**Microbial Diversity Symposium**

**Quiz Questions**

**Fall 2018**

**1- Addison**

1. What are some of the similarities between *Ehrlichia* and *Rickettsia*?

2. Where/how are we most likely to encounter *Ehrlichia/Rickettsia*, and how can we avoid infection?

**2- Mandi**

1. What component of the cell walls of Proteobacteria such as *Bordetella* and *Neisseria* causes symptoms in humans infected by these bacteria?

2. Name 1 of the 3 medically significant diseases caused by the Betaproteobacteria *Bordetella* and *Neisseria.*

**3- Alia**

1. If I have Legionnaires’ disease(caused by *Legionella*), am I likely to spread this disease to someone else? Why or why not?

2. When is someone most likely to get a *Pseudomonas* infection? Why?

**4- Avienne**

1.  What medium can be used to isolate *V. cholereae* in a patient's stool that is infected by cholera? What does is inhibits?

2. Give two similarities of genus *Vibrio* and *Enterobacter.*

**5- Brandi**

1. How do eggs become contaminated with *Salmonella*?

2. Are we at risk to consume *E. coli* in our water? If so how can it be killed?

**6- Malena**

1. How does O-antigen (LPS) in *Shigella* induce m-cells in the gastrointestinal tract?
2. How does *Yersinia pestis* acquire antiphagocytic capabilities?

**7- Cesar**

1. What differences caused *C. pylori* to be reclassified as *H. pylori*?

2. The *Campylobacter* genus has a variety of species that affect a wide range of animals, including animals used in agriculture. What are 2 possible complications *Campylobacter* bacteria can cause in cattle or sheep?

**8- Cheyenne**

1. What is the advantage of *Chlamydia* having an elementary form and a reticulate form?
2. What are the two functions of bacteroides in the human digestive tract that make it a beneficial component of gut flora?

**9- Christy**

1. Which type of bacteria causes “Fried Rice Syndrome?”

2. What are the characteristics of *Clostridium* species in general including cell wall, shape, metabolic pathway, and living environments?

**11- Kayla**

1. *Listeria monocytogenes:* Why does listeriosis primarily affect pregnant women and those with weakened immune systems (older adults, newborns, etc.)?

2. *Enterococcus*: Why is *Enterococcus* considered one of the most antibiotic-resistant bacteria?

**12- Elise**

1. Describe a unique factor of *Mycobacterium* and explain the impact that this factor has on the antibiotic resistance of the cell.

2. What are three key differences between *Mycobacterium* and *Actinomyces*?

**13- Ilene**

1. What are the three phases of sexual spores?

2. What diseases can Ascomycota cause?

**14- Josh B.**

1. Other then the direct infection of humans by pathogenic fungi, what kind of fungal infections threaten humankind on a global scale?

2. Many fungi are teleomorphic meaning they can reproduce both sexually and asexually.  Some members of basidiomycota have lost their ability to reproduce sexually. What characteristic describes these asexual fungi?

**15. Josh C**

1. Name two main features of the cell wall in a Bacillariophyta cell?

2. Name the microorganism that causes red tides and describe some of the environmental effects that red tides can cause?

**16- Joyce**

1. How does endosymbiosis theory apply to Euglenozoans?

2. How does Amoebozoa’s pseudopod form help with mobility and feeding?

**17- Elena**

1. Ciliophora use both macro nucleus and micro nucleus that are involved in what type of reproduction?

2. Apicomplexa are parasitic and most these organisms possess a unique organelle called apicoplast, and it’s involved in what process?

**18- Kristine**

1) What factors qualify the trematode life cycle as complex?

2) List the three portions of a cestode body and give one function of each portion.

**19- Brittany**

1) What does the term “a tube within a tube” refer to?

2) What two forms of nematodes are there? Give examples of each.

**20- Melodee**

1. What are some similarities between herpesviridae and papovaviridae family?
2. What is the difference between enveloped and nonenveloped viruses?

**21- Michelle**

1) The capsid-coat protein of the Picornavirus serve multiple functions. Name two functions and provide a brief description of each.

2) There are several methods to inactivate viruses in the Picornaviridae and Parvoviridae family, both of which are nonenveloped viruses. Name one method that will inactivate both viruses.

**22- Alexa**

1. How does the structure of a filovirus, like *Ebolavirus*, lead to its pathogenicity?

2. Briefly describe the replication process unique to retroviruses. Begin to describe after the retrovirus enters a host cell.