

Immunopathology Laboratory

In 1973 the Immunology Laboratory included in its structure the Immunopathology team, already existing since 1969 in the institute. This team performed interdisciplinary activities such as histopathology, immunology and serological immunodiagnostic for medical units.

Since 1992 the laboratory consists of three teams: Immunomodulators, Immunodiagnostic and Clinical Immunochemistry (abolished in 2007). Immunopathology Laboratory has now, as main research objectives, measurement of changes in humoral and cellular immune status in diseases with immune component, implementation of new immunodiagnostic methods and criteria for the study of antitumor immune response mechanisms, immunomodulation and immunotherapy. Also, a constant activity of Immunopathology Laboratory is the clinical immunodiagnostic through immunological tests for patients with different pathologies.

The laboratory was headed by MD, PhD Rodica Lenkei during 1969-1980, MD, PhD Carmen Stroilă between 1982-1992, MD, PhD Cornel Ursaciuc between 1992-2000 and from 2000 to present Biol. Dan Ciotaru, senior research 3.



MD, PhD
Rodica Lenkei



MD, PhD
Carmen Stroilă



MD, PhD
Cornel Ursaciuc



Biol.
Dan Ciotaru

The main directions of research during 1970-1980 were: serological immunodiagnosis in chronic hepatitis, the study of autoantibodies in autoimmune diseases, the study of pathogenic and diagnostic role of anti - polymerized human albumin autoantibodies (AAA). These autoantibodies were found in 1974 by MD, PhD Rodica Lenkei and they represented an important concern for the Immunopathology team until 1980 and for the Immunochemistry team until 1987.

Since 1982, under the leadership of MD, PhD Carmen Stroilă, the major themes of the research were tumor immunology and cellular antitumor immune response. Later, this concern was associated with the study of pathogenic role of fibronectin in the development of diseases with immune component or with serious injury. There were approached the following topics:

- The early immunodiagnostic of malignant tumors by leukocyte adherence inhibition test (LAI)
- Determination of serum factors involved in modulating of cellular immune response in cancer

- Modulate E-rosette test for lymphocyte response investigation in diseases with immune component and malignant tumors
- Methodology for dosage of fibronectin and study of this glycoprotein as a pathogenic factor in infections, immunodeficiency, malignancy etc.
- Modulation of leukocyte adherence by interferon and fibronectin
- Methodology for evaluation of E-rosette test by specific indicators

After 1992, the core team of Immunopathology, made the Immunodiagnostic team, led till 1996 by MD, PhD Carmen Stroilă and from 1996 to present, by Biol. Dan Ciotaru.

The current activity of Immunopathology Laboratory:

- The immunodiagnostic of autoimmune diseases by detection of specific and nonspecific autoantibodies (anti-LKM-1, LMA, ANCA, ANA, ASMA, AMA)
- The evolution of malignant tumors in animals under the influence of the natural or synthetic modulator factors
- The physiology of normal human peripheral polymorphonuclear granulocytes
- Cellular immunological parameters in various pathologies and monitoring of some modern therapeutic lines
- Study of placental proteins and their use in early diagnosis of cancer
- Identification of a panel of predictive biomarkers of the development of inflammatory rheumatic diseases
- NK-CD56^{bright} and NK-CD56^{dim} subpopulations and glycoproteins from tetraspanin family: immunomodulators involved in tumor invasion and metastasis
- Study of innovative therapies in infantile hemangiomas
- Study of non-invasive markers for diagnostic and prognosis in NASH

The current structure of Immunopathology Laboratory:

1. Dan Ciotaru - specialist biologist, Senior Researcher 3, Head of Laboratory
2. Cornel Ursaciuc - MD, PhD, Senior Researcher 2, Head of Immunology Department
3. Mihaela Surcel - chemist, Senior Researcher3, Cytometry Unit leader
4. Radu Huică - MD, PhD student, Senior Researcher 3, Immunogenomics Unit leader
5. Maria Dobre - specialist biologist, Researcher, BCTAN Unit leader
6. Adriana Munteanu - specialist biochemist, Researcher
7. Ioana Pîrvu – biochemist, Research Assistant
8. Silvia Sorca – medical nurse
9. Cristina Fugariu - laboratory technician



Biol.
Dan
Ciotaru



MD, PhD
Cornel
Ursaciuc



Chem.
Mihaela
Surcel



MD.
Radu
Huică



Biol.
Maria
Dobre



Bioch.
Adriana
Munteanu



Bioch.
Ioana
Pîrvu



Silvia
Sorca



Cristina
Fugariu