Tutorial VI: autumn semester 2016/2017

K Group No. 30	######	13:30 - 15:10	Campus, Department of Physiology, room 207
B Group No. 32	######	16:00 - 17:40	Campus, Department of Physiology, room 207
B Group No. 33	######	17:00 - 18:40	Campus, Department of Physiology, room 207
K Group No. 31	######	13:30 - 15:10	Campus, Department of Physiology, room 207
S Group No. 35	######	13:30 - 15:10	Campus, Department of Physiology, library
K Group No. 36	######	11:00 - 12:40	Campus, Department of Physiology, room207
S Group No. 37	######	11:00 - 12:40	Campus, Department of Physiology, library
S Group No. 34	######	13:30 - 15:10	Campus, Department of Physiology, library

The tutorial takes place in the Department of Physiology, building A 20,

Campus, , Kamenice 5, Brno-Bohunice

The tutorial will be held by doc. PharmDr. Petr Babula, Ph.D., dr. Mohamed Al-Kubati, Ph.D. and dr. Ivan Szadvari.

Program: Hemostasis

Circulation and hemostasis

Blood vessels tone and its importance for blood flow. Characteristics of blood flow in vessels. Endothelial function. Local reaction of vessels after vessel wall damage. Mechanisms of vasoconstriction and vasodilation. Circulating vasoactive molecules.

Primary hemostasis and platelets

Thrombopoesis, number, morphology, structure and shape (membrane, glycocalyx, granules) of thrombocytes. Thrombocyte function - 3A (adhesion, activation, aggregation).

Hemocoagulation

Protein and cellular model of blood clotting. Overview of the coagulation factors, their synthesis and function. Intrincis and extrinsic activation of coagulation cascade.

Regulation of hemostasis

Humoral regulation of hemostasis. Anticoagulation, fibrinolysis, thrombolysis. Non-humoral regulation of hemostasis.

Clinical applications

INR, anti-Xa, anticoagulants, fV-Leiden mutation.

All students are obliged to read the theory prior to the tutorial (Barrett: Ganong's Review of Medical Physiology or Boron W., Boulpaep E.: Medical Physiology.) The tutorials are obligatory, the presence is the condition for obtaining the credit. <u>All students are allowed to substitute only two tutorials during one semester -</u> <u>those who will have more than two absences will not obtain the credit from tutorials.</u>

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