

THEORETICAL IMMUNOLOGY (14 H)

Program :

1. Introduction
2. Innate Immunity
 - 2.1. The different cell types involved
 - 2.2. Triggering the immune response
 - 2.3. Molecular recognition of pathogens
 - 2.4. Phagocytosis
 - 2.5. The complement system
 - 2.6. Humoral defence systems
 - 2.7. « NK » (natural killer) cell
 - 2.8. Anti-parasite immunity
3. Specific immunity
 - 3.1. Role of antibodies
 - 3.2. Lymphocytes
 - 3.3. Immune memory
 - 3.4. Discrimination either vs. no or
 - 3.5. Cellular immunity
4. Antibodies
 - 4.1. Immunoglobulin classes
 - 4.2. Their structure and function
 - 4.3. Antibodies and the complement system
 - 4.4. Genetic diversity of antibodies
5. Anatomy of the immune system
 - 5.1. The different lymphoid tissues
 - 5.2. Lymph nodes
 - 5.3. The spleen
 - 5.4. The skin
 - 5.5. The marrow
 - 5.6. The liver
6. Immune effectors
 - 6.1. Cellular
 - 6.2. Humoral
7. Control mechanisms
 - 7.1. Lymphocytes
 - 7.2. Antibodies
 - 7.3. The complement system
 - 7.4. Genetic factors
 - 7.5. Apoptosis
8. Laboratory techniques
 - 8.1. Enzymatic/radioisotopic techniques
 - 8.2. Immunoprecipitation
 - 8.3. Immunostaining
 - 8.4. Cell culture