*Infectious Disease Final Research Project*

You have studied infectious diseases from several different perspectives this year. Initially you investigated the epidemiology of diseases in terms of an overview of their transmission cycles and statistics involved in such studies. Next you studied human biology including the immune system and preventative measures against disease such as vaccination. And finally, we looked into how ecological factors can affect disease incidence and transmission. Technology plays a role in each of these areas and the lab activities served to illustrate these connections. Dr. Ostfeld’s reading should also drive home the importance of scientific study to identify and characterize infectious disease.

It should be apparent now, that thorough research on an infectious pathogen is not something that can be undertaken by an individual, but relies on the expertise of researchers with various specialties. The Machupo research team included a mix of talents: MacKenzie was a pediatrician, Kuns, an ecologist and Johnson a virologist. Dr. Ostfeld, an ecologist by training, launched his research on an infectious disease, while consulting and collaborating with people in various disciplines to be sure his work was comprehensive in scope. In reality, such research teams – sometimes termed ‘constellations’ are becoming more common in all areas of study – not just medicine. In this final project, you will be asked to contribute findings in ‘your’ specialty toward an overall understanding of one of the world’s most dangerous infectious diseases.

Your Team of Experts will include members specializing in:

1. **Ecologist/Geography 2. Physician 3. Public Health Specialist**

Disease vectors Inf. Disease in humans Epidemiology, local life

Life cycle in nature Immune system community/culture

Human interactions Technol./vaccines Past/present/future of

And envir. changes World health initiatives

The Diseases:

**Malaria Tuberculosis Cholera Schistosomiasis HIV/AIDS**

**Your assignment:**

**For your disease:** Prepare PowerPoint presentation including contributions from each member of your team and 5 minute presentations per person. Your product should be:

* Professional – seamless in style of PPT and presentation –

avoid cutesy/gimmicky animations ! Use no more than 4 slides per person.

* Fluent – each presenter must know their content – without reading screen
* Content - shown without extensive text! Use PPT for data and prompts only
* Clear explanations and elaboration given by each presenter
* Collaboration and collegiality shown by team members
* Describe a use of technology in every *individual* presentation – explain specific use of technology in research of this disease.
* Reference page turned in by email separately:

Use at least one reading and one reference from jhsph.edu courseware resources <http://ocw.jhsph.edu/courses/EpiInfectiousDisease/lectureNotes.cfm>

**NOTE: *You must SAVE these jhsph files on your computer in order to open them.***

I strongly recommend that you dress professionally for your presentation – as if you are presenting at a formal conference.

Dates: Friday 5/13 and Sat 5/14 -In class research:

Monday 5/16: In class practice session

Thursday 5/19 and Friday 5/20 - presentations