



*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)

1st 2014 Weekly Session - Tuesday, January 14  
5:30 – 7:30 p.m.

“Weekly One Health Series Kick-Off Speaker”

**From 2/3 to One:**

**An MD’s Perspective on One Health**

Peter Rabinowitz, MD, MPH

Dept of Environmental and Occupational Health Sciences,  
Director, Human Animal Medicine Project  
University of Washington

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: [www.ncbiotech.org/directions](http://www.ncbiotech.org/directions)

Suggestions? Ideas? Contact Dr. Bill Stokes [williamstokes.asg@gmail.com](mailto:williamstokes.asg@gmail.com) or

Dr. Julie Casani [julie.casani@dhhs.nc.gov](mailto:julie.casani@dhhs.nc.gov) NC OHC Co-Chairs

Add yourself to the listserve with Listserv Manager Liz Selisker [liz\\_selisker@ncsu.edu](mailto:liz_selisker@ncsu.edu)

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

<http://nconehealthcollaborative.weebly.com/index.htm>

<http://onehealtheducation.blogspot.com/>

For more information on the course option contact: Mamie Harris at UNC [msharris@med.unc.edu](mailto:msharris@med.unc.edu)

Chris Woods at Duke [chris.woods@duke.edu](mailto:chris.woods@duke.edu)

At NCSU Barrett Slenning [barrett\\_slenning@ncsu.edu](mailto:barrett_slenning@ncsu.edu) or Suzanne Kennedy-Stoskopf

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## Peter Rabinowitz, MD, MPH

Peter Rabinowitz, MD, MPH is Associate Professor in the Department of Environmental and Occupational Health Sciences and the Department of Global Health at the University of Washington, where he directs the Human Animal Medicine Project (<http://deohs.washington.edu/hamp/>) This Project explores linkages between human, animal, and environmental health including: zoonotic infectious diseases at the human-animal interface, animals as "sentinels" of environmental health hazards, and clinical collaboration between human health care providers and veterinarians in a species-spanning approach. A goal of the Project is to serve as an incubator and organizer of research, training, and clinical activities at the University of Washington related to the human-animal-ecosystem interface.

Dr. Rabinowitz is also an Adjunct Professor at Yale School of Medicine and directs the Canary Database (<http://canarydatabase.org/>), an online resource for evidence about animals as sentinels of environmental health threats from both toxic and infectious hazards. He has been a visiting scientist at the Global Influenza Program of the WHO, and also in the Animal Health Division of the U.N. Food and Agriculture Organization (FAO) where he researched zoonotic diseases. He is the co-editor, with Lisa Conti DVM, MPH, of the clinical manual Human Animal Medicine: Zoonoses, Toxicants and other Shared Health Risks (Elsevier 2010) and with Malika Kachani DVM, PhD, of the Stone Mountain Working Group on One Health Proof of Concept Research.

Dr. Rabinowitz did a Family Medicine residency (UC San Francisco, Salinas Program) and a fellowship in General Preventive Medicine / Occupational and Environmental Medicine at the Yale School of Medicine. Current Projects include: Occupational influenza risk in swine workers; zoonotic disease exposures in wildlife surveillance workers; using microbiome and metagenomic techniques to assess human-animal transfer of pathogens and antibiotic genes in Dairy Agriculture; animal and human sentinels of natural gas extraction hazards; prevention of noise induced hearing loss; a One Health Model for dairy agriculture; a One Health Model for Human-Animal-Ecosystem interactions in conservation areas; comparative environmentally induced disease response in humans and non-human animals. Contact information: UW Department of Environmental and Occupational Health Sciences, Box 357234, Seattle WA 98195-7234 [peterr7@uw.edu](mailto:peterr7@uw.edu) 206 616 0578

### **Learning Objectives:**

By the end of the session: participants will be able to:

- 1) Provide a working definition of One Health
- 2) List at least 3 barriers to professional collaboration between MDs and DVMs and environmental health
- 3) Describe an example of an integrated One Health assessment
- 4) Describe an example of an integrated One Health intervention

### **Suggested Readings:**

1. Toward proof of concept of a one health approach to disease prediction and control. Rabinowitz et al., Stone Mountain One Health Proof of Concept Working Group. *Emerg Infect Dis.* 2013 Dec;19 (12). [http://wwwnc.cdc.gov/eid/article/19/12/13-0265\\_article.htm](http://wwwnc.cdc.gov/eid/article/19/12/13-0265_article.htm)
2. From "Us vs Them" to "Shared Risk": Can Animals Help Link Environmental Factors to Human Health?, Rabinowitz et al., *EcoHealth* 5: 2008, 224-229 <http://link.springer.com/article/10.1007%2Fs10393-008-0170-4#page-1>

**Other Selected Recent Publications of interest:**

Rabinowitz P, Conti L. Links among human health, animal health, and ecosystem health. *Annu Rev Public Health*. 2013;34:189-204.

Rabinowitz PM, Galusha D, Vegso S, Michalove J, Rinne S, Scotch M, Kane M. Comparison of Human and Animal Surveillance Data for H5N1 Influenza A in Egypt 2006-2011. *PLoS One*. 2012;7(9):e43851

Rabinowitz P, Conti L. One Health and Emerging Infectious Diseases: Clinical Perspectives. *Curr Top Microbiol Immunol*. 2012 Sep 11.

Rabinowitz PM, Galusha D, Kirsche SR, Cullen MR, Slade MD, Dixon-Ernst C. Effect of daily noise exposure monitoring on annual rates of hearing loss in industrial workers. *Occup Environ Med*. 2011 Jun;68(6):414-8.

Rabinowitz PM, Scotch ML, Conti LA. Animals as sentinels: using comparative medicine to move beyond the laboratory. *ILAR J*. 2010;51(3):262-7.

Rabinowitz, P., Perdue, M., Mumford, E. Contact Variables for Exposure to Avian Influenza H5N1 Virus at the Human-Animal Interface. *Zoonoses Public Health*. 2009

Rabinowitz, P.M., Dein, F.J., Liu, A., Chudnov, D., Odofin, L., Gordon, Z. Animals as Sentinels for Bioterrorism Agents, An Evidence Based Review. *Emerg Infect Dis*. 2006, 12:647-52.

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