Microbes are everywhere, but not everyone gets sick

Now that you know something about epidemiology and the sorts of data collected, it’s time to unleash the scientist in you and work on an experiment.

**Objectives of this activity:**

- Promote critical thinking in a data-rich environment
- Formulate a testable hypothesis knowing the data available (review hypotheses if needed)
- Test the hypothesis using tools to access these data sets
- Offer multiple interpretations about the relationship(s) of data sets

**Activity:** Work and Submission is **ONLINE; printed copies will not be accepted**

**FIRST:** Review data sets available through websites:

- GAPMINDER: [www.gapminder.org](http://www.gapminder.org)
- WORLDMAPPER: [www.worldmapper.org](http://www.worldmapper.org)
- STATMAP: [macroint.mapsherpa.com/statmapper/](http://macroint.mapsherpa.com/statmapper/)
- Others available-ask Dr. Mixter

- Use online tutorials at each site to develop maps with multiple dependent variables in datasets
- Develop an hypothesis **about infectious disease** based on dependent variables within the data sets available; You may wish to use location as a dependent variable for comparison
- Find Template document on ANGEL
  - Write up an analysis of your original hypothesis using the data set; Include narrative of your data interpretation
  - COPY SHARE LINK for map (GAPMINDER)
  - Cite any outside sources appropriately
  - SAVE AS Document with YOURNAME in the filename; Submit to assignment dropbox on ANGEL (LESSONS menu, below Section 2 folder)

- **Suggestions:**
  - Complex questions are possible, but it may be useful to simplify your hypothesis
  - No “proof” only correlations
  - Put the re- back in research; it may take a few tries