

Immunology

Lecture 1: Innate Immunity

- Reacts to limited number of molecules
- Cannot adapt
- No lasting protection
- Rapid and constant response
- Fixed
- External barriers
 - Skin
 - Mucous membranes
- Internal barriers
 - Physiological
 - Endocytic and phagocytic
 - Inflammatory response
- Skin
 - Two distinct layers
 - Epidermis
 - Thin outer layer
 - Layers of tightly packed epithelial cells
 - Outer layer is dead
 - Filled with keratin (impermeable)
 - Renewed each 10-15 days
 - Sheds bacteria on skin surface
 - Avascular
 - Psoriasis
 - Dermis
 - Thicker layer
 - Vascularised
 - Connective tissue
 - Hair follicles
 - Sebaceous and sweat glands
 - Sebum
 - Maintains pH of 3-5
- Mucous Membranes
 - Conjunctivae, pulmonary, alimentary and urogenital tracts
 - Provides saliva, tears etc.
 - Wash away microorganisms
 - Antiviral, antibacterial substances

- High viscosity
 - Entraps
 - Cilia propel organisms from tracts
- Physiological barriers