**Introduction to Medical Microbiology**

**Exam #3 Study Guide**

**Human-Microbe Interaction & Epidemiology**

1. Know the definitions of infection, portal of entry, adherence, portal of exit, true pathogen, opportunistic pathogen, transient flora, resident flora, and virulence factors.
2. Know the types of flora bacteria typically found in the parts of the digestive tract, respiratory tract, urogenital tract, and on the skin.
3. Know the characteristics of resident and transient flora and things that influence them. (i.e. clothing, occupational exposure, hygiene, etc…)
4. Know the difference between local, systemic, focal, and mixed infections and any examples of each given in class.
5. Know the definitions of epidemiology, pandemic, epidemic, endemic, outbreak, prevalence, mortality rate, morbidity rate, vector, reservoir, fomites, nosocomial and zoonotic disease.
6. Be able to recognize the different types of disease transmission and the factors that can influence transmission.
7. Know the different types of reservoirs, examples of diseases associated with each, and how hard/easy they are to eliminate.

**Immune Responses**

1. Know the characteristics of an effective vaccine.
2. Be able to define adjuvant.
3. Know the mechanism of ELISA and what it can be used to detect.
4. Be able to define the 4 different types of immunity and recognize examples of each.
5. Know the definitions and examples of toxoids, protein subunit vaccines, and polysaccharide vaccines.

**Immunological Disorders**

1. Know the different types of transplants.
2. Know the cells and chemicals (including antibody) involved with Type I hypersensitivity.
3. Know the examples given in class of Types I, II, III, & IV hypersensitivities.
4. Know the blood typing rules.
5. Know how the different types of hypersensitivities are treated (if mentioned in class)

***This study guide covers the majority of information on the exam but not all of it. You are still responsible for any information that was covered in the notes but not put on this guide (intentionally or unintentionally). Good Luck and Study Hard!!***