Lviv Research Institute of Epidemiology and Hygiene (LRIEH), Lviv

Technical Area: Biotechnologies, Agricultural Sciences and Medicine

Keywords: identification, prevention and control of infectious (including bacterial, viral infections) diseases





General Information

The Research Institute of Epidemiology and Hygiene (RIEH) in Lviv is one of the leading Ukrainian reference and methodical-scientifically centers for identification, prevention and control of infectious (including bacterial and viral infections) diseases. The personnel of RIEH is involved in surveillance, reporting and control of human infectious diseases performing comprehensive analyses and providing recommendations to government bodies, such as the State Sanitary and Epidemiological Inspection of the Ministry of Health of Ukraine.

Lastly, RIEH is engaged in experimental drug and diagnostic test-systems development utilizing unique collections of viral and rickettsial strains. These collections are considered a national asset by the Ukrainian government.

Institute's Focus

- A. Solid core competencies in:
- epidemiological monitoring and disease prevention
- epidemiological diagnostics, typing, and referencing
- sanitary-ecological assessment of soil, air and water
- sanitary micro-biology and ecology
- new drug and diagnostic test-systems development and approbation
- B. Unique collections of viral and rickettsial strains support

Valuable Technology Offerings

The laboratory of **rickettsial infections** studies preventive measures against rickettsial diseases, in particular, epidemic typhus, Volynsk-, Marseille- and Q-fevers, and ixodic strain of fevers. The lab conducts epidemiological monitoring for rickettsial taints and renders practical help to public health agencies in diagnostics, treatment and prevention of these diseases. The laboratory of **transmissible viral infections** specializes in monitoring of tick encephalitis and ixodic tick borreliosis including emerging instances of Lime disease transmitted by *ixodes ricinus* ticks.

The department of epidemiology and clinic tuberculosis and non-specific lung diseases examines the quality, availability, and effectiveness of anti-TB medications, as well as the emergence of resistance in mycobacterium tuberculosis. The scientists of the department are involved in clinical and experimental studies of tubercular process,

mutation of mycobacteria, and development of antibacterial preparations. Also, the department explores innovative TB treatment methods, such as use of ozone and laser therapy for treatment of patients with destructive pulmonary tuberculosis.

The laboratory of **diphtheria** performs diphtheria and tetanus monitoring and participates in the development of a vaccination calendar, a basis for an efficient immune prophylaxis and also develops the new computer system of monitoring of population immunity against diphtheria and tetanus of regional and national level.

The laboratories of **sanitary microbiology and ecological problems of human** focuses on medicoecological evaluation of iodine deficiency diseases caused, among other things, by such environmental factors as the presence of heavy metals and sulfur compounds. The laboratory of sanitary toxicology conducts sanitary-hygienic quantitative assessments of chemical agents in water and investigates alternative methods of toxicological analysis.

Scientific Cooperation and Technology Transfer

The Institute has cooperative relationships with several institutions, both in Ukraine (e.g., Kiev Institute of Epidemiology and Infectious Diseases) and abroad (e.g., National Institute of Hygiene, Poland), but its international ties are far from being extensive. In recent years, however, RIEH has increased its international exposure participating in science and technology exhibitions in Poland and India. Domestically, the Institute provides extensive R&D support and reference services to diagnostic laboratories of the State Sanitary and Epidemiological Service, which adopt and implement methods and techniques of diagnostics of infectious diseases, epidemiological typecasting and determination of antibody prevalence against different infectious diseases in population developed at RIEH.

The Institute has spun off its production facilities, which became the material basis of Lvivdialik (http://www.lvdialik.lviv.ua), a pharmaceutical production enterprise. RIEH continues to collaborate with the company on the development of new diagnostic drugs.

Contact Details

Olexandra O. Tarasyuk Director, PhD

12, Zelena str., Lviv, 79005, Ukraine phone: +38 032 276-28-32

e-mail: otarasyuk@mail.lviv.ua

Nadiya V. Senyuk

Chief Technology Commercialization Officer

Phone/ fax: +38 032-276-30-67 e-mail: nadijas@ukr.net e-mail: epidem@mail.lviv.ua web-site: www.lndieg.org.ua