

NATIONAL LABORATORY OF PHARMACEUTICAL RESEARCH AND DEVELOPMENT (PHARMALAB)

HEALTH TOGETHER: COOPERATION TO PROMOTE HEALTH RESEARCH AND DEVELOPMENT

The aim of PharmaLab's activities is to create a critical mass in Hungary, in cooperation with universities, research institutes belonging to the ELKH, European research organizations, and small, medium and large companies, which is uniquely suited to the development of competitive technologies, therapeutic and diagnostic procedures. In addition to early research projects, the laboratory aims to provide chemical, biological, biotechnological, pharmacological and pharmaceutical technology activities related to preclinical and generic development in cooperation with its small, medium and large company partners. The laboratory integrates the research potential of laboratories, centers, institutes, universities and companies operating in the fields of diagnostics, medical biotechnology, bionics and the development of pharmaceutical products.



MAIN RESEARCH AREAS

- Molecular oncology
- Neuropharmacology
- Biotechnology
- Drug development technology

CONSORTIUM LEADER:

HUN-REN Research Centre for Natural Sciences

CONSORTIUM PARTNERS:

Budapest University of Technology and Economics

Eötvös Loránd University

HUN-REN Biological Research Centre, Szeged

HUN-REN Institute of Experimental Medicine

University of Pécs

PROJECT NUMBER: RRF-2.3.1-21-2022-00015

FUNDING PERIOD: 01.03.2022 - 28.02.2026

OVERALL BUDGET: 5.450.000.000 HUF

BENEFITS TO BE EXPECTED FROM LABORATORY RESEARCH

- Development of new diagnostic and therapeutic options for neurology and oncology indications.
- Production of biologicals and diagnostics. Increasing the efficiency of cell lines that produce protein molecules. Formulation of biologics and diagnostic preparations.
- Development of RNA- and DNA-based and immunological-based diagnostic tests for laboratory and point-of-care applications.
- Increasing the efficiency of the production processes: developing batch and continuous process technologies.

THE PROFESSIONAL TEAM

Professional leader of the project:

Dr. György M. Keserű

medicinal chemist, drug discovery scientist, corr. member of the Hungarian Academy of Sciences, director of the Pharmaceutical Innovation Center at the Research Center for Natural Sciences.

Neuropharmacology pillar:

Dr. István Ulbert, director of the Institute of Cognitive Neuroscience and Psychology of the ELKH, head of the Institute's Integrative Neuroscience Research Group, university professor at Pázmány Péter Catholic University, and research director of the National Institute of Mental, Neurological and Neurosurgery. He has medical and engineering degrees, Doctor of the Hungarian Academy of Sciences.

Molecular oncology pillar:

Dr. Balázs Györffy, Professor at Semmelweis University, Doctor of the Hungarian Academy of Sciences, Head of the TTK's Oncology Biomarker Research Group, Head of ELIXIR Hungary.

Biotechnology pillar:

Dr. Imre Kacs Kovics PhD, DSc, expert in molecular immunology-biotechnology, professor, dean of Faculty of Science, Eötvös Loránd University and director of ELTE Biotechnology FIEK.

Dr. András Szarka, PhD, DSC, head of the Medical Research at BME, Dean of the Faculty of Chemical Technology and Biotechnology, Budapest University of Technology and Economics.

Drug development technology pillar:

Dr. György Marosi, university professor at the Department of Organic Chemistry and Technology of BME, corr. member of the Hungarian Academy of Sciences.

POSSIBLE PARTNERSHIPS

For universities, research institutes, pharmaceutical companies:

Execution of commission-based research tasks in the following areas of competence:

- identification and validation of neurology and molecular oncology targets
- development of original therapeutic approaches in the field of secondary tumorigenesis, relapse and resistance
- development of translational models and human biomarker research for neurology and oncology indications
- investigation of individual cell line development and humoral immunity
- development of active ingredients based on molecular evolution based on monoclonal antibody development and B-cell diversity experiences
- batch and flow manufacturing, purification and formulation technologies
- Joint developments with mutual investment, joint IP
- Joint basic research and applied research applications

For pharmaceutical big companies:

- R&D service framework contracts with mandatory request for proposals
- Business intelligence, reaching talents
- Outsourcing/insourcing

For SMEs interested in pharmaceutical development:

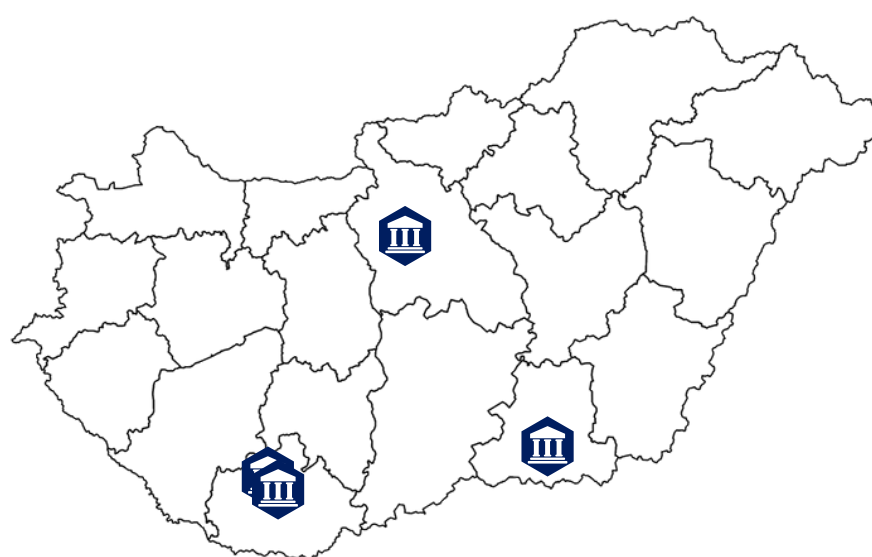
- Business development in NL - introductory meetings, scientific days, partner meetings

TARGET GROUP

- Universities
- Research institutes
- SMEs active in pharmaceutical research and development
- Integrated pharmaceutical companies

PLACES OF IMPLEMENTATION:

- Budapest
- Kővágozszölös
- Pécs
- Szeged




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