

# Dataset: Patterns and Organization

Pathogen Project, Micr-22, revised SP18

## Objectives:

- Share accurate pathogen information with the entire class.
- Identify patterns among pathogens.
- Practice organizing a large amount of detailed information. (This will be useful during your pathogen test.)

## Instructions:

1. Revise your charts to make them as accurate as possible.
2. Save the files as Word documents (i.e., with the filetype “.doc”).  
Name the files as follows: *Set#-Your name-Pathogen name.doc*  
For example: *"Set8-Chris Briggs-Helicobacter pylori.doc"*  
(If your five charts are combined in a single file, you can omit the pathogen name part.)
3. Submit digital versions of the charts you have assembled. Find the link on Canvas. These are **due at 11:59pm on Wednesday, March 28**.
4. Use your own method to organize information gathered from the entire class. This portion has two constraints: First, your final organization method must not be electronic – meaning, it must be on paper. Second, your organization method should be the result of your own work.

The goal is to have you find patterns and organize information. With an electronic version it is too simple to just search for text, removing the need to find patterns.

### *Recommended organization methods:*

- Pages arranged in a binder in sections: To use this method, examine the charts uploaded by your classmates, and choose the most reliable examples to print. Print one best copy of each chart. Place the charts in a three-ring binder and organize them into sections based on their characteristics, such as large sections for viral/non-viral, and then smaller sections to subdivide Gram +/Gram -, spore-forming/no spores, etc. (This seems to be the most efficient and useful method.)
- Flowcharts or dichotomous keys: These can be helpful supplements, to see the general divisions of the pathogens.

Note: Later this semester, you will use these organized charts to diagnose diseases and identify pathogens in case studies. Some information will frequently be given:

- For non-viral pathogens: Gram +/-, spores +/-, capsule +/-, acid-fast +/-, and motile +/-
- For viral pathogens: DNA/RNA, single/double-stranded, and envelope +/-
- You will also need access to all the details contained in the original charts, such as symptoms, serious complications, high-risk groups, etc.

5. Turn in a hard copy of your organized charts. These will be returned to you. **Due April 30 in lecture.**

**Evaluation:** I will use the same check, check-plus, check-minus evaluation system as for other assignments.

### *Updated point breakdown of pathogen project:*

First chart	5 pts
Five more charts	10
Reliability analysis (in class)	5
Digital chart submission	10
Organized charts	10
<u>Pathogen test</u>	<u>50 (5 per case on test)</u>
Project total	90 pts