

Study programme: IMMUNOPHARMACOTHERAPY

ANNOTATION

A graduate of the Immunopharmacotherapy course will receive a training supported by a system of specialized seminars together with the practical training in laboratories focused on experimental immunology, intracellular signaling, immunopharmacology and nanotechnology. The graduate will be educated in detail with the current possibilities of biological treatment and will be able to actively participate in the development of new biological preparations in basic and applied research. Graduates will be able to design experiments and publish the results of their work in Czech and foreign scientific journals. The combination of knowledge from the field of immunology, immunopharmacology and technological fields such as nanotechnology and in vivo imaging is a prerequisite for a very good employment of graduates in universities and in domestic and foreign pharmaceutical and biotechnology companies.

ADMISSION PROCEDURE 2020/21

Contact details of the training department:

Department of Immunology, Faculty of Medicine and Dentistry, Palacký University Olomouc and University Hospital Olomouc, Hněvotínská 3, Olomouc, phone: +420 585 632 752.

Dissertation topics of the training department:

1. Genetic vaccination.

1 position in the full-time form of study

Supervisor: prof. Mgr. MUDr. Milan Raška, Ph.D.

2. Mechanisms of dendritic cells activation.

1 position in the full-time form of study

Supervisor: prof. Mgr. MUDr. Milan Raška, Ph.D.

3. Nanoparticulate formulation of antigens for immune response induction.

1 position in the full-time form of study

Supervisor: prof. Mgr. MUDr. Milan Raška, Ph.D.

4. Liposomal carriers for immunotherapeutics.

1 position in the full-time form of study

Supervisor: prof. Mgr. MUDr. Milan Raška, Ph.D.

5. Vaccines based on recombinant protein mimicking protective epitopes.

1 position in the full-time form of study

Supervisor: prof. Mgr. MUDr. Milan Raška, Ph.D.

6. Cell based tumor therapy.

1 position in the full-time form of study
Supervisor: prof. Mgr. MUDr. Milan Raška, Ph.D.

7. Immune checkpoint inhibitors for tumor therapy.

1 position in the full-time form of study
Supervisor: prof. Mgr. MUDr. Milan Raška, Ph.D.

8. Pathology of immune complex based autoimmune diseases.

1 position in the full-time form of study
Supervisor: prof. Mgr. MUDr. Milan Raška, Ph.D.

9. Development of vaccine preventing Borrelia infection.

1 position in the full-time form of study
Supervisor: prof. Mgr. MUDr. Milan Raška, Ph.D.

Contact details of the training department:

Department of Biology, Faculty of Medicine and Dentistry, Palacký University Olomouc and University Hospital Olomouc, Hněvotínská 3, Olomouc, phone +420 585 632 151.

Dissertation topic of the training department:

1. Molecular pathophysiology and experimental therapy of hematological disorders

1 position in the full-time form of study
Supervisor: doc. RNDr. Vladimír Divoký, Ph.D.

Application deadline: **12 May 2020**

Date and location of the entrance examination: **3 June 2020 or 10 June 2020 at 10 a.m.**

Library of the Department of Immunology, Faculty
of Medicine and Dentistry, Palacký University
Olomouc

Anticipated maximum number of admitted students:

Full-time form:	6 students
Distance form:	0 students

Examination format: oral

General content of the oral entrance examination:

The candidate must meet the prerequisites of professional knowledge corresponding to the level of the master programme of the course Molecular Biology and Fundamentals of Immunology.

Job description:

Key tasks as a PhD fellow are:

- Carry through an independent research project under supervision
- Write scientific articles and the PhD thesis on the grounds of your research project
- Complete PhD courses Obtain experience with teaching or other types of dissemination related to your PhD project
- Participate in national and international conferences and scientific meetings

Evaluation criteria:

MSc, MD or equivalent degree in natural or medical sciences.

The level of knowledge of molecular biology and immunology will be evaluated, as well as the motives leading to the commencement of doctoral studies and the current scientific research activities.

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