## **Projects carried out since 2020**

# (only projects for which the Principal Investigator is/was from the Institute of Pharmacology are listed)

## **Projects supported by the National Grant Agencies**

#### **APVV**

Cell interactions in the tumour microenvironment and their pharmacological modulations. APVV-16-0446;

Principal Investigator: RNDr. Lenka Varinská, PhD./prof. MVDr. Ján Mojžiš, DrSc

Biocompatibility assessment of new generation lipophosphonoxins for wound infection management. APVV-22-0006;

Principal Investigator: RNDr. Gál Peter, DrSc.

#### **VEGA**

Fibroblasts and tumor microenvironment: cell interactions and their pharmacological modulation. VEGA 1/0539/21;

Principal Investigator: prof. MVDr. Mojžiš Ján, DrSc.

Clinical relevance of programmed-death (PD) receptor expression in the microenvironment of breast carcinomas. VEGA 1/0513/21;

Principal Investigator: prof. MUDr. Mirossay Ladislav, DrSc.

Modulation of the tumor microenvironment in breast cancer by lichen secondary metabolites: an in vitro study. VEGA 1/0498/23;

Principal Investigator: Kello Martin, PhD.

SLAMF receptors in chronic lymphocytic leukemia – potential targets for anticancer therapy. VEGA 1/0617/22;

Principal Investigator: PharmDr. Šarišský Marek, PhD.

Study of chalcones in the context of their effects on membrane transporters responsible for drug resistance. VEGA 1/0446/22;

Principal Investigator: doc. MUDr. Martina Čižmáriková, PhD.

Development of an active wound dressing based on an antibacterial (LPPO) hydrogel containing a plant extract that stimulates wound healing. VEGA 1/0455/22.

Principal Investigator: RNDr. Gál Peter, DrSc.

## Ongoing since 2026

Pharmacogenetic aspects of antidepressant therapy: The significance of P-glycoprotein gene variants and other genetic determinants in the Slovak population. VEGA 1/0123/26

Principal Investigator: doc. MUDr. Martina Čižmáriková, PhD.

Innovative approaches to glioblastoma therapy: Combination of natural compounds and biocompatible nanoparticles in 3D models. VEGA 1/0210/26. Principal Investigator: PharmDr. Radka Michalková, PhD.

Study of the role of hyaluronic acid and yarrow (Achillea millefolium) extracts in skin regeneration and wound healing. VEGA 1/0185/26 Principal Investigator: RNDr. Gál Peter, DrSc.

#### **VVGS**

Analysis of the expression of SLAM-associated proteins SAP and EAT-2 in B cells. VVGS- 2020- 1652; Principal Investigator: Mgr. Huniadi Mykhailo

A new innovative strategy in cancer treatment: natural compounds and mechanisms of autophagy regulation – an in vitro study. VVGS-2020-1666; Principal Investigator: PharmDr. Michalková Radka

Galectins – their relationship to ABC transporter expression and their potential modulation by acridine-derived chalcones. VVGS-2023-2754.

Principal Investigator: PharmDr. Franko Ondrej

## **Projects supported by EU**

#### **Structural Funds**

Open scientific community for modern interdisciplinary research in medicine (OPENMED). Principal Investigator of the Activity 7.1: prof. MVDr. J. Mojžiš, DrSc.

#### **Recovery and Resilience Plan for Slovakia**

Uncovering the impact of heterogeneity of tumor-associated fibroblasts on chemosensitivity of pancreatic ductal adenocarcinoma PO: Component 9– ÚV SR (09103-03-V04-00398) – (R2). Principal Investigator: RNDr. Matúš Čoma, PhD.

Uncovering the biocompatibility of lipofosfonoxins for wound infection management: Towards a new generation of therapeutics. PO: Component 9– ÚV SR (09103-03-V04-00075) (R3);

Principal Investigator: RNDr. Gál Peter, DrSc.