

Name: \_\_\_\_\_ EID: \_\_\_\_\_

## Topic: Probiotics and the Human Microbiome

Pre-discussion questions. Answer briefly. Use only the space provided.

- 1) What is a probiotic?
  
- 2) Find a commercial probiotic that is not discussed in the readings to share with the class. What microorganism does it contain? How many microbial cells (CFUs)? What are the advertised health benefits?
  
- 3) Describe at least two ways that *Streptococcus mutans* was genetically modified to create a probiotic for preventing cavities. (Be specific: mention genes and their effects.)
  
- 4) What was the main finding of the Le Chatelier *et al* study of the gut microbiome? Mention specific types of bacteria and at least one health condition.
  
- 5) Imagine medicine in the future when we have a better understanding of the microbiome and ability to engineer probiotics. How might it be different from today?
  
- 6) Would you brush your teeth with GM bacteria if it could prevent cavities?      YES / NO
  
- 7) What was the most interesting reading (or viewing) item this week?