

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)

9th 2013 Weekly Session - Tuesday, March 5 5:30 – 7:30 p.m.

One Health Issues in the News Open Discussion Session

Are Bans on Plastic Bags Making People Sick?

Chagas Bugs: The Kiss of Death

The Dangers of Disposing Pharmaceuticals in the Home

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 Cheryl Stroud, Steering Comm. Chair cms7earth@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://nconehealthcollaborative.weebly.com/index.htm

Chris Woods at Duke chris.woods@duke.edu

At NCSU Barrett Slenning <u>barrett slenning@ncsu.edu</u> or Suzanne Kennedy-Stoskopf <u>suzanne_stoskopf@ncsu.edu</u>







Tonight's session topics will be presented in 3 'vignettes' by students participating in the weekly One Health Intellectual Exchange series for credit. It is anticipated that the session public attendees will also bring their backgrounds and thoughts to add depth to these discussions.

Background and Suggested Readings:

A. Are Bans on Plastic Bags Making People Sick? Liz Krebs, Anna Uehara, Catherine Lynch

In 2007, in an effort to limit the harmful environmental effects of plastic grocery bags, the city of San Francisco banned them. Recently, some folks at Wharton business school published a study showing that there was a substantial jump in gastrointestinal illnesses in the area post-ban, and 5 related deaths likely resulted from this ban. This and other studies will be presented for critique and discussion.

- Plummer B, Are Bans on Plastic Bags Making People Sick? Not so fast. The Washington Post 'WonkBlog', Feb 16, 2013 http://www.washingtonpost.com/blogs/wonkblog/wp/2013/02/16/is-san-franciscos-ban-on-plastic-bags-making-people-sick-perhaps-not/
- 2. Saunders D, Could a ban on plastic bags be fatal? News Time, Feb 10, 2013 http://www.newstimes.com/feeds/article/Could-a-ban-on-plastic-bags-be-fatal-4266802.php
- 3. Klick, J, Wright J, Grocery Bag Bans and Foodborne Illness, http://ssrn.com/abstract=2196481

B. Chagas Bugs: The Kiss of Death Caroline Gass, Rachel Lorenzen

Chagas disease is on the rise in the United States. Spread by the triatomine bug, which is also known as "the kissing bug," this illness is widespread throughout much of South and Central America, but has only made rare appearances in the US for most of its natural history. The Trypanosome parasite, *T. cruzi*, infects the triatomine bug, which then transmits the parasite to an animal or human host via a bite. Once the host is infected, the disease may lie dormant for up to 30 years. Initial symptoms include a flu-like syndrome, which can later progress to cardiac and gastrointestinal manifestations. Triatomine bugs are often found in substandard housing and animal pens, making this largely a disease of developing countries; recently, however, the geographical range of the triatomine bug has expanded, possibly due to global climate change. Due to the rarity of the disease in this country, many health professionals do not know how to correctly diagnose or treat patients, even when they present with classic symptoms. Education, increased awareness, better treatments and vaccines are needed.

- Kuehn, B. M. (2012). New Programs Take Aim at Neglected Tropical Diseases in the United States. JAMA, 308(13), 1308-1309. http://jama.jamanetwork.com/article.aspx?articleid=1367460
- 2. McNeil, D. (Feb 11, 2013). Chagas disease costs U.S. more than better-known illnesses. New York Times. Retreived from http://www.nytimes.com/2013/02/12/health/chagas-disease-costs-us-more-than-better-known-illnesses.html? r=0
- 3. Petherick, A. (2010). Campaigning for Chagas disease. *Nature*, 465(n7301 supp), S21-S22.

C. The Dangers of Disposing Pharmaceuticals in the Home

Laura Lewandowski, MD, Dipika Kadaba, DVM

- Brodin T, Fick J, Jonsson M, Klaminder J, Dilute Concentrations of a Psychiatric Drug Alter Behavior of Fish from Natural Populations, Science 15 February 2013: Vol. 339 no. 6121 pp. 814-815DOI:10.1126/science.1226850 http://www.sciencemag.org/content/339/6121/814.full
- 2. Kümmerer K, Al-Ahmad A., Estimation of the cancer risk to humans resulting from the presence of cyclophosphamide and ifosfamide in surface water. Environ Sci Pollut Res Int. 2010 Feb;17(2):486-96. http://www.ncbi.nlm.nih.gov/pubmed/19548016
- 3. Fent K, Weston AA, Caminada D, Ecotoxicology of human pharmaceuticals , Aquat Toxicol. 2006 Feb 10;76(2):122-59. Epub 2005 Oct 27. http://www.biol.uw.edu.pl/pl/files/docs/st_dokt/SD_SCB_Ecotoxicology_of_human_pharmaceuticals.pdf