## 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. Topics for pathophysiology doctoral studies are linked to ongoing research which evolves around inflammation and its regulation on cellular & molecular level with translation to cardiopulmonary disorders.

## ADMISSION PROCEDURE 2019/20

Dissertation topics of the training department:

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

- 1. **Continuous glucose monitoring using new transcutaneous sensors and microdialysis** 2 positions in the full-time form of study or 2 positions in the distance form of study Supervisor: doc. MUDr. Rudolf Chlup, CSc.
- Incretin and insulin analogues in the treatment of type 1 and 2 diabetes mellitus
  2 positions in the full-time form of study or 2 positions in the distance form of study
  Supervisor: doc. MUDr. Rudolf Chlup, CSc.

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

- Molecular pathophysiology of pulmonary inflammatory disease
  1 position in the full-time form of study
  Supervisor: prof. MUDr. Martin Petřek, CSc.
- Genetic factors of sudden cardiac death
  1 position in the full-time form of study
  Supervisor: MUDr. Jana Petřková, Ph.D.

Application deadline:

5. **The selected regulatory factors of inflammation** 1 position in the full-time form of study Supervisor: Mgr. Zdenka Navrátilová, Ph.D.

Date and location of the entrance examination:	19 June 2019 at 10:00 at the Departmer	۱t
	of Pathological Physiology, Faculty of	of

13 May 2019

Medicine and Dentistry, Palacký University Olomouc, Hněvotínská 3, Olomouc

## Anticipated maximum number of admitted students:

Full-time form:7 studentsDistance form:4 students

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.