Study programme: PHYSIOLOGY AND PATHOLOGICAL PHYSIOLOGY

ANNOTATION

The Ph.D. programme focuses on up-dating the present knowledge on recent transcutaneous sensors and on microdialysis, aiming to the assessment of concentration of glucose and various drugs in plasma or interstitial tissue. It also focuses on evaluation of microdialysis as possible method for research and/or practical use.

ADMISSION PROCEDURE 2018/19

Dissertation topics of the training department:

<u>Department of Physiology, Faculty of Medicine and Dentistry, Palacký University Olomouc,</u> Hněvotínská 3, Olomouc, tel.: +420 585 632 351

1. Continuous glucose monitoring using new transcutaneous sensors and microdialysis

1 position in the full-time form of study

Supervisor: doc. MUDr. Rudolf Chlup, CSc.

<u>Department of Pathological Physiology, Faculty of Medicine and Dentistry, Palacký University Olomouc, Hněvotínská 3, Olomouc, tel.: +420 585 632 502</u>

2. Molecular substance of sarcoidosis

1 position in the full-time form of study

Supervisor: prof. MUDr. Martin Petřek, CSc.

3. Detection of miRNA in vessels and valves related to atherosclerosis

1 position in the full-time form of study

Supervisor: prof. MUDr. Martin Petřek, CSc

4. Detection of miRNA in lung inflammation

1 position in the full-time form of study

Supervisor: Dr. Amit Kishore, Ph.D., M.Sc.

5. Detection and significance of exosomes in cardiovascular and respiratory inflammatory disorders

1 position in the full-time form of study

Supervisor: Dr. Amit Kishore, Ph.D., M.Sc.

6. The effect of ageing on stability of mRNA in primary cells

1 position in the full-time form of study

Supervisor: Mgr. Zdenka Navrátilová, Ph.D.

7. The effect of smoking on the expression of post-transcription regulatory factors

1 position in the full-time form of study

Supervisor: Mgr. Zdenka Navrátilová, Ph.D.

Application deadline: 14 May 2018

<u>Date and location of the entrance examination:</u> **20 June 2018** at 10:00 at the Department

of Pathological Physiology, Faculty of Medicine and Dentistry, Palacký University

Olomouc, Hněvotínská 3, Olomouc

Anticipated maximum number of admitted students:

Full-time form: 7 students

Distance form: -

Examination format: oral

Contents of entrance examination:

 colloquium on various aspects of applicant's motivation, knowledge, skills and attitudes related to the topic of the study

Evaluation criteria:

- problem-oriented knowledge and skills of the applicant
- communication abilities
- basic knowledge of Czech language/willingness to learn it

The annual tuition fee for the post-graduate study programme conducted in English is set at EUR 3,000.