# Tutorial IV: autumn semester 2016/2017

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S 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
S Group No. 31 ###### 13:30 - 15:10 Campus, Department of Physiology, room 207
B Group No. 35 ###### 13:30 - 15:10 Campus, Department of Physiology, room 207
K Group No. 36 ###### 16:00 - 17:40 Campus, Department of Physiology, room 207
B Group No. 37 ###### 16:00 - 17:40 Campus, Department of Physiology, room 207
B Group No. 37 ###### 17:00 - 18:40 Campus, Department of Physiology, library
K Group No. 34 ###### 13:15 - 14:55 Campus, Department of Physiology, room 207
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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.

# **ENDOCRINE PHYSIOLOGY**

#### 1. General principles of endocrine physiology

Hierarchy of endocrine functions - examples, second messengers, hormone-receptor complex, up- and down-regulation of receptors - examples.

## 2. Humoral regulation of mineral and water metabolism

Antidiuretic hormon (vasopressin), aldosteron, natriuretic peptides, parathormone, vitamin D, calcitonin.

## 3. Regulation of glycemia

STH. Insulin (diabetes mellitus), glucagon, somatostatin D; cortisol, adrenaline.

### 4. Humoral regulation of energy production

Thyroid gland, thyreopathies.

## 5. Endocrine component of the stress response

its structural elements, metabolic and other impact

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.

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

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