

## **Study programme: IMMUNOPHARMACOTHERAPY**

### **ANNOTATION**

PhD students are profiled for orientation in the principles of basic and clinical immunology, well trained in performing various methodological approaches allowing determining the parameters of cell-mediated and humoral immunity, and the underlying genetic background of various immunologically determined states. The dissertation topics proposed by the Department of Immunology, Faculty of Medicine and Dentistry and University Hospital Olomouc, reflect the experimental focus of individual research groups, and their collaboration with other academic, research, and commercial subjects.

### **ADMISSION PROCEDURE 2021/22**

Dissertation topic/s of the training department:

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

#### **1. The mechanisms of mucosal defense and IgA immunoglobulin**

1 position in the full-time form of study

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

supported by grant: 15-33686A MZ CR

#### **2. The pathogenesis of immune complexes-based autoimmune diseases**

1 position in the full-time form of study

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

supported by grant: 15-33686A MZ ČR

#### **3. The study of HIV-1 envelope glycoprotein Env as the approach for effective design of vaccine antigen**

1 position in the full-time form of study

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

supported by grant: IGA 15-32198A MZ ČR

#### **4. Expression of recombinant proteins modified for proteoliposomal vaccines preparation and testing**

1 position in the full-time form of study

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

supported by grant: IGA 15-32198A MZ ČR

**5. New methods for detecting gene variability in clinical practice**

1 position in the full-time form of study

Supervisor: doc. Ing. Eva Kriegová, Dr.

supported by grant: VES16-32339A MZ ČR, VES16-31852A MZ ČR

**6. Study of immune cells in orthopaedic diseases**

1 position in the full-time form of study

Supervisor: doc. Ing. Eva Kriegová, Dr.

supported by grant: VES16-31852A MZ ČR

**7. Study of chemokine network in the pathogenesis of B-cell malignancies**

1 position in the full-time form of study

Supervisor: doc. Ing. Eva Kriegová, Dr.

supported by grant: VES16-32339A MZ ČR

**8. The importance of selected immunogenetic and immunological factors for the haematopoietic stem cell transplantation outcome**

1 position in the full-time form of study

Supervisor: prof. MUDr. František Mrázek, Ph.D.

supported by grant: IGA UP

**9. Multiparametric analysis of lymphocyte immune response to antigenic stimulation**

1 position in the full-time form of study

Supervisor: RNDr. Leona Rašková Kafková, Ph.D.

supported by grant: VES16-31852A MZ ČR

Application deadline: **14 May 2021**

Date and location of the entrance examination: **15 June 2021** at 10:00 a.m. in the library of the Department of Immunology, Faculty of Medicine and Dentistry and University Hospital Olomouc, Palacký University Olomouc, Hněvotínská 3, Olomouc

Alternative date of entrance examination: **12 June 2021** at 10:00 a.m. in the library of the Department of Immunology, Faculty of Medicine and Dentistry and University Hospital Olomouc, Palacký University Olomouc, Hněvotínská 3, Olomouc

Anticipated maximum number of admitted students:  
**Full-time form: 9 students**

Examination format: oral

Contents of entrance examination:

basic immunology, principles of the immune system, specific and adaptive immunity, cell mediated and humoral factors of immune protection

basics of clinical immunology – allergy, autoimmunity, immune deficiencies, immune control of tumour development

immunotherapy

Graduates of General Medicine or Dentistry programmes or graduates of biology, alternatively biochemistry related study programmes are welcomed.

Based on the submitted CV evaluation, candidates will be invited for an interview.

Evaluation criteria:

The interview will focus on assessing the candidate's orientation in immunology and general biology, including the evaluation of laboratory skills. The next part will be focused on determining the candidate's ability to propose an experimental solution for simple biological and immunological tasks.

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