

## One world, ONE MEDICINE, ONE HEALTH One Health Intellectual Exchange

Weekly Discussions / Course: Philosophy to Practical Integration of Human, Animal and Environmental Health

A weekly discussion series, sponsored by the **North Carolina One Health Collaborative** within the NCBC IEG Program to enhance collaborations between physicians, veterinarians, researchers and other local/global/environmental health professionals by increasing public awareness of the interconnectedness of people, animals and the environment.

(Available each spring for credit if desired)

6th 2014 Weekly Session - Tuesday, February 18th 5:30 – 7:30 p.m.

# Hemotropic Mycoplasmas:

### Insight into reservoirs and new species

Ricardo G Maggi, MS, Ph.D

Research Associate Professor in Molecular Microbiology College of Veterinary Medicine North Carolina State University

> Meets Tuesdays, 5:30 – 7:30 p.m. at the North Carolina Biotechnology Center 15 T.W. Alexander Drive Research Triangle Park, NC 27709 Directions: <u>www.ncbiotech.org/directions</u>

For more information on the course option, suggestions, or ideas contact NC OHC: nconehealth@gmail.com

 For Speaker Cancellation notices and additional background on One Health and the NC OHC:

 http://nconehealthcollaborative.weebly.com/index.htm
 http://onehealtheducation.blogspot.com/

Facebook: search 'North Carolina One Health Collaborative' or go to

http://www.facebook.com/pages/North-Carolina-One-Health-Collaborative/300163350109335?ref=stream

Twitter: @NC\_OneHealth









#### Ricardo G Maggi, MS, Ph.D

**Education** Ph.D., University of Puerto Rico – Mayaguez, PR, 2000 MS, University of Puerto Rico – Mayaguez, PR, 1993 Licentiate in Chemistry – Universidad Nacional de Cordoba –Cordoba, Argentina, 1988

#### **Professional Experience & Qualifications**

Co-Director Vector-Borne Diseases Diagnostic Laboratory

Molecular microbiologist with more than 10 years of experience in the characterization of intracellular and vectorborne pathogens

Golden Key National Honor Society Award for Outstanding Scholastic Achievement and Excellence- Honor Member 1998

Published more than 87 peer-reviewed manuscripts including scientific and clinical-case reports

#### **Research Area**

Molecular microbiology of vector borne diseases and intracellular pathogens in animals and humans. Development of molecular assays for the detection, diagnosis, and characterization of emerging and re-emerging zoonotic pathogens.

#### Abstract:

Hemotropic *Mycoplasma* spp. (hemoplasmas) are obligate epierythrocytic bacteria that infect numerous animal species, including human being. Hemotropic *Mycoplasma* infection is often chronic and sub-clinical; however, in some cases it is associated with hemolytic anemia of variable severity, ranging from non-clinical hemolysis to severe anemia, particularly when the individual is stressed or immunosuppressed. The work presented here bring some insights into different *Mycoplasma* species recently discovered and characterized by our research group, the description of known and new reservoir hosts for these species, and the zoonotic potential of this group of bacteria.

#### **Suggested Readings:**

Maggi, Ricardo G., et al. "Co-infection with Anaplasma platys, Bartonella henselae and Candidatus Mycoplasma haematoparvum in a veterinarian." *Parasites & vectors* 6.1 (2013): 103.

Maggi, Ricardo G., et al. "Infection with Hemotropic Mycoplasma Species in Patients with or without Extensive Arthropod or Animal Contact." *Journal of clinical microbiology* 51.10 (2013): 3237-3241.

Maggi, Ricardo G., et al. ""Candidatus Mycoplasma haemomacaque" and Bartonella quintana Bacteremia in Cynomolgus Monkeys." *Journal of clinical microbiology* 51.5 (2013): 1408-1411.