

Study programme: MEDICAL IMMUNOLOGY

ANNOTATION

Ph.D. 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 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. 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 ČR

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 CR

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 CR

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: 15-32198A MZ CR

5. New methods for the analysis of immune genes

1 position in the full-time form of study

Supervisor: doc. Dr. Eva Kriegová

Support: MZ ČR VES16-32339A, MZ ČR VES16-31852A

6. Study of immune cell profiles in synovial fluid in osteoarthritis

1 position in the full-time form of study

Supervisor: doc. Dr. Eva Kriegová

Support: MZ ČR VES16-31852A

7. Study of the microenvironment in B-cell malignancies

1 position in the full-time form of study

Supervisor: doc. Dr. Eva Kriegová

Support: MZ ČR VES16-32339A

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

1 position in the full-time form of study

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

Support: IGA UP, MEX grant from University Hospital Olomouc

Application deadline: **12 May 2020**

Date and location of entrance examination: **11 June 2020** at 10:00
library of the Department of Immunology

Alternative date of entrance examination: **18 June 2020** at 10:00
library of the Department of Immunology

Anticipated maximum number of admitted students:

Full-time form: **8** students

Distance form: **0** students

Contents of the 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 biologically, eventually biochemically, oriented 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, inclusive of evaluating laboratory skills. The following 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 as EUR 3,000.