partial differential equations, optimal control, population and environmental models, disease models	lenhart@math.utk.edu
5	Zhilan Feng, PhD	Professor, Department of Mathematics, Purdue University	PhD in Applied Mathematics. Differential equations and dynamical systems, mathematical biology.	fengz@purdue.edu
6	Claudia Munoz-Zanzi, DVM, PhD*	Associate Professor, Division of Epidemiology, University of Minnesota	PhD in Epidemiology; Epidemiology of infectious diseases, vet med, public health	munozzan@umn.edu
7	Rudy Hartskeerl, PhD #	Royal Tropical Institute, Biomedical Research, Netherlands	PhD in Molecular Microbiology, leptospirosis diagnosis, animal models	r.hartskeerl@kit.nl
8	Andrea Previtali #	Research Scientist. Universidad Nacional del Litoral, Santa Fe, Argentina	PhD Biological Sciences; ecology, modeling	andrea.previtali@gmail.com
9	Cristina Schneider, DVM, PhD	Advisor, Human and Animal Health Interface, IHR/ Alert and Response and Epidemic Diseases, HSD/PAHO-Washington	PhD in Epidemiology; zoonosis, epidemiology, outbreak response	schneidc@paho.org
10	Vincent Herbreteau, PhD #	Research Scientist, Espace-Dev, Institut de Recherche pour le Developpement (IRD), France	PhD in Health Geography, MS in Engineering; leptospirosis researcher, geographer, leptospirosis community ecology, health ecology.	vincent.herbreteau@ird.fr
11	Alejandro de la Pena-Moctezuma, DVM, MS, PhD	Center for Training, Research, and Extension in Animal Production, College of Veterinary Medicine, Universidad Nacional Autónoma de México	PhD in Molecular Biology; leptospirosis research, pathogenesis, animals models, veterinary medicine.	delapema@unam.mx