

Tutorial I: autumn semester 2014/2015

Group No. 33 ##### 16:00 - 18:30	Campus, Department of Physiology, room 207
Group No. 31 ##### 16:15 - 18:45	Campus, Department of Physiology, library
Group No. 32 ##### 13:00 - 15:30	Campus, Department of Physiology, room207
Group No. 35 ##### 13:30 - 16:00	Campus, Department of Physiology, room207
Group No. 34 ##### 13:00 - 15:30	Campus, Department of Physiology, room207
Group No. 36 ##### 13:30 - 16:00	Campus, Department of Physiology, room207
Group No. 30 ##### 16:15 - 18:45	Campus, Department of Physiology, room207
Group No. 37 ##### 13:00 - 15:30	Campus, Department of Physiology, room207

The tutorial takes place **in the Department of Physiology, building A 20, Campus, , Kamenice 5, Brno-Bohunice**

The tutorial will be held by Professor M. Nováková, PhD.

Program:

Intercellular contact

Mechanical, electrical and humoral coupling, ligands and receptors.

Second messengers.

Resting membrane potential

Na/K ATP-ase, diffusion currents, electro-chemical gradient, equilibrium potential.

Physiological importance of resting membrane potential.

Action potential

Local responses, selective conductivity of membrane channels, mechanism of depolarization, transpolarization and repolarization.

Principles of muscle contraction

Contractile proteins, troponin and tropomyosin, role of calcium, mechanism of relaxation. Differences between smooth, skeletal and heart muscle.

All students are obliged to read the theory prior to the tutorial (Barrett: Ganong's Review of Medical Physiology, Section I-chapters 1,2; Section II-chapters 4,5).

The tutorials are obligatory, the presence is the condition for obtaining the credit.

All students are allowed to substitute only one tutorial during one semester - those who will have more than one absence will not obtain the credit from tutorials.

doc. PharmDr. Petr Babula, Ph.D.
Head of the Department of Physiology