



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)

2nd 2014 Weekly Session - Tuesday, January 21

5:30 – 7:30 p.m.

A Multidisciplinary Approach to Parasitic Diseases

Armando E. Gonzalez, PhD

Head, Veterinary Epidemiology and Economics Laboratory
School of Veterinary Medicine, San Marcos University, Peru
Cysticercosis Working Group in Peru

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

Suggestions? Ideas? Contact Dr. Bill Stokes, NC OHC Chair williamstokes.asg@gmail.com

Add yourself to the listserve with Listserv Manager Liz Selisker, liz_selisker@ncsu.edu

For Speaker Bio's, Suggested Readings, Cancellation notices and additional background

<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

Chris Woods at Duke chris.woods@duke.edu

At NCSU Barrett Slenning barrett_slenning@ncsu.edu or Suzanne Kennedy-Stoskopf

suzanne_stoskopf@ncsu.edu





Armando E. Gonzalez, PhD

Professor Gonzalez has a Master degree in Microbiology from San Marcos and a PhD in Veterinary Epidemiology and Economics from the University of Reading. He used to be the Dean of the San Marcos University Veterinary School and now is the head of the Veterinary Epidemiology and Economics laboratory.

Most of his research has been devoted to *Taenia solium*, specifically in diagnosis, treatment, prevention and control. He is the founder and member of the board of the Cysticercosis Working Group in Peru, responsible of eliminating *T. solium* in an area with 100,000 inhabitants.

Currently he is working in the transmission dynamics of zoonotic cestodes and the role of invertebrates in egg dispersion and endemic stability for *T. solium* and other zoonotic cestodes. Likewise he is investigating the possibility of using a set of drugs and interventions for the prevention, control and elimination of multiple diseases in a given area. Armando Gonzalez has an Associate appointment at Bloomberg School of Public health (Johns Hopkins University) and is the current president of the Peruvian Academy of Veterinary Sciences and a correspondent member of the Spanish Royal Academy of Veterinary Sciences. He has over 150 indexed papers in scientific journals in Disease control and surveillance, *T. solium*, *Echinococcus*, Avian Influenza virus and Parasites of camelids.

Suggested Reading:

Rasamoelina-Andriamanivo, Harentsoaniaina, Vincent Porphyre, and Ronan Jambou. "Control of cysticercosis in Madagascar: beware of the pitfalls." *Trends in parasitology* 29.11 (2013): 538-547.
<http://www.sciencedirect.com/science/article/pii/S1471492213001542>

Willingham III, Arve Lee, and Dirk Engels. "Control of *Taenia solium* cysticercosis/taeniosis." *Advances in parasitology* 61 (2006): 509-566. <http://www.sciencedirect.com/science/article/pii/S0065308X05610123>

Flisser, Ana, Rossanna Rodríguez-Canul, and Arve Lee Willingham III. "Control of the taeniosis/cysticercosis complex: future developments." *Veterinary parasitology* 139.4 (2006): 283-292.
<http://www.sciencedirect.com/science/article/pii/S0304401706002524>

Garcia, Hector H., Armando E. Gonzalez, and Robert H. Gilman. "Diagnosis, treatment and control of *Taenia solium* cysticercosis." *Current opinion in infectious diseases* 16.5 (2003): 411-419.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3103219/>

Learning Objectives:

1. History of the unintended use of a multidisciplinary approach to control (and elimination) of *Taenia solium* cysticercosis
 - a. Development of monitoring and intervention tools such as diagnosis and porcine cysticercosis treatment
 - b. *Taenia solium* epidemiology
 - c. First attempts to control the parasite
 - d. Successful elimination
2. Future multidisciplinary endeavors
 - a. Unveiling *T. solium* transmission, potential role of invertebrates in egg dispersal
3. Epilogue and final remarks

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