## Suggested essay topics for the students' competition in pathophysiology in memory of "Hőgyes Endre" 2013/2014

• The role of nutritional risk factors in the development of ischemic cardiovascular diseases

Tutors: Dr. Szollár Lajos, Dr. Tornóci László

• The role of inflammation in the development and progression of arteriosclerosis

Tutor: Dr. Szollár Lajos

• Vaccination, a possible therapy of arteriosclerosis

Tutor: Dr. Szollár Lajos

• The role of TGF-β in atherosclerosis

Tutors: Dr. Hamar Péter

• The pathophysiology of metabolic X syndrome

Tutor: Dr. Szollár Lajos

• Inherited and acquired factors of diabetes mellitus

Tutor: Dr. Tornóci László

Patomechanism of the side effects developing in diabetes mellitus type I and its therapeutic possibilities
Tutors: Dr. Molnár Miklós

The physiology and pathophysiology of a tissue specific renin angiotensin system (kidney, brain)

Tutor: Dr. Rosivall László

• Juxtaglomerular apparatus, the brain of the kidney

Tutors: Dr. Rosivall László

• Specific inhibition of cyclooxygenase-2

Tutor: Dr. Molnár Miklós

Molecular mechanism of preterm delivery

Tutor: Dr. Molnár Miklós

• The pathogenesis of hypertension in pregnancy – preeclampsia – eclampsia

Tutor: Dr. Kriston Tünde

• The effect of pregnancy on the progression of SLE

Tutors: Dr. Kökény Gábor, Dr. Hamar Péter

• The role of T lymphocytes in progressive kidney fibrosis

Tutors: Dr. Kökény Gábor, Dr. Hamar Péter

Mechanism of apoptotic cell death during reperfusion after ischemia

Tutors: Dr. Hamar Péter

Possible use of RNA interference in clinical practice

Tutors: Dr. Hamar Péter

• The role of relaxin in the development of cardiovascular diseases

Tutors: Dr. Mózes Miklós, Dr. Kökény Gábor

The role of relaxin in kidney diseases

Tutors: Dr. Kökény Gábor, Dr. Mózes Miklós

• The role of TGF- $\beta$  in progressive kidney fibrosis

Tutor: Dr. Mózes Miklós

Biochemical markers of monitoring tissue ischemia

Tutor: Dr.Papp Enikő

• A new hypothesis in the pathomechanism of a disease of your choice

Your own tutor can refer you to the person who can help you with writing this essay, depending on the subject.

The date and time of the competition: the 3rd May, 2014. (Saturday) 9:00-12:00h.

Place: NET Green auditorium.