
Courses for doctoral students

Selected problems of endocrinology and metabolism 2024/2025

Venue of seminar: distance form: MS Teams

Type of seminar: presentations of seminars participants(10 min approx.), focused on particular problems.

Conditions to receive the credit: attendance of seminar sessions and short presentation.

It is necessary to register for the seminar by mail: mstvojtkova@endo.cz

The Lectures are held in Czech language.

Teachers:

MUDr. Michaela Svojtková, Ph.D., Institute of Endocrinology

MUDr. Hana Pospíšilová, Ph.D., Institute of Endocrinology

December 9, 2024, at 4pm

Opening and informative seminar – selection of presentations topics

January 27, 2025, at 4pm

Presentations of selected participants

February 24, 2025, at 4pm

Presentations of selected participants

March 24, 2025, at 4pm

Presentations of selected participants

April 28, 2025, at 4pm

Presentations of selected participants

May 26, 2025, at 4pm

Course summary, credit award

Electrophysiological methods in clinical practice and research

PGS COURSE for the Ph.D. BIOMEDICINE study program

Date:

Coordinator: Prof. MUDr. Otomar Kittnar, CSc.

Lecturer: MUDr. Eduard Kurišćák, Ph.D.

Institute of Physiology 1. LF UK, Prague

Address: Albertov 5, 128 00 Praha 2, Czech Republic

Tel.: 224968483

E-mail: okittnar@lf1.cuni.cz , ekuri@lf1.cuni.cz

Registration till

Registration fee: no fees

Accommodation for attendees is not being provided by organizers of the course

Course accomplishment requirements: Credit given based on attendance

Program:

1. Introduction to the subject (biophysics and electrophysiology of the cell membrane, information theory, signal transduction process). Differences and characteristics of bio-signals (stochastic vs. deterministic, stationarity, ergodicity, etc.).
2. Methods of registering bio-electrical signals (electrodes, operational amplifiers, ADC convertors, etc.). Preprocessing, processing and postprocessing of digital signals.
3. Analysis of electrophysiological signals in time and frequency domain. Harmonic analysis (FFT and others).
4. Automated ECG analysis. EEG signal processing – brain mapping, brain-computer interface.

Methodological Fundamentals of Research of Cardiovascular Diseases

Course for doctoral student - Cardiovascular sciences

Main coordinator: P. Widimský

The course is accessible and open for all doctoral students of the CU free of charge. To complete the course, it is necessary to attend at least 70% of all lessons.

Every lesson starts at 15:30 with the first approximately 20 minutes dedicated to a presentation followed by an informal and interactive discussion (eventually student presentations or sharing experiences etc. are also possible). If any student should be interested in showing his or her own presentation (slides with questions included) during a seminar, he or she should consult the lecturer in advance.

The seminars will take place either in their full-time form (the location of each meeting listed below in the programme) or remotely (according to the current epidemiological situation). The form of the seminars will always be confirmed by the Dean's Office of the 3. FM (Mrs. Jizbová) at least one week beforehand. All lectures organized remotely due to an adverse epidemiological situation can be accessed through this link: <http://meet.lf3.cuni.cz/metodologie-KV>

Course code in the SIS: **CPGS014**

[Course program for download](#)

Course: Applied Pharmacokinetics (B90274)

Field Board 10: Pharmacology and Toxicology

A course is intended primarily for Charles University doctoral students in the study program Pharmacology and Toxicology and for other students interested in clinical pharmacokinetics. It is valid as one of the obligatory courses that must be passed during Doctoral Study Program. The confirmation of completion of the course is validated by credit in the University Study Report. The course lasts 3 days and comprises from seminars on the basic pharmacokinetic theory which is then discussed on practical demonstrations (case reports, guidelines, therapeutic drug monitoring, and population pharmacokinetics) and interactive practicing of therapeutic drug monitoring on validated software (MW/Pharm). Part of the course is final test of acquired knowledge.

Date and place:

Institute of Pharmacology 1st Faculty of Medicine Charles University and General University Hospital in Prague, Albertov 4, 128 00 Praha 2

[Course program for download](#)

The Essentials of Medical Sciences for students of non-medical disciplines

In the school year of 2020/2021 we are opening once more the course of the Essentials of Medical Sciences for students from non-medical branches of study.

The course takes place every Monday of the summer semester and it aims to acquaint students with the basics of anatomy, physiology, pathophysiology and pathology. After each lecture, time is set aside for consultations and discussions with the lecturer.

The course starts with the beginning of the summer semester. Please, send your applications to this email: kbernas@lf3.cuni.cz. The maximum number of students is 15.

To successfully complete the course, it is necessary to attend at least 80% of lectures, pass a test and submit a short work (literary review on the topic of your dissertation) using the knowledge gained in the course.

Course code in the SIS: **CPGS00**

MUDr. K. Bernášková, CSc. is responsible for the organisation of this course.
Department of pathophysiology, Ke Karlovu 4, 120 00 Praha 2, kbernas@lf3.cuni.cz

[Course program for download](#)

Introduction to Practical Research Methodology

Recommended according to the [directive of the Dean of 3FM CU No. 6/2018](#) .

The course Introduction to Practical Research Methodology is meant for postgraduate students at the beginning of their studies. Within this course, students will acquire necessary theoretical knowledge utilizable during their doctoral studies,

as well as the basics of research methodology in practice. One of those important skills gained during the course should be the ability to transform their scientific work and form an abstract, a poster or an oral presentation. For more information, see the [course annotation](#) .

Experimental Surgery

Course dates

- Experimentální chirurgie I 22.-23.4.2024 12:00-15:00
- Experimentální chirurgie II 24.-25.4.2024 12:00-15:00

To register to the course kindly contact **Bc. Lenka Hájková, MSc.** - lenka.hajkova@lf1.cuni.cz

Progress in Neurosciences Course

- will be held from to , on-line participation
- virtual form of teaching
- the number of participants will not be limited
- registration form for potential participants:
<https://forms.gle/E7TfyxzpCkoHRBQb8>

[Course program for download](#)