

BIOE 149 Poster Assignment

This is an opportunity to be creative, to learn to use scientific resources, and share your research with the class. You will be randomly assigned the pathogen/disease on which you will create a poster.

Your poster should include the following information and/or answer these questions:

- 1) Classify the disease/pathogen. To what genus, family, order, etc. does it belong? **2pts**
- 2) What hosts does the pathogen infect? Which of these are “competent” (infectious) hosts and can transmit the pathogen to another host? What role does each host species (if more than one) play in transmission? **4pts**
- 3) What is the life-cycle of the pathogen and how is it transmitted? Is transmission likely to be density or frequency dependent? **5 pts**
- 4) What type of effects does the pathogen have on each of the hosts (or vectors) it infects? **4 pts**
- 5) What is the global distribution of the pathogen? **2 pts**
- 6) What is the approximate transmission intensity of the pathogen (i.e. cases per year, infection prevalence, etc.)? **3 pts**
- 7) Is there a seasonal or multi-year pattern to the number of infections? Are the number of cases increasing or decreasing? Would you say your disease is “emerging”? **3 pts**
- 8) When was the pathogen discovered, by who, and how? **2 pts**
- 9) Are there treatments or vaccines for disease caused by the pathogen? How do they work? **3 pts**
- 10) How well studied is the pathogen (how many papers per year on Web of Science over the last 10 years)? **2 pts**
- 11) What makes this pathogen/disease interesting? **4 pts**
- 12) What isn't known about this pathogen? **3 pts**
- 13) 6 primary sources cited **3 pts**
- 14) **Creativity 5 pts**
- 15) **Overall effort 5 pts**

You MUST address all of these questions, ideally with pictures/graphs whenever possible. If something is not known your poster must state that it is not known! When possible/necessary, make tentative conclusions from what information is available.

The poster should consist of 1-2 large pieces of poster-board, no bigger than 5' wide and 3' tall. All text must be in very large letters (18 pt font or larger). Your pathogen and disease name should be in big (36+ pt font) letters near the top. The best posters have a natural flow to the information – all subsections should fit into the overall goal of the poster. Figures are much better at conveying information than text and are preferred whenever possible. Use bulleted text rather than complete sentences. Photos, in limited quantity can be effective. All figures should have a figure legend that explains what is needed to understand the figure. The poster should NOT be a term paper attached to a poster-board.

The poster must cite at least 6 primary sources from original scientific papers (not the Web), in the format you see in the main text of papers (e.g. Jones 2005, Peterjohn & Samuels 2004, or Johnson et al 2009 for 1,2, or 3+ authors). These citations should be on the poster in very small font (10-12 pt font) and should be formatted as seen on the course website syllabus.

Example posters are posted on the course website. Some are better than others!

Bring your poster to class on June 2nd, and be prepared to give a 90 second oral presentation on your poster to the class that conveys what you think are the important points of your poster.

Timeline:

May 19th: Identified and downloaded scientific papers from Web of Science. Email me a formatted reference list (not the papers themselves).

May 26th: Progress check – how is your poster coming along?

June 2nd: Bring fully assembled poster to class and give 90 second oral presentation.

Have Fun!