BIO1331 Animal Biochemistry, physiology and histology

[60h+22.5h exercises] 6 credits

This course is taught in the 1st and 2nd semester

Teacher(s): Bernard Knoops (coord.), Jean-François Rees, Yves-Jacques Schneider
Language: French
Level: First cycle

Aims

To establish the bases in biochemistry, physiology and histology, the main animal tissues will be studied, emphasis being put on mammalian tissues. Certain notions in cellular biology will also be deepened with the objective of integrating morphological, physiological and biochemical aspects in cellular processes.

Main themes

Epithelia.
Histology of epithelia
Physiology : transport of gas and solutes through epithelia
Biochemistry : application to intestinal epithelium in the context of digestion, transport and metabolism of food
Muscles.
Histology of skeletal muscle, cardiac muscle and smooth muscles
Physiology of muscular contraction
Biochemistry of energy production mechanisms
Nervous tissue
Histology of central and peripheral nervous system
Physiology of neurotransmission - synapse and regulation
Biochemistry in energy gain of brain and neurotransmission
Connective tissues
Histology of connective tissues
Physiology : brown adipose tissue and thermoregulation
Biochemistry : energetic reserve control in adipose tissue
Blood
Blood cells
Biochemistry : haemoglobin role, biochemistry of coagulation

Other credits in programs

CHIM22 Deuxième licence en sciences chimiques (6 credits)