# Projects – Overview



# Department of Medical and Clinical Biochemistry



# Overview of employee involvement in project solutions

#### **Content**

Projects supported by the Grant Age	ncy of the Ministry of Education SR 1
Projects supported by EU structural	funds 3

More information on the website of <u>department</u> (<u>ústav</u>) in part <u>Research</u> (<u>Výskum</u>).

# Projects supported by the Grant Agency of the Ministry of Education SR

#### *APVV-22-0357:*

Non-invasive diagnostics based on ncRNA

Head of the research team: doc. RNDr. Miroslava Rabajdová, PhD.

## VEGA 1/0435/23:

Investigation of role of non-coding RNA and composition of metabolome in endometriosis and endometrial cancer

Head of the research team: prof. Ing. Mária Mareková, CSc.

## KEGA 017UPJŠ-4/2023

CASE-PORTAL for the support and innovation of medical biochemistry teaching *Head of the research team:* MUDr. Anna Birková, PhD.

#### KEGA 014UPJŠ-4/2023:

Basics of chemistry for foreign students - Biomedical aspects and applications *Head of the research team:* doc. RNDr. Marek Stupák, PhD.

## VVGS-2023-2612:

Introduction of a 3D *in vitro* model for the study of endometrial receptivity to trophoblast spheroids

Head of the research team: doc. RNDr. Miroslava Rabajdová, PhD.

#### VEGA 1/0540/20:

Study of selected biomarkers of the origin and progression of demyelinating CNS diseases *Head of the research team:* doc. Mgr. Peter Urban, PhD.

#### VEGA 1/0333/20:

Tear fluid and saliva in preventive, predictive and personalized medicine *Head of the research team:* doc. RNDr. Vladimíra Tomečková, PhD.

#### VEGA 1/0620/19:

The use of innovative molecular biochemistry methods in the diagnosis of non-perceptive endometrium in the process of *in vitro* fertilization

Head of the research team: doc. RNDr. Miroslava Rabajdová, PhD.

#### VEGA 1/0559/18:

Study of the origin and progression of periodontitis using the latest molecular-biochemical methods

Head of the research team: doc. RNDr. Janka Vašková, PhD.

# Projects - Overview



# Department of Medical and Clinical Biochemistry



#### VEGA 1/0873/17:

The use miRNA and fluorescence techniques in diagnosis of bladder tumors *Head of the research team:* prof. Ing. Mária Mareková, CSc.

#### VEGA 1/0873/16:

Characterization of microenvironment of endometrial carcinoma *Head of the research team:* RNDr. Miroslava Rabajdová, PhD.

## KEGA 013UPJŠ-4/2016:

Clinical biochemistry

Head of the research team: prof. Ing. Mária Mareková, CSc.

#### VEGA 1/0782/15:

Effect of humic substances, acids and other natural ingredients to the functional status of some organs and mitochondria in their physiological condition and intoxication *Head of the research team:* doc. MVDr. Ladislav Vaško, CSc.

#### KEGA 3/7130/09:

Biochemistry in scheme and pictures

Head of the research team: prof. Ing. Mária Mareková, CSc.

#### VEGA 1/0799/09:

Effect of omega - 3 PUFA and humic acids on metabolism and animal health, lipid composition and oxidative stability of animal feed products and derived foods on the health of patients *Head of the research team:* doc. MVDr. Ladislav Vaško, CSc.

#### VEGA 1/0624/08:

The study of structure-activity relationship of chalcones on mitochondria *Head of the research team:* prof. Ing. Juraj Guzy, CSc.

#### VEGA 1/4233/07:

Early diagnosis of ovarian carcinomas by new methods of biochemical analysis of blood and urine *Head of the research team*: prof. Ing. Mária Mareková, CSc.

#### APVV-0252 07:

Multiple organ dysfunction syndromes after ischemia/transplantation of the small intestine *Head of the biochemistry research team:* prof. Ing. Mária Mareková, CSc.

## VEGA 1/3364/06:

Fluorescence spectral matrix of biological fluids - new search tool of molecular markers of severe metabolic disorders (quasi - metabolomic profiling)

Head of the research team: doc. RNDr. Jaroslav Kušnír, CSc.

## KEGA 3/3187/05:

Biochemistry for the medical faculty *Head of the research team:* prof. MUDr. Dušan Dobrota, CSc.

#### VEGA 1/2267/05:

Natural and synthetic flavonoids (chalcones) - molecular mechanisms of action on living systems *Head of the research team:* prof. Ing. Juraj Guzy, CSc.

# di

# Projects – Overview

# Department of Medical and Clinical Biochemistry



# Projects supported by EU structural funds

#### **AKARDIO COVID19**

Analysis of the cardiovascular and immunological response of patients after overcoming COVID-19 with a focus on the research of new diagnostic markers and therapeutic agents 313AUB100001 Research of new diagnostic markers and therapeutic agents with a diagnosis of COVID-19

#### **OPENMED** - *ITMS*2014+: 313011V455

Open scientific community for modern interdisciplinary research in medicine; *Activity* 313V45500005-H5: Cardiovascullar Diseases (NV95)

**MEDIPARK -** *ITMS*: 26220220185

Medical University Science Park in Košice (MediPark, Košice)

**CEMIO** - *ITMS*: 26220120058

Centre of Excellence for Research on determinants of health, with a focus on group of marginalized and immunocompromised people; *Activity 1.4*: Modernization of infrastructure for research on rapid metabolic monitoring of health status

*Head of the research team:* prof. Ing. Juraj Guzy, CSc. *Manager of project:* doc. Mgr. Peter Urban, PhD.

**CEEPM** - *ITMS*: 26220120067

Centre of Excellence for electromagnetic fields in medicine; *Activity 1.4*: Completing the Laboratory of Biochemical Analysis

Head of the research team: prof. Ing. Mária Mareková, CSc.

### **PROBIOTECH** - *ITMS*: 26220220152

Competence Center for biomodulators and nutritional supplements; *Activity 2.1*: Research and development of boosted probiotics, biomodulation products and functional foods *Head of the research team:* prof. Ing. Mária Mareková, CSc.

#### **DIAGONKO** - *ITMS*: 26220220153

Competence Center for Research and Development in the diagnosis and treatment of cancer; *Activity 2.4:* Proteomic and biochemical analysis of blood and tissues of animals and patients irradiated by protons potentiated probiotics, biomodulation products and functional foods *Head of the research team:* prof. Ing. Mária Mareková, CSc.