

UNIVERSITY OF BELGRADE  
FACULTY OF MEDICINE  
PhD STUDIES

NAME OF THE MODULE: INFLAMMATION AND AUTOIMMUNITY

CONTENT OF THE PROGRAM:

Inflammation and autoimmunity is clinical interdisciplinary module.

The cells and mediators of the immune system function together in a highly complex network to maintain the integrity of the body in the face of potentially damaging microbes and other factors in our environment. When control of the immune system is impaired, autoimmunity and tissue damage due to inflammation can result.

Attendees of the Inflammation and Autoimmunity module study the basic mechanisms of immune system function and the role of altered immune system activation, regulation, and effector function in the pathogenesis of the systemic autoimmune and inflammatory diseases.

The prototype diseases studied include systemic lupus erythematosus, antiphospholipid syndrome, rheumatoid arthritis, scleroderma, vasculitis, allergic and skin disorders, secondary immunodeficiencies, inflammatory bowel diseases etc. Observations from basic research studies are applied to patients with autoimmune and inflammatory diseases in translational research that aims to identify new therapeutic targets and to develop improved treatments for patients.

Goals of the Autoimmunity and Inflammation Program:

- To characterize the underlying mechanisms that account for autoimmune and inflammatory diseases
- To identify new targets for therapeutic intervention in autoimmune, inflammatory, and musculoskeletal diseases

ADMISSION REQUIREMENTS:

- The grade point average from all previous levels of study to be at least 8.00
- Knowledge of English to the level of communication and monitoring of scientific literature
- Appropriate computer skills
- Desirable recommendations related to scientific research
- Completed integrated academic studies in medical sciences lasting 6 years (360 ECTS),
- Scientific research work in the relevant field as evidenced by publications in which the candidate is the author (one original paper in a journal cited in the *Medline* database in which the candidate is the author)

#### MEMBERS OF THE ADVISORY BOARD:

Prof. Mirjana Šefik Bukilica  
Prof. Miodrag Krstić  
Prof. Aleksandra Perić Popadić  
Prof. Mirjana Milinković Srećković

#### OBLIGATORY COURSES:

1. Methodology of scientific research work
2. Biostatistics (basic course)
3. Research ethics
4. Inflammation - basic principles and clinical correlations
5. Autoimmunity - basic principles and clinical correlations

#### ELECTIVE COURSES:

1. Biomarkers in diseases of the musculoskeletal system
2. Allergic diseases
3. Systemic diseases, vasculitis and immunodeficiencies
4. Rehabilitation of patients with inflammatory and autoimmune diseases
5. Immunoinflammatory and autoimmune diseases of the digestive system
6. Immunoinflammatory and autoimmune liver diseases
7. Immunoregulation
8. Modulation of the immune response
9. Immunoinflammatory and autoimmune skin diseases

