Module Description

Immunology

How multicellular organisms have evolved defense mechanisms that are foreign to the body - Molecules and Cells involved in normal immune defense mechanisms - Organs of immune systems and differences between innate and adaptive immunity, humoral and cellular immunity - Structure/function relationships in antibodies classes - Antibody synthesis and the genetic mechanisms for antibody diversity, Molecular basis of T-cell activation, role of cytokines in adaptive immunity and inflammation - Structure/function of B-cell and T-cell receptors and MHC-I and MHC-II - Immunological methods for production and application of Antibody molecules as tools for research diagnosis and treatment. Basis of acquired immune deficiency, Hypersensitivity reaction, tolerance and autoimmunity

Module Aims:

Aim 1: Initial concepts of Immunology principal.

Aim 2: Understanding of the basic principles of host immunity

Aim 3: Critically assess, select and apply appropriate research methods infection

Gain knowledge of current immunological principles

The ability to recognize antigens

References:


Basic Immunology: Functions and Disorders of the Immune System with STUDENT CONSULT Online Access, 7th Edition