Màster Biomedicina

Programm of the course

Name of the course: Molecular basis and research in inflammatory pathologies, infectives and immunology
Credits: 3
Coordinator: Antonio Celada M.D.; Ph.D.

Subject:

The course is divided in two structural areas: basic and clinical immunology. The teaching will be structured according the different objectives of each block. Each block will combine a basic lesson of theory and a seminar related to the subjects explained in the theory. The seminar may be based on original work of the professor team or a work of the literature.

- **Basic immunology:**
  The first 8 subjects will be related to the function of the immune system under normal conditions. We will make three different phases:
  1) General introduction where taking into account the basic knowledge of histology, biochemistry and cellular biology we will introduce the more critical concepts in immunology.
  2) Explanation in detail of each of the molecular and cellular elements of the immune system.
  3) Description and analysis of the integrate response of the immune system.

- **Clinical immunology:**
  The following 12 subjects will be dedicated to the different pathologies where the immune system is directly involved, or is associated to other pathologies. We will describe the diagnostic tests used in clinic. We will use clinical histories of patients to show the concepts of the different pathologies where the immune system plays a critical role.
  1) Immune response to microorganisms.
  2) Inflammation
  3) Immunodeficiencies, congenitally and acquired.
  4) Autoimmunity
  5) Transplantation
  6) Cancer
References

Books


WEB

http://www.efis.org European Federation of Immunological Societies.
http://www.aai.org American Association of Immunologists.