WEEK 1

Welcome to week 1! This week we have a total of 4 four options for you to answer in this week's discussion. You may choice at least one (1) question and answer by Wednesday by 11:59 pm eastern time. Please be aware, you must also post **2 additional times** which **both** can be a reply. You can also answer another question from the options or a follow up question that the instructor will paste later in the week and then do only one reply. You have to have a total of 3 different post on 2 different days in the week.

**It's highly recommended you choose a question in the area you may need additional practice. Take this time to practice and interact with your classmates. **

THREAD: Microscopy

Option (I):
Describe a clinical or research scenario that requires the use of a microscope. What microscope is the best choice for your scenario and why? What would be your second choice?

Answer:

I would definitely use electron microscope to study the complex interactions of microorganisms in a biofilm because of its excellent resolution properties. The electron microscope is the most important tool for the biofilm scientist. Electron microscope has been used for the test and study of biofilms on medical devices and in human infections. My second choice would be a compound light microscope which contains four objective lenses. The resolution might be lower but it is inexpensive, easily available and doesn't require electricity for it to magnify.

The use of transmission electron microscopy and specific polysaccharide stains like ruthenium red allowed researchers both to identify the nature of these extracellular fibers in biofilms and to better elucidate their association with the cells.

OR

Option (II):

As a medical professional, it is important to have prior knowledge in Microbiology. Many of your patients will seek medical attention due to illness caused by bacterial infection. Medical News Today released an article that explains how gastric biopsies are used to diagnose a wide