



ANNUAL REPORT

*on the quality of creative activity of the
Faculty of Medicine for the year 2021*



March 2022

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1. Research infrastructure

1.1 Scientific research capacity and its use for solving scientific projects in 2021

Tab. 1 - Scientific research capacity of UPJŠ employees in 2021

average recalculated numbers for 2021

		FM	FS	FL	FPA	FA	TIP	BG	UTVaŠ	together UPJŠ
Teachers (without lecturers)	Recalc. count	321,9	138,3	49,3	28,9	110,4	2	1	11,2	663
	VV chap. (tis. hr)	321,9								
Research employees with university education	Recalc. count	64,5	58,2	10,5	0,7	2,9	12,9			149,7
	VV chap. (tis. hr)	129								
Together	Recalc. count	386,4	196,5	59,8	29,6	113,3	14,9	1	11,2	812,7
	VV chap. (tis. hr)	450,9 (437)*	(247)*	(65)*	(30)*	(120)*	(19)*	(1)	(11)*	(931)*

* The data in parentheses are given for comparison form 2020

Recalculated numbers of employees according to individual categories (only assistant professors, associate professors and professors + researchers) who are not involved in the solution of any scientific project

Professors: 5,93
 Associate professors: 8,24
 Assistant professors: 35,95

Together: 52,12

1.2 Qualification structure of UPJŠ creative employees and new holders of scientific-pedagogical titles, scientific ranks and VKS for the year 2021

Tab. 2 - Qualification structure of UPJŠ creative employees

data in natural persons as of 31.12.2021

faculty	University Teachers (UT)				UT teachers together	Research Employees (RE)					research employees together	UPJŠ
	prof*	Assoc. prof *	Assistant of prof CSc./PhD	Assistant of prof + assistant without CSc./PhD		senior researcher VKS I * (DrSc.)	independent researcher VKS IIa (CSc./PhD)	researcher VKS IIb (CSc./PhD)	research worker without CSc./PhD	professional technical worker without CSc./PhD		
FM	44 (4)	55	226	67	392		30	31	20		81	473
FS	30 (13)	53 (2)	61	4	148	2	22	38	9		71	219
FL	7 (1)	20	24	3	54	1		11			12	66
FPA	2	12	18		32		1				1	33
FA	21 (4)	37 (1)	53	1	112			1			1	113
BG	1				1						0	1
ÚTVŠ	1	4	6	1	12						0	12
TIP	2 (2)				2		4	8	1		13	15
together UPJŠ	108 (24)	181 (3)	388	76	753	3	57	89	30	0	179	932

* the number with the scientific rank of DrSc is given in brackets. professor - professor in the position of professor associate professor – associate professor in the position of associate professor

Tab. 2a – QUALIFICATION STRUCTURE OF UPJŠ CREATIVE EMPLOYEES BY TITLES

data in natural persons as of 31.12.2020

	University Teachers (UT)				Together UPJŠ
	professor	associate professor	assistant professor CSc./PhD	assistant professor + assistant without CSc./PhD	
FM	44	75	206	67	392
FS	30	53	61	4	148
FL	7	20	24	3	54
FPA	2	11	19		32
FA	18	38	55	1	112
BG	1				1
ÚTVŠ	1	3	7	1	12
TIP	2				2
together UPJŠ	105	200	372	76	753

1.3 New holders of scientific-pedagogical titles, scientific ranks and VKS for the year 2021

a) professor: 3

prof. MUDr. Tatiana Kimáková, PhD.

Habilitation and Inauguration Proceedings **Public Health**

Inaugural lecture: Mercury in the environment as a health risk factor

Inaugural proceedings before VR FVZ szu in Bratislava: 11.12.2019

VR SZU in Bratislava: 17.12.2020

Title: 22.04.2021

prof. RNDr. Pavol Švorc, CSc.

Habilitation and Inauguration Proceedings **Normal and Pathologic Physiology**

Inaugural lecture: Biorhythms in physiology and medicine

Inaugural proceedings before VR JLF UK in Martin: 25.06.2020

VR UK in Bratislava: 07.12.2020

Title: 22.04.2021

prof. MUDr. Želmíra Macejová, PhD., MPH

Habilitation and Inauguration Proceedings **Internal Diseases**

Inaugural lecture: Rheumatoid arthritis - a disease of many faces

Inaugural proceedings before VR UPJŠ FM: 06.10.2020

VR UPJŠ in Košice: 27.11.2020

Title: 22.04.2021

b) associate professor: 9

doc. MUDr. Silvia Farkašová Iannaccone, PhD.

Habilitation and Inauguration Proceedings **Pathological Anatomy and Forensic Medicine**

Habilitation lecture: Fungal poisoning in forensic practice

Habilitation thesis topic: Analysis of fungal poisoning with a focus on the investigation of spores

Defense of habilitation thesis before VR FM UK in Bratislava: 10.12.2020

Title: 01.02.2021

doc. MUDr. Ján Varga, PhD., MHA

Habilitation and Inauguration Proceedings **Gynecology and Obstetrics**

Habilitation lecture: Endometriosis

Habilitation thesis topic: Genesis of ovarian cancer

Defense of habilitation thesis before VR UPJŠ FM: 16.03.2021

Title: 04.05.2021

doc. MUDr. Zuzana Solárová, PhD.

Habilitation and Inauguration Proceedings **Medical Pharmacology**

Habilitation lecture: Have we exhausted the goals of anti-cancer treatment, or is it a challenge for the future?

Habilitation thesis topic: Heat shock proteins as a target of anticancer therapy

Defense of habilitation thesis before VR UPJŠ FM: 27.04.2021

Title: 21.05.2021

doc. MUDr. Erik Dosedla, PhD., MBA

Habilitation and Inauguration Proceedings **Gynecology and Obstetrics**

Habilitation lecture: Cesarean section scar syndrome

Habilitation thesis topic: Morbidity related to scarring after caesarean section

Defense of habilitation thesis before VR UPJŠ FM: 27.04.2021

Title: 21.05.2021

doc. MUDr. Peter Čandík, PhD., MPH

Habilitation and Inauguration Proceedings **Surgery**

Habilitation lecture: Non-invasive and protective artificial lung ventilation in clinical practice

Habilitation thesis topic: Objectives and possibilities of non-invasive and protective artificial lung ventilation

Defense of habilitation thesis before VR UPJŠ FM: 01.06.2021

Title: 08.07.2021

doc. MUDr. Peter Berek, PhD.

Habilitation and Inauguration Proceedings **Surgery**

Habilitation lecture: Surgical treatment of thoracoabdominal aorta diseases

Habilitation thesis topic: Acute carotid endarterectomy: risk or benefit

Defense of habilitation thesis before VR UPJŠ FM: 01.06.2021

Title: 17.06.2021

doc. MUDr. Vladimír Kačuch, PhD., MBA

Habilitation and Inauguration Proceedings **Surgery**

Habilitation lecture: Complications of anterior cervical disectomas

Habilitation thesis topic: Possibilities of using interstitial fusion in the treatment of degenerative diseases of the lumbar spine

Defense of habilitation thesis before VR UPJŠ FM: 01.06.2021

Title: 17.06.2021

doc. MUDr. Miriam Kozárová, PhD.

Habilitation and Inauguration Proceedings **Internal Diseases**

Habilitation lecture: Residual vascular risk - a new goal of cardiovascular prevention?

Habilitation thesis topic: Predictive genetic factors and biomarkers in the progression of atherosclerosis in type 2 diabetes mellitus

Defense of habilitation thesis before VR UPJŠ FM: 05.10.2021

Title: 25.11.2021

doc. MUDr. Silvia Mišíková, PhD., MPH

Habilitation and Inauguration Proceedings **Internal Diseases**

Habilitation lecture: Balóniková kryoablácia fibrilácie predsiení

Habilitation thesis topic: Katetrizačný uzáver uška ľavej predsieni

Defense of habilitation thesis before VR UPJŠ FM: 05.10.2021

Title: 29.11.2021

c) **DrSc.:** the title was not awarded in 2021

d) PhD.: 6

MUDr. Zuzana Benetínová, PhD.

Field of study: General Medicine
Study programme: anatomy, histology and embryology
Dissertation topic: Angiogenesis in breast cancer and its correlation with tumor-associated CD163 + macrophages and hormonal receptors
Dissertation defense, place: 25.6.2021, UPJŠ in Košice, Faculty of Medicine
Award of an academic degree: 25.6.2021, UPJŠ in Košice

MUDr. Zuzana Kováčová, PhD.

Field of study: General Medicine
Study programme: anatomy, histology and embryology
Dissertation topic: Morphological study of prognostic factors of colon cancer
Dissertation defense, place: 25.6.2021, UPJŠ in Košice, Faculty of Medicine
Award of an academic degree: 25.6.2021, UPJŠ in Košice

MUDr. Vladimír Kraus, PhD.

Field of study: General Medicine
Study programme: clinical biochemistry
Dissertation topic: Clinical-biochemical markers of malignant gynecological tumors
Dissertation defense, place: 26.8.2021, UPJŠ in Košice, Faculty of Medicine
Award of an academic degree: 26.8.2021, UPJŠ in Košice

MUDr. Zora Lazúrová, PhD.

Field of study: všeobecné lekárstvo
Study programme: internal diseases
Dissertation topic: The importance of adenosine in the pathogenesis and diagnosis of syncopal conditions
Dissertation defense, place: 26.8.2021, UPJŠ in Košice, Faculty of Medicine
Award of an academic degree: 26.8.2021, UPJŠ in Košice

MUDr. Lenka Šalamonová Blichová, PhD.

Field of study: General Medicine
Study programme: normal and pathological physiology
Dissertation topic: Influence of diabetic gastroparesis and other diseases of the digestive system on glycemic compensation of patients with diabetes mellitus
Dissertation defense, place: 26.8.2021, UPJŠ in Košice, Faculty of Medicine
Award of an academic degree: 26.8.2021, UPJŠ in Košice

MUDr. Marek Brenišin, PhD.

Field of study: General Medicine
Study programme: normal and pathological physiology
Dissertation topic: Disorders of lipid and carbohydrate metabolism in women with preeclampsia
Dissertation defense, place: 31.8.2021, UPJŠ in Košice, Faculty of Medicine
Award of an academic degree: 31.8.2021, UPJŠ in Košice

e) scientific qualification level IIa. in 2021: 2

RNDr. Jana Janočková, PhD.

RNDr. Beáta Čižmarová, PhD.

f) from employees without PhD. (174) are involved in PhD studies: 65

g) professors emeritus at the faculty: 3

prof. MUDr. Andrej Böör, CSc.

prof. MUDr. Jozef Kafka, DrSc.

prof. MUDr. Juraj Bober, CSc.

h) the number of reintegrated staff members or other researchers funded from non-government grants: 24

1. MUDr. Breznoščáková Dagmar, Ph.D.
2. MUDr. Grendel Tomáš, PhD.
3. MUDr. Grochová Monika, PhD.
4. RNDr. Homol'ová Lucia, PhD.
5. Mgr. Husárová Daniela, PhD.
6. Mgr. Husivargová Alexandra
7. Mgr. Jendrichovský Marián, PhD.
8. Mgr. Kacírová Mária, PhD.
9. MUDr. Kočan Ladislav, PhD.
10. RNDr. Kolesár Fecskeová Lívia, PhD.
11. Mgr. Kopčáková Jaroslava, PhD.
12. RNDr. Košuthová Hedviga, PhD.
13. MUDr. Lopuchovský Tomáš
14. Mgr. Ondová Monika
15. Ing. Papíková Jana
16. MUDr. Polanová Miriam MPH, PhD.
17. MUDr. Rosenberger Jaroslav, PhD.
18. MUDr. Rybár Rafael, PhD.
19. Ing. Salokyová Henrieta
20. Mgr. Slavkovská Miriam, PhD.
21. Mgr. Šamudovská Tünde
22. MUDr. Šimonová Jana, PhD., MPH
23. Mgr. Timková Vladimíra, PhD.
24. doc. MUDr. Török Pavol, CSc.

POST - PhD students: 0

Average. recalculated number: 15,39

1.4 Science prices, resp. other awards and honours received by faculty staff in 2021 for research results

For scientific research activity:

- Winner in the category "Innovation of Slovakia 2021" biomedical project "MicroRNA test of success of in vitro fertilization (IVF) process and diagnostics of quality embryo for IVF process". The Prize for Technology Transfer in Slovakia is awarded by the Center for Scientific and Technical Information of the Slovak Republic (CVTI SR). The awards were presented at the COINTT - Cooperation Innovation Technology Transfer conference, which took place on 19-21 October 2021 at the FIIT of the Slovak University of Technology in Bratislava. The staff of the Department of Medical and Clinical Biochemistry made a significant contribution to the creation of an innovative diagnostic-predictive method. Employees of the department - associate professors, researchers, doctoral students have been actively involved for almost 4 years in solving several scientific research projects, while the project VEGA 1/0620/19 under the leadership of doc. RNDr. Miroslava Rabajdová PhD. was key to innovation.



More on the site [UPJŠ](https://www.upjs.sk/public/media/22635/Ocenenia_Veda.pdf), resp. [Ústavu lekárskej a klinickej biochémie](https://www.upjs.sk/public/media/22635/Ocenenia_Veda.pdf).

- CEOG Award for Best Contribution: Telocytes: a brief review for the obstetrics / gynecology clinician, authors – Kraus, Birková, Veliká, Hubková, Grešová, Stupák, Mareková;

More on https://www.upjs.sk/public/media/22635/Ocenenia_Veda.pdf

For pedagogical activity:

- The prize for the best diploma thesis at UPJŠ FM for the academic year 2020/2021, which is already regularly awarded by LYNX, was presented to the 6th year of general medicine student Dana Lešová on 16 November 2021. The commission assessing the diploma thesis was mostly addressed by the work "Screening of serious diseases based on fluorescent metabolomics analysis of urine", which the student solved at the Institute of Medical and Clinical Biochemistry UPJŠ LF under the expert guidance of doc. Ing. Katarína Dubayová, PhD.



More on: https://www.upjs.sk/public/media/22635/Ocenenia_Pedagogika.pdf, resp <https://www.upjs.sk/lekarska-fakulta/26034/>

Award of the President of the Košice Self-Governing Region for the year 2020 to MVDr. Ján Rosocha, CSc., for excellent results in the field of cell therapy research, construction of the most modern workplace for the preparation of tissue and cell transplants on a national scale and for a significant contribution to the laboratory diagnostics of the new coronavirus.

City Award Košice to prof. MUDr. Pavel Jarčušek, PhD. for active involvement and coordination of procedures in the fight against the pandemic of the new coronavirus COVID-19 at the regional,

national and European level (from the mayor of Košice - Jaroslav Polaček)

Plaque of the Mayor of Košice to MUDr. Martin Novotný, PhD. for his involvement in helping the city of Košice and its inhabitants during the second wave of the COVID-19 pandemic

Award of the Mayor of Košice to doc. MUDr. Veronica Vargova, PhD. (for extraordinary activity, extensive pedagogical activity and contribution in the management of the highly specialized workplace of the Department of Children and Adolescents of UPJŠ FM and DFN)

Award of the Slovak Diabetological Association for exceptional publications: prof. MUDr. Ivan Tkáč, Ph.D., doc. MUDr. Mária Rašiová, Ph.D.

Prize of the Presidium of the Slovak Diabetological Association for doc. MUDr. Mária Rašiová and the team (Habalová, Židzik, Koščo, Farkášová, Moščovič, Hudák, Javorský, Tkáč) for the scientific contribution and professional development of diabetology for the publication: An association between rs7635818 polymorphism located on chromosome 3p12.3 and the presence of abdominal aortic aneurysm.

Lecture: Michalko D, Sotak Š, Felšoci M, Lazúrová I: Rapidly progressing quadraparesis in a young diabetic. – **3rd place in the competition of case studies in internal medicine at the 4th year of case studies in internal medicine** – febr. 2021.

doc. MUDr. Jozef Firment, PhD. - Award of the Slovak Society of Anaesthesiology and Intensive Care Medicine for the best publication in 2020, textbook Anaesthesiology and Intensive Care Medicine for medical students

prof. MUDr. Ľ. Legáth, PhD. – **SLS Occupational Medicine Company Award for the best publication in 2020**, granted in 2021

Award of the Slovak Neurological Society for the best original scientific work of authors up to 35 years. 2021, co-author of the publication: Which clinical and neuropsychological factors are responsible for cognitive impairment in patients with epilepsy? International Journal of Public Health. - ISSN 1661-8556. - y. 65, č. 6 (2020), s. 947-956. - DOI 10.1007/s00038-020-01401-7 2020 IF=3,380; 2020 Q1 (Public, Environmental & Occupational Health), Q2 ((Public, Environmental & Occupational Health) SSCI, SCIE [JARČUŠKOVÁ, Dominika DOK-51-I (65%) - PALUŠNÁ, Miroslava (1%) - GAZDA, Jakub DOK-51-I (14%) - FEKETE OVÁ, Eva (10%) - GDOVINOVÁ, Zuzana (10%) Gdovinová Z. – adviser, Feketeová E. – adviser specialist

Article of the year 2020 – Parkinson's Disease journal (Hindawi) IF 2,704

Update on the Management of Parkinson's disease for General Neurologists [electronic source] / Zvezdan Pirtošek ... [et al.]. - reviewed.

In: Parkinson's Disease. - ISSN 2042-0080. - Roč. 2020, (2020), art. no. 9131474 , s. [1-13]. - method of access: <https://www.hindawi.com/journals/pd/2020/9131474/>. - DOI 10.1155/2020/9131474

2020 JIF=2,704; 2020 Q3 (Clinical Neurology) SCIE

[PIRTOŠEK, Zvezdan (20%) - BAJENARU, Ovidiu (15%) - KOVACS, Norbert (15%) - MILANOV, Ivan G (15%) - RELJA, Maja (15%) - ŠKORVÁNEK, Matej (20%)]

RNDr. Veronika Benetinová, PhD.

1st place on the occasion of XIII. Interactive Conference of Young Scientists 2021 (PREVEDA)
For an excellent contribution in the section Cell Metabolism, Physiology, Molecular Biology and Genetics - Clinical Studies

SLS, SkMA a SAS (Slovak Anatomical Society):

1st prize of a professional company for the best publication in 2020 (for the Covid -19 pandemic, awarded in 2021)

doc. MVDr. Jozef Mihalik, CSc., MVDr. Andrea Kreheľová, doc. MVDr. Iveta Domoráková, PhD., MUDr. Andriana Pavliuk-Karachevtseva, MVDr. Alena Hladová, prof. MVDr. Silvia Rybárová, PhD. a doc. MUDr. Ingrid Hodorová, PhD.

GPx8 Expression in Rat Oocytes, Embryos, and Female Genital Organs During Preimplantation Period of Pregnancy.

Int J Mol Sci, 21 (2020) 6313. doi: 10.3390/ijms21176313. PMID: 32878231; PMCID: PMC7503774.

Mgr. Iveta Rajničová Nagyová, PhD, Head of the Department of Social and Behavioral Medicine UPJŠ FM, received the prestigious international award ‘2021 Fellow of the Academy of Behavioral Medicine Research AB (ABMR). ABMR is a network of top behavioural scientists from around the world, founded in 1978. The ABMR Fellow award can only be obtained through nominations by two current members of the Academy for "high levels of productivity, excellence and wide recognition for achievements in behavioural medicine research".
<https://academyofbmr.org/who-we-are>

2. Scientific research results of the faculty, R&D projects and solved tasks of the faculty and obtained funds for solving projects in 2021 in euros

Tab. 3 Scientific research projects and solved tasks

List of research projects solved in the evaluated period (2021)						
No.	Project type and identification number	Responsible project leader	Name of the project Faculty of Medicine	The beginning of the solution project (month / year)	The end of the solution project (month / year)	Volume of financial resources provided resources
Department of Anatomy						
1.	VEGA 1/0173/19	doc. MUDr. Jozef Mihalik, CSc.	The effect of entacapone administration on antioxidant status and reproductive parameters of rat males	01/2019	12/2022	15.570
2.	VVGS-2020-1460	MUDr. Janka Vecanová, PhD.	Production of educational videos for studying skull in Human Anatomy (making a video atlas of human skull)	07/2020	06/2021	0.000
3.	018UPJŠ-4/2021	doc. MUDr. Ingrid Hodorová, PhD.	Ultrasonographic anatomy of peripheral nerves and vessels	01/2021	12/2023	8.336
4.	vvgs-2021-1739	MUDr. Slávka Flešárová, PhD.	The human body - the entrance gate to the Anatomical Museum	03/2021	02/2022	3.000
5.	vvgs-2021-1972	MUDr. Janka Vecanová, PhD.	Creation of English dubbing for instructional videos - Chest autopsy (digitization of anatomy teaching)	11/2021	10/2022	2.000

	together					28.906
Department of Epidemiology of UPJŠ FM						
6.	VEGA 1/0084/18	prof. MVDr. Monika Halánová, PhD.	Genetic analysis of selected new and emerging pathogens with zoonotic potential in animals and humans.	01/2018	12/2021	11.064
7.	101015736 Response	prof. MVDr. Monika Halánová, PhD.	European Research and Preparedness Network for Pandemics and Emerging Infectious Diseases	07/2020	06/2025	5.993
8.	PP-COVID-20-0064	prof. MVDr. Monika Halánová, PhD.	Prevalence study of herd immunity SARS-CoV-2 in the population of Eastern Slovakia.	09/2020	12/2021	308.025
9.	1/0359/21	MVDr. Elena Hatalová, PhD.	Mapping of epidemiological and epizootiological distribution and occurrence of selected zoonotic intestinal pathogens using molecular methods	01/2021	12/2024	13.137
10.	COVIMEP	prof. MVDr. Monika Halánová, PhD.	Seroepidemiological study on the presence of antibodies to SARS-CoV-2 in selected regions of Slovakia (COVIMEP)	10/2021	04/2022	50.000
	together					388.219
Department of Experimental Medicine of UPJŠ FM						
11.	APVV-16-0176	RNDr. Izabela Bertková, PhD.	Targeted modulation of gut microbiota and its transplantation in prevention and treatment of inflammatory bowel diseases	07/2017	12/2021	15.685 (28.508)
12.	VEGA 1/0519/18	Mgr. Ľuboš Ambro, PhD.	Isolation and advanced characterization of new probiotic microorganism with potential for use in biomedicine and biotechnology	01/2018	12/2021	8.650
13.	OP II 313011V336 Drive4SIFood	MVDr. Ladislav Strojný, PhD.	Demand-oriented research for sustainable and innovative foods, Drive4SIFood	07/2019	06/2023	54.370
14.	VEGA 1/0393/20	RNDr. Jana Štofilová, PhD.	Relationship between adherent and immunomodulatory properties of probiotic lactobacilli and the functionality and integrity of the intestinal barrier in inflammatory bowel diseases	01/2020	12/2023	17.516

15.	VVGS-2020-1506	RNDr. Anna Kamlárová, PhD.	Gut Microbiome in Relation to Inflammatory Diseases and Colon Cancer: Training to Reach State-of-the-art	07/2020	06/2021	0.000
16.	OP II 313012T288	MVDr. Emília Hijová, PhD.	Functional foods for a healthy life (T 288)	10/2020	05/2023	0.000
	together					96.221 * (109.044)
Department of Pharmacology of UPJŠ FM						
17.	APVV-16-0446	prof. MVDr. Ján Mojžiš, DrSc.	Cell interactions in the tumour microenvironment and their pharmacological modulations	07/2017	12/2021	32.140
18.	VEGA 1/0653/19	RNDr. Martin Kello, PhD.	Lichen secondary metabolites: promising modulators of tumour microenvironment?	01/2019	12/2022	18.526
19.	VEGA 1/0673/19	PharmDr. Marek Šarišský, PhD.	Analysis of SLAMF receptors expression in B-cell chronic lymphoproliferative disorders as potential new diagnostic markers and targets for novel anticancer drugs	01/2019	12/2021	12.221
20.	1/0513/21	prof. MUDr. Ladislav Mirossay, DrSc.	Clinical relevance of PD expression of "programmed death" in the microenvironment of mammary carcinomas.	01/2021	12/2024	19.517
21.	1/0539/21	prof. MVDr. Ján Mojžiš, DrSc.	Fibroblasts and the tumor microenvironment: cell interactions and their pharmacological influence.	01/2021	12/2024	20.530
22.	vvgs-2020-1666	PharmDr. Radka Michalková	A new innovative strategy in the treatment of tumors: natural substances and mechanisms of autophagy regulation - study in vitro	01/2021	06/2022	1.500
23.	vvgs-2020-1652	Mgr. Mykhailo Huniadi	Expression analysis of SLAM-associated SAP and EAT2 proteins in B cells	01/2021	06/2022	1.500
	together					105.934
Department of Medical and Clinical Biophysics of UPJŠ FM						
24.	COST CA16122	doc. RNDr. Ján Sabo, CSc., mim. prof.	Biomaterials and advanced physical techniques for regenerative and neurology	03/2017	09/2021	0.000

25.	OP II 313011V446 LISPER	doc. RNDr. Ján Sabo, CSc., mim. prof.	Integrative strategy in the development of personalized medicine of selected cancers and its impact on quality of life	09/2019	06/2023	22.698
26.	VEGA 1/0196/20	RNDr. Ivan Talian, PhD.	Application of proteomic analysis of distal human fluids for determination of temporomandibular joint disorders and evaluation of treatment effect by intra-articular application of hyaluronic acid	01/2020	12/2022	11.351
27.	APVV-19-0476	doc. RNDr. Ján Sabo, CSc., mim. prof.	Innovative strategy to breast cancer diagnostics and therapy based on changes in proteome of circulating leukocytes	07/2020	06/2024	81.051
	together					115.100
Department of Medical and Clinical Biochemistry of UPJŠ FM						
28.	COST CA15203	RNDr. Beáta Čižárová, PhD.	Mitochondrial mapping: Evolution - Age - Gender - Lifestyle - Environment	09/2016	02/2021	0.000
29.	VEGA 1/0620/19	doc. RNDr. Miroslava Rabajdová, PhD.	The use of innovative molecular - biochemical methods in the diagnosis of non - perceptive endometrium in the process of in vitro fertilization.	01/2019	12/2021	18.029
30.	VEGA 1/0540/20	doc. Mgr. Peter Urban, PhD.	Study of selected biomarkers of the origin and progression of CNS demyelinating diseases	01/2020	12/2022	13.903
31.	VEGA 1/0333/20	doc. RNDr. Vladimíra Tomečková, PhD.	Tear fluid and saliva in preventive, predictive and personalized medicine	01/2020	12/2022	9.110
	together					41.042
Department of Medical and Clinical Microbiology of UPJŠ FM						
32.	VVGS-2019-1300	RNDr. Katarína Čurová, PhD.	Introduction of effective microbiologic diagnostics of hypervirulent strains Clostridioides difficile	11/2019	04/2021	0.000
	together					0.00
Department of Medical Biology of UPJŠ FM						
33.	VEGA 1/0536/19	doc. RNDr. Peter Solár, PhD.	The role of erythropoietin receptor in the response of mammary adenocarcinoma cells to paclitaxel in vitro	01/2019	12/2022	21.105

			and in vivo			
	together					21.105
Department of Medical Physiology of UPJŠ FM						
34.	023UK-4/2021	prof. MUDr. Viliam Donič, CSc.	Implementation of the latest scientific knowledge on health risks of electromagnetic exposure fields into modern medical education.	01/2021	12/2023	0.790
35.	VEGA 1/0008/20	doc. RNDr. Pavol Švorc, CSc.	Chronobiological aspects of sex differences after episodes of central apnoea and reoxygenation in an experimental rat model of general anaesthesia	01/2020	12/2022	2.375
36.	313011ASX1, IPMVDCov	prof. MUDr. Viliam Donič, CSc.	Design and implementation of advanced methods of ventilatory treatment and diagnosis of viral pneumonias, including Covid-19 with the possibility of their rapid adoption	02/2020	06/2023	291.372
37.	1/0723/21	RNDr. Martin Bona, PhD.	Monitoring the effect of middle cerebral artery occlusion using connectomy data	01/2021	12/2024	1.922
38.	2/0073/21	RNDr. Martin Bona, PhD.	Mechanisms of glutamate metabolism as a tool of ischemic tolerance.	01/2021	12/2023	7.025
	together					303.484
Department of Medical Informatics of UPJŠ FM						
39.	ERASMUS+, 2018- 1-RO01-KA203- 049412	doc. Ing. Jaroslav Majerník, PhD.	Case-based learning and virtual cases to foster critical thinking skills of students (Clever).	09/2018	08/2021	0.000
40.	ERASMUS+, 2018- 1-SK01-KA203- 046318	doc. Ing. Jaroslav Majerník, PhD.	Building Curriculum Infrastructure in Medical Education (BCIME)	09/2018	08/2021	0.000
41.	KEGA 011UPJŠ-4/2019	doc. Ing. Jaroslav Majerník, PhD.	Increasing of competences and critical thinking level in students of medical study programs using simulation tools of evidence based medicine	01/2019	12/2021	12.277

42.	002UPJŠ-2-1/2021	doc. Ing. Jaroslav Majerník, PhD.	Support for building practical skills of medical and healthcare students using simulation tools	01/2021	12/2022	0.00
43.	2020-1-CZ01-KA226-HE-094424	doc. Ing. Jaroslav Majerník, PhD.	New Era in Medical Education (NEWMED)	03/2021	02/2023	18.117
	together					30.394
Department of Health Psychology and Research Methodology of UPJŠ FM						
44.	APVV-16-0490	MUDr. Jaroslav Rosenberger, PhD.	How to use health literacy profiles in improvement of chronic disease management.	07/2017	12/2021	20.567
45.	VVGS-2019-1069_Zelko	PhDr. Ivana Skoumalová	Secondary prevention among dialysis patients: aspects of physical activity, quality of life and applicability of exercise programme in dialysis centres	07/2019	05/2021	0.000
46.	APVV-18-0070	prof. Mgr. Andrea Madarasová Gecková, PhD.	Generation Z - new challenges in youth development.	07/2019	06/2023	50.990 (58.024)
47.	VEGA 1/0177/20	doc. Mgr. Zuzana Dankulincová, PhD.	Mapping the trajectory and experiences of adolescents with emotional and behavioral problems in the care system: opportunities for improvement from the perspective of adolescents and their parents	01/2020	12/2023	9.411
48.	Iné granty domáce UPJŠ-140/2020	prof. Mgr. Andrea Madarasová Gecková, PhD.	Agreement for co-operation in the Research Programme „Youth & Health“ UPJS in Košice and UMCG	01/2020	12/2023	30.000
49.	APVV-19-0493	doc. Mgr. Zuzana Dankulincová, PhD.	Research on early childhood in marginalized Roma communities: contextual factors of psychomotor development in the first 1000 days.	07/2020	06/2024	91.800
50.	VVGS-2020-1444	prof. Mgr. Andrea Madarasová Gecková, PhD.	PURE Spreading scientific excellence to improve the health of vulnerable groups	07/2020	06/2021	0.000
51.	COST CA19113	prof. Mgr. Andrea Madarasová Gecková, PhD.	The European Researchers' Network Working on Second Victims	09/2020	09/2024	0.000
52.	Iné zahraničné UPJŠ - 36/2021	prof. Mgr. Andrea Madarasová	Agreement on cooperation in the research program "Vulnerable Groups" UPJŠ in Košice and UMCG	01/2021	12/2024	30.000

		Gecková, PhD.				
53.	Iné zahraničné 622594 PARIPRE	Mgr. Jaroslava Kopčáková, PhD	Physical activity-related injuries prevention in adolescents	01/2021	12/2023	15.887
54.	VEGA 1/0593/21	Mgr. Daniela Fiľakovsk á, PhD.	Early development of children in the context of marginalized Roma communities: factors threatening health and healthy development	01/2021	12/2024	18.354
55.	PP-H-EUROPE-21- 0050	prof. Mgr. Andrea Madarasová Gecková, PhD.	Request for reimbursement of costs associated with the preparation of the Horizon Europe Fit4PS project	10/2021	-	3.970
	together					270.980 * (278.014)

Department of Social and Behavioural Medicine of UPJŠ FM

56.	826676 SCIROCCO	Mgr. Iveta Rajničová Nagyová, PhD.	SCIROCCO Exchange: Personalized knowledge transfer and access to evidence-based integrated care assets	01/2019	02/2022	0.000
57.	VEGA 1/0372/20	MUDr. Zuzana Katreniaková, PhD.	Utilizing eco-social and behavioural interventions in preventing the burden of caregivers for people with Alzheimer's disease	01/2020	12/2022	10.559
58.	945263 IMMERSE	Mgr. Iveta Rajničová Nagyová, PhD.	IMMERSE: Implementation of digital mobile mental health in clinical care routes	04/2021	03/2025	116.290
	together					126.849

Department of Public Health and Hygiene of UPJŠ FM

59.	KEGA 005UPJŠ- 4/2019	doc. MVDr. Tatiana Kimáková, PhD.	Analysis of lifestyle risk factors of university students and University of third age students	01/2019	12/2021	2.364
60.	VVGS-2019- 1356	doc. MVDr. Tatiana Kimáková, PhD.	Implementation of e-learning courses in the study program Medicine at the University of the Third Age at UPJŠ in Košice	01/2020	01/2021	0.000
61.	VVGS-2019- 1383	Mgr. Jana Diabelková, PhD.	E-learning Innovation in Teaching Hygiene and Public Health through Online Learning Scripts	01/2020	01/2021	0.000

62.	KEGA 008UPJŠ- 4/2020	prof. Mgr. MUDr. Erik Dorko, PhD., MPH, MBA	Multimedia Technology in Teaching Studies of Cardiovascular Risk and Population Health for University Students Using Free Software Applications	01/2020	12/2022	12.839
63.	VVGS-2020- 1485	doc. MUDr. Kvetoslava Rimárová, CSc., mim. prof.	Implementation of e-learning preventive interventions in the education of medical and paramedical disciplines	07/2020	06/2021	0.000
64.	VVGS-2020- 1662	Mgr. Jana Diabelková, PhD.	E-learning innovation of teaching the subject Hygiene of children and adolescents	11/2020	10/2021	0.000
65.	010UPJŠ- 4/2021	doc. MUDr. Kvetoslava Rimárová, CSc., mim. prof.	Implementation of multimedia technologies in the teaching of preventive interventions in the medical and non-medical fields	01/2021	12/2023	16.485
66.	vvgs-2020-1653	Mgr. Erik Drabiščák	Analysis of the occurrence and composition of urinary stones in association with disease risk factors	01/2021	06/2022	1.460
67.	vvgs-2021-1983	doc. MUDr. Kvetoslava Rimárová, CSc., mim. prof.	Modernization of teaching in the field of knowledge about healthy nutrition and nutrition hygiene with the implementation of e-learning strategies	11/2021	10/2022	2.000
	together					35.148
Department of Histology and Embryology of UPJŠ FM						
68.	024UPJŠ- 4/2021	doc. MVDr. Iveta Domoráková, PhD.	Integration of new forms and technologies in practical teaching the subject Histology and Embryology	01/2021	12/2023	8.366
	together					8.366
Department of Forensic Medicine of UPJŠ FM						
69.	313011AUA5	doc. MUDr. Silvia Farkašová Iannaccone, PhD.	New possibilities for the management of serious diseases in medical and preventive care with regard to the safety of health professionals	11/2020	06/2023	0.000
70.	vvgs-2021-1841	doc. MUDr. Silvia Farkašová	Creation of an interactive digital atlas of forensic autopsy findings focusing on sudden deaths for	07/2021	06/2022	2.000

		Iannaccone, PhD.	undergraduate study			
	together					2.000
Department of Nursing of UPJŠ FM						
71.	vvgs-2021-1862	PhDr. Gabriela Štefková, PhD.	Development of critical thinking in teaching through an electronic mind map	07/2021	06/2022	2.000
	together					2.000
Department of Gynaecology and Obstetrics UPJŠ FM and UNLP						
72.	1/0540/21	doc. MUDr. Peter Urdzík, PhD., MPH, mim.prof.	Correlation of a combination of biochemical and clinical markers in the diagnosis and prognosis of clinical cancer research	01/2021	12/2023	12.513
	spolu					12.513
Surgery department of UPJŠ FM and AGEL Hospital Košice-Šaca, a. c.						
73.	VEGA 1/0319/20	MUDr. Tomáš Vasilenko PhD.	Development of active wound dressings based on hydrogels containing plant extracts stimulating wound healing in healthy and diabetic rats	01/2020	12/2023	18.931
	together					18.931
1st Department of Surgery of UPJŠ FM and UNLP						
74.	VEGA 1/0622/20	prof. MUDr. Jozef Radoňak, CSc., MPH	Study of molecular and metabolomics profile of breast cancer	01/2020	12/2023	21.146
	together					21.146
1st Department of Internal Medicine of UPJŠ FM and UNLP						
75.	MZ SR 2019/32-UPJŠ-4	prof. MUDr. Ivica Lazúrová, DrSc., FRCP	Early diagnosis of cardiovascular damage using new hormonal biomarkers (Biomarkery)	10/2019	12/2021	8.825
	together					8.825
1st Department of Internal Medicine of UPJŠ FM and VÚSCH, a. s.						
76.	VEGA	prof. MUDr. Peter		01/2019	12/2021	2.825

	1/0769/19	Mitro, PhD.				
77.	KEGA 007UPJŠ- 4/2020	prof. MUDr. Ingrid Schusterová, PhD.	Childhood obesity: Etiopathogenesis, diagnosis and treatment.	01/2020	12/2022	10.062
	together					12.887
1st department of psychiatry of UPJŠ FM and UNLP						
78.	vvgs-2021-1872	MUDr. Dominika Jarčušková, PhD.	Psychocology as a new comprehensive approach to the integration of psychiatric diagnostics into oncological care	07/2021	06/2022	3.000
	together					3.000
2nd Department of Surgery of UPJŠ FM and UNLP						
79.	VVGS-2020- 1648	doc. MUDr. Jozef Belák, PhD.	Ischemic model of gastric graft survival in the construction of oesophageal-gastro anastomosis	11/2020	10/2021	0.000
	together					0.000
2nd Department of Internal Medicine of UPJŠ FM and UNLP						
80.	APVV-16-0211	prof. MUDr. Peter Jarčuška, PhD.	Computer-Aided Decision Support System for Hepatic Encephalopathy	07/2017	11/2021	12.740
	together					12.740
2nd Department of Cardiology of UPJŠ FM and VÚSCH, a. c.						
81.	APVV-17-0550	prof. MUDr. Daniel Pella, PhD.	Determinants of increased cardiovascular risk and their prognostic significance analysed by machine learning in the detection of highrisk individuals	07/2018	06/2022	92.329
	together					92.329
4th Department of Internal Medicine of UPJŠ FM and UNLP						
82.	MZ SR 2019/29-UPJŠ-1	MUDr. Miriam Kozárová, PhD.	Monitoring of selected gene variants and proteomic markers in patients with mental disorders as a contribution to personalized treatment. (DepDemGen)	10/2019	12/2021	14.705
83.	VEGA 1/0183/20	prof. MUDr. Ivan Tkáč, PhD.	Investigation of the genomic and proteomic markers of the progression of atherosclerosis of lower limb and carotid arteries in type 2 diabetes	01/2020	12/2023	21.198
84.	vvgs-2020-1494	doc. MUDr. Norbert Lukán,	Allergic inflammation and obesity	07/2020	06/2021	0.000

		PhD.				
	together					35.903
Department of angiology of UPJŠ FM and VÚSCH, a.s.						
85.	vvgs-2021-1844	doc. MUDr. Mária Rašiová, PhD.	Preventive and predictive potential of video capillaroscopy in diabetic foot.	07/2021	06/2022	3.000
	together					3.000
Department of Vascular Surgery of UPJŠ FM and VÚSCH, a.s.						
86.	vvgs-2020-1486	Koplovets Ivan, CSc.	Detection of predictors of stroke in patients with internal carotid artery stenosis	07/2020	06/2021	0.000
	together					0.000
Department of Dermatovenerology of UPJŠ FM and UNLP						
87.	313012R720 Eridok	MUDr. Janette Baloghová, PhD.	Elimination of the risk of coherent radiation effects in dermatological procedures	12/2020	11/2021	13.921
	together					13.921
Department of Gerontology and Geriatrics of UPJŠ FM						
88.	VEGA 1/0780/19	Mgr. MUDr. Štefan Tóth, MBA, PhD.	Utilization of analysis of anamnestic, biochemical, socioeconomic results and genetic analysis in optimizing the screening of patients with familial hypercholesterolemia in Slovakia	01/2019	12/2022	15.268
	together					15.268
Department of Infectology and Travel Medicine of UPJŠ FM and UNLP						
89.	APVV-18-0171	doc. MUDr. Pavol Kristian, PhD.	Importance of novel hepatitis B biomarkers for risk stratification and treatment management of patients with chronic HBV infection	07/2019	12/2022	49.107 (80.435)
90.	MZ SR 2019/35-UPJŠ-6	prof. MUDr. Pavol Jarčuška, PhD.	Factors Associated with the Use of Fecal Microbiota Transplant in Patients with Clostridioides difficile Infections (Transfec)	10/2019	12/2021	31.875
91.	PP-COVID-20-0036	prof. MUDr. Pavol Jarčuška, PhD.	Electrochemical virus detection	09/2020	12/2021	42.558 (127.609)

92.	964353 RIVER EU	prof. MUDr. Pavol Jarčuška, PhD.	Reducing Inequalities in Vaccine uptake in the European Region - Engaging Underserved communities	06/2021	05/2026	78.531
	together					202.072 * (318.451)
Department of Orthopaedics and Traumatology of Locomotory Apparatus of UPJŠ FM						
93.	VEGA 1/0598/20	doc. MUDr. Marek Lacko, PhD.	Analysis of serum and synovial biomarkers of osteoarthritis in correlation with clinical results after intra-articular administration of autologous platelet-rich plasma in patients with knee osteoarthritis	01/2020	12/2022	7.173
	together					7.173
Department of Pneumology and Phtiseology of UPJŠ FM and UNLP						
94.	APVV-16-0158	doc. MUDr. Pavol Joppa, PhD.	Obesity, Sleep Apnoea, Obesity-Hypoventilation Syndrome: Effects of Hypoxia on Cardiovascular Outcomes in Obesity and Associated Respiratory Diseases and their Modulation by Therapy	07/2017	06/2021	31.012 (33.678)
	together					31.012 * (33.678)
Department of Occupational Medicine and Clinical Toxicology of UPJŠ FM and UNLP						
95.	APVV-17-0017	prof. MUDr. Ľubomír Legáth, PhD.	Toxicological effects of snake venoms of selected species	07/2018	06/2022	3.125
	together					3.125
Department of Stomatology and Maxilofacial Surgery of UPJŠ FM and UNLP						
96.	020UPJŠ- 4/2021	MUDr. Andrej Jenča, PhD., MBA	E-learning education in preclinical and clinical disciplines of dentistry in crisis and emergency conditions.	01/2021	12/2023	17.467
	together					17.467
Department of Traumatology of UPJŠ FM and UNLP						
97.	vvgs-2020-1643	MUDr. Rastislav Burda, PhD.	Application of remote postconditioning in surgical treatment of ankle fractures	11/2020	10/2021	0.000
	together					0.000
			Department of Physiotherapy, Balneology and			

			Medical Rehabilitation of UPJŠ FM and UNLP			
98.	VEGA 1/0163/21	doc. PhDr. Magdaléna Hagovská, PhD.	Prevalence of pain and disability of the spine and joints in selected sports	01/2021	12/2023	4.670
99.	Iné zahraničné SKHU/1902/4.1 /093	doc. MUDr. Peter Takáč, PhD.	Robot-Assisted Rehabilitation	10/2020	09/2022	0.000
	together					4.670
Department of Neurology of UPJŠ FM and UNLP						
100.	VEGA 1/0380/19	prof. MUDr. Zuzana Gdovinová, CSc.	The relationship of the risk factors to stroke and cognitive impairment.	01/2019	12/2021	9.115
101.	VEGA 1/0596/19	doc. MUDr. Matej Škorvánek, PhD.	Identification and validation of new biomarkers of prodromal Parkinson's disease in a large cohort of patients with idiopathic REM-sleep behaviour disorder	01/2019	12/2021	17.170
102.	APVV-18-0547	doc. MUDr. Matej Škorvánek, PhD.	Novel biomarkers of prodromal Parkinson's disease	07/2019	06/2023	57.395
	together					83.680
Associated Tissue Bank of UPJŠ FM and UNLP						
103.	APVV-17-0118	MVDr. Ján Rosocha, CSc.	Exosomes derived from mesenchymal stem cells as potential alternatives to stem cell therapy for treatment of osteoarthritis	07/2018	06/2022	94.556
104.	VEGA 1/0229/20	RNDr. Tímea Špaková, PhD.	Analysis of the effect of exosomes produced by human mesenchymal stem cells on inflammatory chondrocytes to compare the effectiveness of cell-free and cell therapy in the treatment of osteoarthritis	01/2020	12/2022	14.688
	together					109.244
Clinical and preclinical research center MEDIPARK						
105.	313011AUB1, AKARDIO COVID-19	doc. MUDr. Ján Fedačko, PhD.	Analysis of cardiovascular and immunological response of patients after overcoming COVID-19 with a focus on research of new diagnostic markers and therapeutic agents	01/2021	06/2023	5.765

106.	EMA/148426/2021	MVDr. Simona Sonderlichová	Covid-Vaccine-Monitor - Safety monitoring of SARS-CoV-2 vaccines in EU Member States	04/2021	12/2021	0.000
107.	PP-H-EUROPE-21-0052	doc. MUDr. Ján Fedačko, PhD.	Request for reimbursement of costs associated with the preparation of the Horizon Europe project	10/2021	-	5.000
	together					10.765
Faculty of Medicine of UPJŠ						
108.	313011V455 OPENMED	doc. Mgr. Daniel Jancura (garant) - prof. Ing. Mária Mareková, CSc. (aktivita H5) - doc. MUDr. Matej Škorvánek, PhD. (aktivita H6) - prof. MVDr. Ján Mojžiš, DrSc. (aktivita H7) - prof. MVDr. Monika Halánová, PhD. (aktivita H8) - RNDr. Tímea Špaková, PhD. (aktivita H9)	Open Scientific Community for Modern Interdisciplinary Medical Research (OPENMED)	11/2019	06/2023	215.569 (804.302)
	together					
TOGETHER						2 510.993 * (3 238.627)

* Inflow of funds after deduction of funds determined by the partner; the amount in brackets represents the total inflow of funds for the project.

3. Outputs of scientific research activities and other scientific research activities

3.1 Publishing and lecture activities of faculty employees in 2021

A summary table on the number of publication outputs of UPJŠ employees according to the categories of publishing activities prepared by the UPJŠ University Library.

Tab. 1 - University publications in 2021

data 31.01.2022

	FM	FS	FL	FPA	FP	TIP	Together UP (BZ+UTVaš)	Together UPJŠ*
AAA – Scientific monographs published by foreign publishers			6	2	2			10
AAB – Scientific monographs published by domestic publishers	5	1	5	3	21		2	35
ABA – Studies of the nature of a scientific monograph in journals and collections published by foreign publishers			4			1		5
ABB – Studies in journals and proceedings of a scientific monograph published by domestic publishers		1	7	2			1	10
ABC – Chapters in scientific monographs published by foreign publishers			3	1				4
ABD – Chapters in scientific monographs published by domestic publishers			10	1				11
ACA – University textbooks published by foreign publishers	1				1			2
ACB – University textbooks published by domestic publishers	7	1	1	3	16			27
ACC – Chapters in university textbooks published abroad publishers	1		20					21

ACD – Chapters in university textbooks published by domestic publishers	39		6					45
ADC – Scientific work in foreign scientific journals	145	245		1	11	30	6	398
ADD – Scientific papers in domestic scientific journals	2	4			4		1	10
ADE – Scientific papers in other foreign journals	26	5	24	10	14	1	2	80
ADF – Scientific papers in other domestic journals	84	11	34	14	25		1	168
ADM – Scientific work foreign journals registered in WoS databases or Scopus	55	38	2	5	26	3	4	127
ADN – Scientific work in the dom. journals registered in WoS databases or Scopus	13	7		1	12		5	34
AEC – Scientific works in foreign peer-reviewed scientific proceedings, monographs	19	8	27	2	11			67
AED – Scientific works in domestic peer-reviewed scientific proceedings, monographs	64	1	22	8	43	1	5	144
AEG – Abstracts of scientific papers in foreign journals								
AEH - Abstracts of scientific papers in domestic journals								
AEM – Abstracts of scientific works in foreign journals registered in WoS databases or Scopus								
AEN – Abstracts of scientific papers in domestic journals registered in WoS or Scopus								
AFA – Published invited papers at foreign scientific conferences					1			1

AFB – Published invited papers at domestic scientific conferences	3	1						4
AFC – Published papers at foreign scientific conferences	7	20	17	16	16	1	1	76
AFD – Published papers at domestic scientific conferences	21	30	132	45	27	5	1	258
AFE – Abstracts of invited papers from foreign scientific conferences							2	2
AFF – Abstracts of invited papers from domestic scientific conferences	9							9
AFG – Abstracts of papers from foreign scientific conferences	35	25	2		3	7		67
AFH – Abstracts of papers from domestic scientific conferences	52	97	6		2		2	156
AFK – Posters from foreign conferences		3				1		3
AFL – Posters from home conferences								
AGJ – Patent applications, utility model applications, .								
BAA – Professional book publications published by foreign publishers	1							1
BAB – Professional book publications published by domestic publishers					1		1	2
BBA – Chapters in professional book publications published foreign publishers								
BBB – Chapters in professional book publications published in dom. publishers								
BCB – Textbooks for secondary and primary schools								
BCI – Scripts and textbooks	4	11	2		2	1	2	20

BCK – Chapters in textbooks	2		3					5
BDC – Professional work foreign journals								
BDD – Professional work in domestic journals								
BDE – Professional work in other foreign magazines	4	1						5
BDF – Professional work in other domestic magazines	66	6	38	1	8		1	120
BDM – Professional work foreign magazines registered in WoS databases or Scopus	1							1
BDN – Professional work in the dom. magazines registered in WoS databases or Scopus					1			1
BEE – Professional work in foreign proceedings (conference and non-conference)	1	4	10		1			16
BEF – Professional work in domestic proceedings (conference and non-conference)	22	8	10		2			42
BFA – Abstracts of professional works from foreign events	27	26						52
BFB – Abstracts of professional works from domestic events	17	3	1					21
CAB – Artistic monographs, translations, author's catalogues published by domestic publishers					1			1
CBB – Chapters in artistic monographs, chapters of artistic translations of publications published by domestic publishers. ed.					1			1
CDF – Works of art and translations in other domestic journals					1			1

CEC – Works of art and translations in anthologies, book publications and group catalogs published by foreign publishers								
EAJ – Professional translations of publications								
EDI – Reviews in magazines and proceedings			2	6	21			29
EDJ – Review works, professional works, translations of standards; professional translations in magazines	3				5			8
FAI – Book compilation work...	2	6	15	4	13	1		37
GHG – Works published in a way that allow mass access	3	4	10		13			30
TOGETHER 2021	741	567	419	125	305	52	37	2167
TOGETHER 2020	693	725	325	99	269	58	60	2229
TOGETHER 2019	991	864	309	161	388	55	63	2722
TOGETHER 2018	884	835	355	144	489	115		2716
TOGETHER 2017	945	922	261	114	510	48		2744
TOGETHER 2016	848	852	259	123	401	41		2460

* data from the EPC database excluding duplicates

** The column Total UPJŠ is not the sum of faculties and UP in the table. This is data from the EPC database excluding duplicates

Statistics of categories of publishing activities of the Faculty of Medicine for the year 2021 (as of 24.03.2022):

AAA - Scientific monographs published by foreing publishers	1
AAB - Scientific monographs published by domestic publishers	5
ACA - University textbooks published by foreign publishers	1
ACB - University textbooks published by domestic publishers	7
ACC - Chapters in university textbooks published by foreign publishers	1
ACD - Chapters in university textbooks published by domestic publishers	39
ADC - Scientific papers in foreign journals	145
ADD - Scientific papers in domestic journals	2
ADE - Scientific papers in other foreign journals	26
ADF - Scientific papers in other domestic journals	84
ADM - Scientific papers in foreign journals reg. in the WoS or SCOPUS databases	55
ADN - Scientific papers in domestic journals reg.in the WoS or SCOPUS	13
AEC - Scientific works in foreign peer-reviewed scientific proceedings, monographs	19
AED - Scientific works in domestic peer-reviewed scientific proceedings, monographs	64
AFB - Published invited papers at domestic scientific conferences	3
AFC - Published papers at foreign scientific conferences	7
AFD - Published papers at domestic scientific conferences	21
AFF - Abstracts of invited papers from domestic scientific conferences	9
AFG - Abstracts of papers from foreign scientific conferences	35
AFH - Abstracts of papers from domestic scientific conferences	52
BAA - Professional book publications published by foreign publishers	1
BCI - Scripts and textbooks	4
BCK - Chapters in textbooks	2
BDE - Professional work in other foreign magazines	4
BDF - Professional work in other domestic magazines	66
BDM - Professional papers in foreign journals registered in the Web of Science or SCOPUS databases	1
BEE - Professional works in foreign collection (conference and non-conference)	1
BEF - Professional work in domestic collection (conference and non-conference)	22
BFA - Abstracts of professional works from foreign events (conferences ...)	27
BFB - Abstracts of professional works from domestic events (conferences...)	17
DAI - Dissertation and habilitation works	6
EDJ - Review works, professional works, translations of standards; professional translations in magazines, anthologies	3
FAI - Book compilations (bibliographies, encyclopaedias, catalogues, dictionaries, collections, atlases ...)	2
GHG - Works published in a way that allow mass access	3
GII - Various publications and documents that cannot be included in any of the previous categories	10

S U M

758

Statistics on categories of publishing activities for the year 2021 (categories from 01.02.2022):

V2 - Scientific output of publishing activities as a part of an edited book or collection	14
V3 - Scientific output of publishing activities from the journal	20
O2 - Professional output of publishing activities as part of a book publication or collection	8
O3 - Professional output of publishing activities from the magazine	17
P1 - Pedagogical output of publishing activities as a whole	2
I3 - Another output of publishing activity from the magazine	1
<hr/>	
S U M	62

3.2 Responses in 2021

Tab. 2 – Citations and other responses to the work of University employees in 2021

data 31.01.2022

Code	Category name *	Fakulty UPJŠ a UP							Together UP (BZ+UTVaŠ)	Together **
		FM	FS	FL	FPA	FP	TIP			
1	Citations in foreign publications registered in the Web of Science citation indexes and the SCOPUS database	4043	4530	21	31	252	123	70	8570	
2	Citations in domestic publications registered in the Web of Science citation indexes and the SCOPUS database	10	6	6		15		2	37	
3	Citations in foreign publications not registered in citation indexes	65	72	118	36	56		7	335	
4	Citations in domestic publications not registered in citation indexes	61	9	381	87	125		7	656	
5	Reviews in foreign publications				1	5			6	
6	Reviews in domestic publications	1		4	4	11			20	
7	Art critics in foreign publications									
8	Art critics in domestic publications									
	Togehter 2021	4180	4617	530	159	464	123	86	9624	
	Togehter 2020	4013	4100	572	108	444	57	71	8908	
	Togehter 2019	2920	3121	599	128	431	51	24	6 994	
	Togehter 2018	2888	2812	534	135	433		64	6592	
	Togehter 2017	2226	2786	357	124	563		31	5809	
	Togehter 2016	2272	2867	438	114	404		9	5850	
	Togehter 2015	1855	2172	462	112	345		32	4785	

	Togehter 2014	911	871	172	54	131	30	2060
	Togehter 2013	1355	2351	378	140	393	41	4520
	Togehter 2012	1228	2004	382	165	251	69	3910

* the place of issue of the document is decisive when classifying the response into the relevant category

** The UPJŠ column is not the sum of faculties and UP in the table. This is data from the EPC database excluding duplicates

***FM response categories statistics for the year 2021 (categories from 31.01.2021)
(as of 28.03.2022):***

[1] Citations in foreign publications registered in the Web of Science citation indexes and in the SCOPUS database	4019
[2] Citations in domestic publications registered in the Web of Science citation indexes and in the SCOPUS database	10
[3] Citations in foreign publications not registered in citation indexes	59
[4] Citations in domestic publications not registered in citation indexes	56
[6] Reviews in domestic publications	1
<hr/> S U M	4145

***FM response categories statistics for the year 2021 (categories from 01.02.2022)
(as of 28.03.2022):***

[1] Publication citation registered in citation indexes	100
[2] Publication citation, including citation in a publication registered in databases other than citation indexes	10
[3] Review and art criticism in the publication	1
<hr/> S U M	111

* data from the EPC database excluding duplicates

3.3 Titles published at the faculty

	Author	The name of the published title
1	E. Mechírová, I. Domoráková	Praktikum z histológie
2	E. Mechírová, I. Domoráková	Histology
3	T. Muchová	Rádiodiagnostika ochorení pečene..
4	T. Muchová	Rádiológia pre lekárske fakulty
5	R. Dudič	Vybrané kapitoly z gynekológie
6	M. Molčan	Repetitóriium otorinolaryngológie
7	T. Hudáková, J. Židzik	Biológia a genetika
8	E. Slabá a kol.	Biológia - praktické cvičenia
9	S. Grešová a kol.	Praktické cvičenia z fyziológie 1. časť
10	L. Dimunová a kol.	Vybrané kapitoly zo základov zdravotnej starostlivosti
11	J. Firment a kol.	Anesteziológia a intenzívna medicína
12	M. legiša kol.	Medical Biophysics
13	T. Kimáková a kol.	Zdravé a aktívne starnutie
14	Z. Gdovinová a kol.	Vybrané kapitoly zo špeciálnej neurológie
15	S. Timková a kol.	Ochorenia jazyka
16	Z. Gdovinová a kol.	Vybrané kapitoly zo špeciálnej neurológie
17	J. Sabo a kol.	Medical Biophysics
18	J. Firment a kol.	Anesteziológia a intenzívna medicína 2. vydanie
19	T. Kimáková a kol.	Zdravé a aktívne starnutie účastníkov vzdelávania na Univerzite tretieho veku a vysokoškolských študentov
20	P. Kolarčík	Koncept zdravotnej gramotnosti v kontexte psychológie zdravia
21	J. Majerník	Úvod do medicíny založenej na dôkazoch
22	J. Majerník	Základy (bio)štatistiky pre medikov
23	I. Valočíková a kol.	Vyšetrovacie metódy v internej medicíne

24	P. Berek	Viscerálna patológia cievneho pôvodu
25	A. Gharaibeh, M. Lacko	Examination methods and injection technique in orthopaedics
26	T. Kimáková a kol.	Zdravé a aktívne starnutie účastníkov vzdelávania na Univerzite tretieho veku a vysokoškolských študentov
27	P. Kolarčík	Koncept zdravotnej gramotnosti v kontexte psychológie zdravia
28	R. Beňačka	Folia Medica Cassoviensis 1/2020
29	R. Beňačka	Folia Medica Cassoviensis 2/2020

3.4 Employees in the editorial boards of magazines

- number of issues issued in the year 2021: **51**

prof. MUDr. Ivica Lazúrová, DrSc., FRCP

- editor-in-chief of the journal Internal Medicine (11 issues).

prof. MUDr. Ivica Lazúrová, DrSc., FRCP

- member of the editorial board of the magazine Vnitřní Léčství (12 issues).

doc. MUDr. Milan Kuchta, CSc.

- Ateroskleróza č. 1-2/2021, č. 3-4/2021, **Deputy Editor-in-Chief**
- Čes.-Slov. Pediatrie 6 issues. deputy editor-in-chief of the magazine
- Pediatria (Bratisl.) 6 issues, member of the editorial board and professional proofreader

doc. MUDr. Ivan Dóci, PhD.

- member of the editorial board of the magazine Psychiatria-psychoterapia-psychosomatika – publisher INVESTA, spol. r.o. Košice (4 issues)

doc. MUDr. Vladimír Kaťuch, PhD., MBA

- member of the editorial board of the magazine: Česká a Slovenská Neurologie a Neurochirurgie, a magazine indexed in Scopus and the Web of Science, IF 0,38 (6 issues)

doc. MUDr. Roman Beňačka, CSc., mim.prof.

- Chairman of the Editorial Board of Folia Medica Cassoviensia (2 issues)

RNDr. Darina Petrášová, PhD.

- Publishing a scientific journal: Ateroskleróza – metabolismus – klinika - liečba, Atherosclerosis. Metabolism – Clinic – Treatment; ISSN 1335-2253 , EV – 709/08, Year XXV, 2021; (1-2; 3-4)

3.5 List of non-conference invited / requested lectures of faculty staff in 2021 at major foreign universities and academic institutions

Škorvánek M. Current concepts in prodromal Parkinson's disease. Invited lecture 11.3.2021 – Lab meeting Movement Disorders and Neuromodulation Group, Dept. Of Neurology, Charite University, Berlin, Germany

Invited lectures at University in Germany: Institut für Mathematik, AG Numerik, Johannes Gutenberg- Universität Mainz, Staudingerweg 9, D-55128 Mainz

An internship: 31.7.2021-11.8.2021

- 2.8.2021 KAŤUCH, Vladimír: The tumor biology, specificity in brain tumors
- 4.8.2021 KAŤUCH, Vladimír: The role of chemotaxis in tumor dissemination
- 10.8.2021 KAŤUCH, Vladimír: Influence of the immune system in tumor growth processes

Prof. MUDr. Jana Kaťuchová, PhD., MBA - invited lectures during an Erasmus internship at the University of Mainz, Staudingerweg 9, D-55128 Mainz

An internship: 31.7.2021-11.8.2021

4 lectures:

- 3.8.2021 The specificity of pancreatic tumors, tumor biology and the role of chemotaxis in tumor dissemination
- 5.8.2021 A study on time discretization and adaptive mesh refinement methods for the simulation of cancer invasion: the urokinase model.
- 6.8.2021 A study of matrix metalloproteinases MMP2, MMP7, MMP9 in pancreatic cancer
- 9.8.2021 Comparison of urokinase model and matrix metalloproteinases MMP2, MMP7, MMP9 in tumor growth processes.

3.6 Scientific events in 2021

XI. New Year's rheumatology seminar

Date: 21. Jan. 2021

Place: Košice

Organizing subjects: co-organizer, prof. MUDr. Ž. Macejová, PhD.

Number of participants: 130

4. Case reports in internal medicine and cardiology

Date: 5.-6. Feb. 2021

Place: online

Organizing subjects: event organizer and chairman of the program committee - prof. MUDr. Ivica Lazúrová, DrSc., FRCP

Number of participants: 600

Neuroophthalmological questions

Date: 8. Apr. 2021 from 16,00 hod

Place: Slovak webinar

Organizing Committee: Slovak Glaucoma Society SLS

Slovak Ophthalmological Society
II. Department of Neurology of SZU , Banská Bystrica
Co-organizer: MUDr. Monika Moravská, Eye clinic UPJŠ FM
Number of participants: 205

What are we learning from the COVID-19 pandemic as a public health workforce? 4th meeting of the Coalition of Partners to strengthen public health capacities in Slovakia.

Date: 16. Apr. 2021, 09:00 – 11:30

Place: online (Zoom)

Organizing subjects: MZ SR, WHO/Europe, SAVEZ and Department of Social and Behavioral Medicine, Faculty of Medicine, UPJŠ in Košice

Number of participants: 55 (SR) and 7 organizers (3 SR, 4 WHO/Europe)

Representatives of the Ministry of Health of the Slovak Republic, ÚVZ SR and selected RÚVZ, universities educating in public health care and professional associations in health care

Goal: Based on the experience with the COVID-19 pandemic to date, consider possible solutions and seek answers on how to strengthen the public health workforce; to create a common understanding and what this knowledge means in terms of advancing the coalition of public health partners.

International Conference Cybernetic Modelling of Biological Systems, MCSB 2021

Date: 28.-30. May 2021

Place: Kraków, Poland

Organizing subjects: doc. Ing. Jaroslav Majerník, PhD.- co-organization of an international conference (Scientific Committee)

Days of practical obesity and metabolic syndrome

Liver and metabolic syndrome

Date: 11.-12. June 2021

Place: Congress hotel Alexander, Bardejov

Scientific Committee: prof. PhDr. Lucia Dimunová, PhD.
prof. MVDr. Tatiana Kimáková, PhD.

International Scientific Conference "Practical Obesity Days"

Date: 11. – 12. June 2021

Place: Bardejov Spa, Bardejov

Organizing subjects: prof. PhDr. L. Dimunová, PhD. – member of the Scientific Committee

Days of practical obesity and metabolic syndrome

Date: 11.-13. June 2021

Place: Chopok

Organizing subjects: Department of Gerontology and Geriatrics UPJŠ LF and UN - St. Michael's Hospital, a. s - co-organizer

Number of participants: 155, 12 zahraničných

13. Congress of Internal Medicine

Date: 17.-19. June 2021

Place: V. Tatry, Grand Hotel Bellevue
Organizing subjects: prof. MUDr. I. Lazúrová, DrSc., FRC – President of Congress
Number of participants: 250, 5 foreign.

Information and Digital Technologies 2021, IDT

Date: 22.-24. June 2021
Place: Žilina
Organizing subjects: doc. Ing. Jaroslav Majerník, PhD. – co-organization of an international conference (Scientific Program Committee)

XX. Stomatological days Košice

Date: 8.-9. Sep. 2021
Place: auditorium tract UPJŠ FM, Tr.SNP No.1, Košice
Organizing Committee: MUDr. Jozef Ivančo, CSc.
Dr.h.c.prof. MUDr. Andrej Jenča, CSc., MPH
MUDr. Jana Kaiferová, PhD.
MUDr. Jozef Minčík, PhD.
MUDr. Silvia Timková, PhD.
Mgr. Natália Bradáčová
Number of participants: 180

Networking of young neurologists

Date: 8.-9. Sep 2021
Place: Tatranská Lomnica
Organizing subjects: doc. MUDr. Matej Škorvánek PhD. – chief organizer

XX. Congress of the Slovak Gerontological and Geriatric Society

Date: 8.-10. Sep. 2021
Place: Prešov
Organizing subjects: Department of Gerontology and Geriatrics UPJŠ FM and UN - St. Michael's Hospital, a. s - co-organizer
Number of participants: 158, 10 foreign, in full-time form, active participation

XXIV. Czech-Slovak Congress on Infectious Diseases

Date: 15.-17. Sep 2021
Place: Harmony club hotel, Špindlerův Mlýn, CR
Organizing subjects: Czech Society of Infectious Medicine ČLS JEP in cooperation with:
Slovak Society of Infectious Diseases SLS,
Department of Infectious Diseases, University Hospital Hradec Králové
Faculty of Medicine in Hradec Králové, Charles University,
Czech Association of Nurses
Scientific Committee: prof. MUDr. Pavol Jarčuška, PhD.

XXXIII. Internal meeting sekcie intenzívnej starostlivosti v pediatrii

Date: 17.-18. Sep 2021

Place: Hotel Trigán, High Tatras
Organizing subjects: KPAIM DFN Košice and FM UPJŠ, Children's University Hospital
Košice
SPS Pediatric Intensive Care Section and SSAIM Pediatric
Anesthesiology Section
Children's Anesthesiology and Resuscitation Department Košice, o.z.
A-medi, s.r.o.
Number of participants: 85, 2 GB

XXXI. Diabetological days with international participation

Date: 19.-21. Sep 2021
Place: hotel PATRIA Štrbské Pleso
Organizing subjects: doc. MUDr. Zbynek Schroner, PhD. – Chairman of the Congress
Program Committee

Preventive medicine XI. Health and work

Date: 23. Sep 2021
Place: Bratislava
Organizing subjects: prof. MUDr. L. Legáth, PhD. – member of the organizing committee

East Slovak conference of dermatovenerologists with international participation - east for skin

Date: 24.-25. Sep. 2021
Place: Grandhotel Starý Smokovec
Organizing subjects: Slovak Medical Chamber
Department of Dermatovenerology, UPJŠ FM and UNLP Košice
Department of Dermatovenerology FNŠP J.A.Reimana, Prešov
Patronage of the event: prof. MUDr. Daniel Pella, PhD., dean of Faculty of Medicine UPJŠ
in Košice
Note: <https://eastforskin.sk/program/>

14. Festival of case studies from pediatrics 2021

Date: 1.-2. Oct. 2021
Place: Žilina
Organizing subjects: President of Congress: doc. MUDr. Milan Kuchta, CSc.
Collection of abstracts ISBN: 978-80-972948-4-7

Return to life from the perspective of a neurologist and psychiatrist

Date: 2. Oct 2021
place: Tatranská Lomnica
Organizing subjects: organizer and professional guarantor MUDr. Jozef Dragašek, PhD., MHA
Number of participants: 50 domestic participants

XXVI. Congress of the Slovak Society of Cardiology

Date: 7.-9. Oct 2021
Place: Šamorín
Organizing subjects: Department of Gerontology and Geriatrics UPJŠ FM and UN - St.

Michael's Hospital, a. s - co-organizer (MUDr. Peter Olexa, PhD.)
Number of participants: 680, 12 foreign

Professional event on the occasion of World Older People's Day

Date: 11. Oct 2021 at 14.30 hod.

Place: Auditorium no. 1 of Faculty of Medicine, UPJŠ Košice, Trieda SNP 1

Organizing subjects: Košice Medical Association
Regional Medical Chamber in Košice
UPJŠ Faculty of Medicine in Košice
L. Pasteur University Hospital in Košice

Coordinator: Ing. Katarína Derzsiová

Coalition of partners for capacity building in public health (VZ) in Slovakia. Professional discussion on further education in VZ with a focus on content and output competencies

Date: 13. Oct 2021, 13:00 – 15:00

Place: online (MS Teams)

Organizing subjects: MZ SR, WHO/Europe, SAVEZ and Department of Social and Behavioral Medicine, Faculty of Medicine, UPJŠ in Košice

Number of participants: 18 (SR) and 4 organizers (3 SR, 1 WHO/Europe),
Representatives of the Ministry of Health of the Slovak Republic, ÚVZ SR and selected RÚVZ, universities educating in public health care and professional associations in health care

Goal: Professional discussion on further education in VZ with a focus on content and output competencies

37th Conference of the Clinic for Children and Adolescents UPJŠ FM and DFN with international participation

XIII. Démant's day

Date: 14. Oct 2021

Place: Košice in the form of a webinar

Organizing subjects: Slovak Pediatric Society
Children's University Hospital Košice
UPJŠ Faculty of Medicine in Košice
Department of Children and Adolescents, FM UPJŠ and DFN Košice

Coordinators: doc. MUDr. Veronika Vargová, PhD.

Note: <http://pediatria-kosice.sk/uvod>

14th nationwide Infectology conference in Nitra

Date: 14.-16. Oct 2021

Place: Nitra

Organizing subjects: Slovak Society of Infectologists, prof. MUDr. Pavol Jarčuška, PhD.

EPUAP Virtual Meeting 2021

Date: 18.- 19.Oct. 2021

Place: virtual conference

Organizing subjects: PhDr. B. Grešš Halász, PhD., MPH - Chair of the Scientific Committee

XI. International Symposium of Nursing, University of Ostrava, Faculty of Medicine

Date: 21. Oct 2021

Place: Ostrava, Czech Republic

Organizing subjects: PhDr. Mária Sováriová Soósová, PhD)- member of the Scientific Committee

International conference "Cooperation of helping professions Poland - Czech - Slovak studies"

Date: 22. – 23. Oct 2021

Place: Ustroň, Poland

Organizing subjects: University of Health and Social Work St. Elizabeth, a. s. in Bratislava
prof. PhDr. Lucia Dimunová, PhD. - member of the Scientific Committee

EWMA and Journées Cicatrisations Virtual Conference

Date: 26.-27. Oct. 2021

Place: virtual conference

Organizing subjects: PhDr. B. Grešš Halász, PhD., MPH – Chair of the Scientific Committee

Institute-wide medical seminar in the field of burns and plastic surgery

Date: 27. Oct 2021 at 14:00 hod.

Place: AGEL Hospital Košice-Šaca, Lúčna 57, auditorium of MUDr. Charvát

Organizing subjects: AGEL Hospital Košice-Šaca a.s.
OZ AGEL ACADEMY
Department of Burns and Reconstructive Surgery UPJŠ FM

XXXV. Congress of occupational medicine with international participation

Date: 28.-29. Oct 2021

Place: Martin

Organizing subjects: prof. MUDr. Ľ. Legáth, PhD. – honorary presidency
doc. MUDr. S. Perečinský, PhD. – member of the scientific committee of the conference

Congress SSPLR 2021 with international participation

Date: 11.-12. Nov. 2021

Place: virtual congress

Organizing subjects: PhDr. B. Grešš Halász, PhD., MPH - Chair of the Scientific Committee

10.F Workshop: Applying behavioral science for public health communication: insights from global COVID-19 initiatives

Workshop organized by 14th European Public Health Conference 2021 „Public health futures in a changing world“ - online event

Date: 12. Nov 2021, 14:50 – 16:00, online

Organizing subjects: International Behavioural Trials Network (IBTN), European Public

Health Association (EUPHA) and Department of Social and Behavioral Medicine, Faculty of Medicine, UPJŠ.

Number of participants: 68 (foreign)

Goal: Discuss barriers and facilitators of adherence to rapidly changing ones policies and measures related to COVID-19. Achieving change in health behavior through community involvement, effective communication and confidence-building between the public and politicians.

International conference MEFANET 2021

Date: 23.-24. Nov. 2021

Place: Brno, CR

Organizing subjects: doc. Ing. Jaroslav Majerník, PhD. - co-organization, Organizing Committee, Program Committee)

1. ceea course with international participation

Date: 24.-26. Nov. 2021

Place: Košice, online

Organizing subjects: Slovak center C.E.E.A. Košice MUDr. V. Hudák, PhD.
European Society of Anesthesiology
Slovak Society of Anesthesiology and Intensive Care
Society for the Critically Ill

Number of participants: 48 participants, 14 Slovak lecturers, 2 foreign lecturers

Integrated care in the Slovak Republic

Date: 25. Nov. 2021, 13:00 – 14:30

Place: online (MS Teams)

Organizing subjects: Institute of Social and Behavioral Medicine, Faculty of Medicine, UPJŠ in Košice in cooperation with Optimedis AG, Germany, and Scottish Government, Scotland

Number of participants: 23 (SR) and 6 organizers (2 SR, 3 Germany, 1 Scotland)
Representatives of the Ministry of Health of the Slovak Republic, the Ministry of Labor and Social Affairs of the Slovak Republic, MIRRI SR, regional and local governments (BSK, KSK, the city of Košice), RÚVZ based in Košice, social service providers and patient NGOs

Goal: Discussion on the Plan to improve the implementation of integrated health and social care in the Slovak Republic at the local, regional and national level within the solution of the SCIROCCO Exchange project (<https://www.sciroccoexchange.com/>)

3. Pre-Christmas Diabetes Congress

Date: 26.-27. Nov 2021

Place: Senec

Organizing subjects: Slovak Diabetological Association
National Institute of Endocrinology and Diabetology n.o. Ľubochňa
I. Department of Internal Medicine of UN Martin
Jessenius Faculty of Medicine UK Martin
IV. Department of Internal Medicine of UPJŠ FM Košice

XXX. Schwarz' day

Date: 10. Dec 2021, 16.00 - 19.00

Place: Scientific conference online

Organizing subjects: Slovak Gynecological and Obstetrical Society SLS
UPJŠ in Košice, Faculty of Medicine

Coordinator: prof. MUDr. Alexander Ostró, CSc., MBA

Web: <http://sgps-kongres.sk/schwarzovden/>

Case webinars of the Extrapiramidal Section of the Slovak Neurological Society

Date: 28.4.2021, 26.5.2021, 30.6.2021, 29.9.2021, 27.10.2021, 24.11.2021,
15.12.2021

Place: Series of 7 webinars

Organizing subjects: doc. MUDr. Matej Škorvánek PhD – main organizer

4. Implementation outputs from project solutions, development and technology transfer, cooperation with practice and business activities

Department of Medical and Clinical Biochemistry UPJŠ FM in Košice

An international patent application has been filed - Haag (Netherlands): European Patent Office, 2021. - 31 s. Method for non-invasive testing of the success of the in vitro fertilization process - Project: Use of innovative molecular biochemical methods in the diagnosis of nonperceptive endometrium in the process of in vitro fertilization - VEGA 1/0620/19 – Rabajdová M., Slabý O., Šoltýs K., Mareková M., Toporcerová S.:

PP refers to the identification of a set of specific miRNA molecules, i.e. the creation of a miRNA profile in order to determine the success/failure of the IVF process. In addition, it relates to the possible use of the miRNA profile in the development of an innovative diagnostic non-invasive test in predicting the success of the in vitro fertilization process in women undergoing artificial insemination. Information also on <https://www.ctt.muni.cz/technologie/test-ivf>

Completion of the project solution VEGA 1/0620/19:

The use of innovative molecular biochemical methods in the diagnosis of non-perceptive endometrium in the process of in vitro fertilization – *responsible researcher: doc. RNDr. Miroslava Rabajdová, PhD.*

Project **VEGA 1/0620/19** was focused on the use of innovative molecular biochemical methods in the diagnosis of non-perceptive endometrium in the process of in vitro fertilization. One of the most important results is the identification of specific miRNA molecules identified in a woman's plasma and in the embryo's culture medium. Specific canonical miRNA / iso-miRNA molecules showed significantly different representations and distributions in the plasma of women in the group of women with a successful IVF process compared to the group of women with a failed IVF process. The distribution of specific canonical miRNA / iso-miRNA molecules (miRNA profile) in plasma can be used for diagnostics on the day of the IVF process, to evaluate biological competence - readiness, resp. maternal unpreparedness for the IVF process. The secretion of specific canonical miRNA / iso-miRNA molecules (miRNA profile) into the embryo culture medium can be used for diagnostics on the day of the IVF process and to evaluate the competence, quality of the embryo.

The achieved scientific-research results were published in 9 scientific-research works *in extenso* in domestic and foreign journals. Two works are registered in the database Web of Science and 4 works were published in foreign journals (IF: 1.216, IF: 3.196, IF: 4.155, IF: 4.856). The results were presented at domestic and foreign conferences and published in the form of abstracts (5) as well as published papers (7). Partial results were published in the form of scientific papers in other domestic journals (3), respectively in the form of presentations of doctoral students at selected events, e.g. 45th Brno Oncology Days (under the auspices of Masaryk University in Brno, Doctoral Students' Seminar dedicated to the memory of Academician Bodř, under the auspices of UVLaF, SAS and UPJŠ in Košice.

The works are registered in UL UPJŠ and a complete list of publications is also available on the UL UPJŠ website: [EPC BIB - Výsledky vyhľadávania \(upjs.sk\)](#) alebo [EPC - Kod pracoviska= UPS? and Projekt\(číslo\)= |1/0620/19| \(upjs.sk\)](#), respektíve [EPC - Kod pracoviska= UPS51010 and Projekt\(číslo\)= |1/0620/19| \(upjs.sk\)](#)

Department of Epidemiology UPJŠ FM in Košice

- on the basis of the Cooperation Agreement no. 1828/2021 carried out a "Seroepidemiological study for the presence of antibodies to SARS-CoV-2 in selected regions of Slovakia". Client: Ministry of Health of the Slovak Republic, budget: 50,000 Eur.

Department of Orthopaedics and Traumatology of Locomotory Apparatus UPJŠ FM and UNLP in Košice

Clinical application of platelet-rich autologous blood plasma preparations for musculoskeletal and articular cartilage injuries, realized at the orthopedic outpatient clinic of the Joint Tissue Bank UNLP Košice and the Department of Orthopaedics and Traumatology of Locomotory Apparatus UPJŠ FM and UNLP in Košice.

Department of Pneumology and Phthisiology UPJŠ FM and UNLP in Košice

Implementation of a wide range of diagnostic and treatment procedures in pneumology and phthisiology, as well as in sleep medicine, within the UNLP in Košice.

Authorship of a professional document - national guidelines (1x):

Updated recommendations for outpatient specialists regarding the management of patients in the current epidemiological situation and the risks of transmission of SARS-CoV-2 virus (COVID-19) - February 2021.

In: *Respiro* : journal for continuing education in pneumology and phthisiology. - ISSN 1335-3985. - y. 19, no. 1 (2021), s. 14-15.
[POBEHA, Pavol (100%)]

Department of Health Psychology and Methodology Research UPJŠ FM

- Professional online conference Mental immunity of teachers, 22.11.2021, Madarasová Gecková A.: What happened to us?? <https://youtu.be/y-nNzqIuhnk>
- Conference Protecting Children from Violence – multidisciplinary cooperation in practice. Bridges to the family - let's protect children from violence, 20.5.2021, Madarasová Gecková A., Dankulincová Z., Husárová D.: We want to hear their voice research studies protecting children from violence
- Within the ERNST training school (<https://cost-ernst.eu/webinar-registration/ernst-training-school/>), 21-23.9.2021, for young researchers from Eastern Europe and dedicated to patient safety, the phenomenon of secondary sacrifice, the reporting and reporting of adverse events in the provision of health care and interventions aimed at building resilience of health professionals, the invited lectures of two project leaders: (3.1.) Madarasová Gecková A.: Speaking up, open disclosure, available online: <https://youtu.be/orkRwj9A5I>, (3.2.) Pačutová V.: Preliminary findings of our research project on health care workers experience with adverse events, available online: <https://www.youtube.com/watch?v=jDgYC24oiLU>
- mediPRÁVNIK Podcast: Communication with the patient brings not only ethical but also legal risks - how to avoid them?/ 3.5.2021/ Guests: MUDr. Petrom Stachurom, Dr. med., MBA.,

- Prof. Andrea Madarasová Gecková, PhD, online: <https://www.podbean.com/ew/pb-b8hgw-1026692>
- mediPRÁVNIK Webinar: Who is yes and who is no longer? Does the doctor face legal sanctions for selecting patients at the triage? Legal, ethical and psychological issues of triage patients with COVID-19/ 25.11.2021, Guests: JUDr. Ivan Humeník, PhD, MUDr. JUDr. Peter Firment, Prof. Andrea Madarasová Gecková, PhD., online: <https://youtu.be/wqX5VWTqxQU>
 - mediPRÁVNIK Podcast: When the patient's health is damaged, the victim is not only the patient but also the doctor, the psychologist points out./ 6.9.2021, Guests: Prof. A. Madarasová Gecková, Phd, online: <https://www.medipravnik.sk/podcasty/87-psychologicka-pri-poskodenii-zdravia-pacienta-je-obetou-nielen-pacient-ale-aj-lekar-upozornuje-psychologicka-87/>
 - I live in science Podcast: With scientists around the world - RomaREACH./ 17.03.2021, Guests: Mgr. Daniela Filáková Bobáková, PhD., Mgr. Shoshana Chovan., online: <https://open.spotify.com/episode/2ChZi8FdDAptnVRiYGIKBU?si=hrTjqBAbTrGJb90rNUyg9Q&nd=1>

Department of Social and Behavioral Medicine UPJŠ FM

– Transfer of knowledge gained within the EU project SCIROCCO Exchange: Personalised Knowledge Transfer and Access to Tailored Evidence-Based Assets on Integrated Care, EK 3rd HP-PJ-2018 (No. 826676) to the Standards of long-term care of the Ministry of Health of the Slovak Republic:

1. Patient and family oriented care – „PROS“ (Authors: Ľ. Kočanová, Z. Katreniaková, Z. Fabianová, I. Rajničová Nagyová)
2. Comprehensive satisfaction of the needs of people in follow-up and long-term care (Authors: H. Gondárová, A. Bratová, M. Koval'ová, M. Laurinc, Z. Katreniaková, M. Žáková)
3. Management of timely provision of follow-up and long-term social and health care (Authors: Z. Fabiánová, A. Bratová, Z. Katreniaková, A. Mochnáčová, M. Žáková)
4. Managing the risk of destabilization in long-term nursing care (Authors: Z. Fabiánová, M. Kličová, A. Bratová, A. Mochnáčová, Z. Katreniaková, M. Žáková)

Available at: <https://www.standardnepostupy.sk/standardy-dlhodoba-starostlivost/>

– Transfer of knowledge gained within the EU project SCIROCCO to the creation of a web-based Integrated Care Platform. The aim of the platform is to provide an overview of the current state of integrated care in the world and in Slovakia, strengthen competencies and knowledge, support multidisciplinary cooperation, stimulate networking of professional contacts in social services and health care at the national, regional and local levels. Available at: <https://integratedcare.mc3.sk/>

5. The most significant scientific research results of the faculty in 2021

Research area 18: Medical and pharmaceutical sciences

ADC Scientific papers in foreign journals

GDOVINOVÁ, Zuzana - VITKOVÁ, Marianna - BARÁKOVÁ, Anna - CVOPOVÁ, Alena
The impact of the COVID-19 outbreak on acute stroke care in Slovakia: Data from across the country. In: *European Journal of Neurology*: Roč. 28, č. 10 Special Issue: COVID-19 (2021), s. 3263-3266. - DOI 10.1111/ene.14640
IF=6,089, 2021 Q1

Niekoľko štúdií na základe údajov z regionálnych databáz nedávno poukázalo na znížený počet pacientov s mozgovou príhodou (CMP) počas pandémie COVID-19. Cieľom štúdie bolo opísať údaje na úrovni krajiny (počet pacientov s CMP, s akútnou CMP, podiel pacientov liečených intravenóznou trombolýzou [IVT] alebo mechanickou trombektómiou [MT], časy do zahájenia liečby (DNT, ONT) počas pandémie COVID-19 na Slovensku. Boli použité údaje z evidencie CMP v Národnom centre zdravotníckych informácií. Porovnávali sa údaje z troch časových období (marec až apríl 2020; marec až apríl 2019; január až február 2020). Výsledky: Počet pacientov s CMP prijatých do nemocníc na Slovensku v období COVID-19 zaznamenal pokles (1673 vs. 2328 v období 2 a 2155 v období 3). Percento pacientov liečených IVT počas pandémie (22,4 %) sa nelíšilo od obdobia 2 (20,0 %) alebo obdobia 3 (21,4 %). Nezistil sa rozdiel v miere MT, 10,2 % vs. 10,7 % vs. 13,1 %. DNT a ONT zostali nezmenené. Počas pandémie COVID-19 na Slovensku sme zistili znížený počet pacientov s CMP, ale bez zmeny kvality starostlivosti o akútnu CMP.

A few studies using data from regional databases have recently pointed to a decreased number of patients with stroke during the COVID-19 pandemic. The aim of study was to describe country-level data (the number of patients with stroke, with acute stroke, the proportion of patients treated with intravenous thrombolysis [IVT] or mechanical thrombectomy [MT], the door-to-needle times [DNT], and the onset-to-needle time [ONT]) during the COVID-19 pandemic in Slovakia. Data from the stroke register at the National Health Information Centre were used. Data from three time periods (March to April 2020; March to April 2019; January to February 2020) were compared. Results: The number of stroke patients admitted to hospitals in Slovakia during the COVID-19 period showed a decrease (1673 vs. 2328 in period 2 and 2155 in period 3). The percentage of patients treated with IVT during the pandemic (22.4%) did not differ from period 2 (20.0%) or period 3 (21.4%). No difference was found in the rate of MT, 10.2% vs 10.7% vs 13.1%. The DNT and ONT remained unchanged. We found a decreased number of stroke patients during the COVID-19 outbreak in Slovakia, but no evidence of a change in the quality of acute stroke care.

PAVELKA, Martin (11.112%) - VAN-ZANDVOORT, Kevin (11.111%) - ABBOTT, Sam (11.111%) - SHERRATT, Katharine (11.111%) - MAJDAN, Marek (11.111%) - JARČUŠKA, Pavol (11.111%) - KRAJČÍ, Marek (11.111%) - FLASCHE, Stefan (11.111%) - FUNK, Sebastian (11.111%): The impact of population-wide rapid antigen testing on SARS-CoV-2 prevalence in Slovakia [elektronický zdroj] / Martin Pavelka a kol.. In: *Science : The World's Leading Journal of Original Scientific Research, Global News, and Commentary*. - ISSN 1095-9203. - Roč. 372, č. 6549 (2021), s. 635-641. - Method of access: <https://www.science.org/doi/10.1126/science.abf9648>. - DOI 10.1126/science.abf9648

IF 47,728, 2020 Q1

The work is published in one of the most prestigious scientific journals, Science. Describes the importance of nationwide antigen screening for COVID-19 infection during the second wave of the COVID-19 pandemic.

JANOČKOVÁ, Jana; SLOVINSKÁ, Lucia; HARVANOVÁ, Denisa; ŠPAKOVÁ, Tímea; ROSOCHA, Ján: New therapeutic approaches of mesenchymal stem cells-derived exosomes. In: Journal of biomedical science. - ISSN 1423-0127. - Roč. 28, č. 1 (2021), s. 1-26. DOI 10.1186/s12929-021-00736-4; IF: 7,481; JCR - Q1

JANOČKOVÁ, Jana; MATEJOVÁ, Jana; MORÁVEK, Marko; HOMOLOVÁ, Lucia; SLOVINSKÁ, Lucia; NAGYOVÁ, Alena; RAK, Dmytro; SEDLÁK, Marián; HARVANOVÁ, Denisa; ŠPAKOVÁ, Tímea; ROSOCHA, Ján : Small Extracellular Vesicles Derived from Human Chorionic MSCs as Modern Perspective towards Cell-Free Therapy. In: International journal of molecular sciences : open access journal. - ISSN 1422-0067. - Roč. 22, č. 24 (2021), art. no. 13581, s. [1-17]. DOI 10.3390/ijms222413581; IF: 5,924; JCR - Q1

V priebehu roka sme zahájili výskum extracelulárnych produktov (exozómov) MKB. Na izoláciu exozómov bola použitá precipitačná metóda za cieľom získať preddefinovanú populáciu exozómov v rozmedzí 35-150 nm. NTA analýza ukázala, že väčšina izolovaných častíc mala veľkosť 169.2 ± 11.6 nm. Koncentrácia častíc bola stanovená ako $1.19 \pm 0.88 \times 10^9$ častíc/mL. Prietokovou cytometriou boli detegované typické exozomálne markery (CD9, CD63, CD81) a taktiež markery bunkového pôvodu (CD29, CD44 a CD105). ELISA testy potvrdili prítomnosť CD63 a CD81 v hodnotách $1.51 \pm 0.14 \times 10^{10}$ a $5.92 \pm 0.41 \times 10^9$ častíc a CD9 pri $1.01 \pm 0.05 \times 10^6$ časticiach. Bolo uskutočnených aj viacero odberov humánných degeneratívnych tkanív (chrupka, synoviálna membrána, Hoffovo tukové tkanivo) a synoviálnej tekutiny od pacientov s neskorou osteoartritídou na prípravu kondicionovaného média (CM) za cieľom vytvoriť zápalové mikroprostredie in vitro. Zápalové/protizápalové mediátory OA boli stanovené v CM pomocou multiplexných kitov na zariadení MAGPIX. Výsledky vznikli v rámci projektu APVV – 17-0118 a VEGA – 1/0229/20.

During the year, we performed research on extracellular products (exosomes) from MSCs. A precipitation method was used to isolate the exosomes in order to obtain a defined population of exosomes in the range of 35-150 nm. NTA analysis showed that most of the isolated particles had a size of 169.2 ± 11.6 nm. The particle concentration was determined to be $1.19 \pm 0.88 \times 10^9$ particles / mL. Typical exosomal markers (CD9, CD63, CD81) as well as markers of cellular origin (CD29, CD44 and CD105) were detected by flow cytometry. ELISA tests confirmed the presence of CD63 and CD81 at $1.51 \pm 0.14 \times 10^{10}$ and $5.92 \pm 0.41 \times 10^9$ particles and CD9 at $1.01 \pm 0.05 \times 10^6$ particles. Several samples of human degenerative tissues (cartilage, synovial membrane, Hoffa's fat pad) and synovial fluid were also taken from patients with late osteoarthritis to prepare conditioned media (CM) in order to create an in vitro inflammatory microenvironment. OA inflammatory / anti-inflammatory mediators were determined in CM using multiplex kits on a MAGPIX device. The results were obtained and funded by the projects APVV - 17-0118 and VEGA - 1/0229/20.

PENGO, Martino F. - FAINI, Andrea - GROTE, Ludger - LUDKA, Ondřej - **JOPPA, Pavol** - PATAKA, Athanasia - DOGAS, Zoran - MIHAICUTA, Stefan - HEIN, Holger - ANTTALAINEN, Ulla - RYAN, Silke - LOMBARDI, Carolina - PARATI, Gianfranco: Impact of Sleep Apnea on Cardioembolic Risk in Patients With Atrial Fibrillation. In: Stroke: a Journal of Cerebral Circulation. - ISSN 0039-2499. - Roč. 52, č. 2 (2021), s. 712-715. - DOI 10.1161/STROKEAHA.120.030285, IF 7,914, 2020 Q1

Background and purpose: An accurate determination of the cardioembolic risk in patients with atrial fibrillation (AF) is crucial to prevent consequences like stroke. Obstructive sleep apnea (OSA) is a known risk factor for both AF and stroke. We aim to explore a possible association between OSA and an increased cardioembolic risk in patients with AF.

Methods: We assessed data from the ESADA (European Sleep Apnea Database) cohort where patients with known AF and OSA were included. Parameters of OSA severity and related hypoxia like lowest Spo₂ and 4% oxygen desaturation index were analyzed. Patients were stratified according to their cardioembolic risk estimated with the CHA₂DS₂-VASc score.

Results: From the initial cohort of 14 646 patients, a final set of 363 patients were included in the analysis. Indices of hypoxia during sleep were associated with increased CHA₂DS₂-VASc score (4% oxygen desaturation index 17.9 versus 29.6 versus 30.5 events/hour and the lowest Spo₂ 81.2 versus 77.8 versus 77.5% for low, moderate, and high cardioembolic risk, respectively, P<0.05).

Conclusions: These results support the potential role of OSA-related hypoxia in the risk for cardioembolic complications such as stroke in patients with AF.

Dopad spánkového apnoe na kardioembolické riziko u pacientov s fibriláciou predsiení. Správne určenie kardioembolického rizika u pacientov s fibriláciou predsiení je kľúčové pri predchádzaní dôsledkom, ako napríklad mozgová porážka. Obštrukčné spánkové apnoe je známym rizikovým faktorom ako fibrilácie predsiení, tak aj mozgovej porážky. Možný vzťah medzi závažnosťou spánkového apnoe a zvýšeným kardioembolickým rizikom pri súčasnom výskyte fibrilácie predsiení bol analyzovaný u podskupiny 363 takýchto pacientov spomedzi celej kohorty 14 646 pacientov so spánkovým apnoe. Výsledky nasvedčujú pre jestvujúci dopad hypoxie vyplývajúcej zo závažnosti obštrukčného spánkového apnoe na riziko kardioembolických komplikácií u pacientov s fibriláciou predsiení.

LACKO, Marek; HARVANOVÁ, Denisa; SLOVINSKÁ, Lucia; MATUŠKA, Martin; BALOG, Marek; LACKOVÁ, Antónia; ŠPAKOVÁ, Tímea; ROSOCHA, Ján: Effect of Intra-Articular Injection of Platelet-Rich Plasma on the Serum Levels of Osteoarthritic Biomarkers in Patients with Unilateral Knee Osteoarthritis. In: Journal of clinical medicine. - ISSN 2077-0383. - Roč. 10, č. 24 (2021), art. no. 5801, s. 1-9, online. DOI 10.3390/jcm10245801; IF: 4,242; JCR - Q1

This is the output of the VEGA project no. 1/0598/20: Analysis of serum and synovial biomarkers of osteoarthritis in correlation with the change in the clinical condition of patients after intra-articular administration of autologous platelet-rich plasma. The project builds on previous scientific research activity, in which the beneficial therapeutic effect of platelet-rich plasma (PRP = platelet rich plasma) applied intra-articularly in the treatment of osteoarthritis of the knee joint was confirmed. The aim of the project was to analyze the biological effect of PRP in the treatment of patients with osteoarthritis of the knee. Based on biochemical analysis of serum biomarkers, the anti-inflammatory and anabolic effect of PRP in cartilage metabolism was confirmed. The work brings unique, to this extent unpublished results that can establish the treatment of PRP as the method of choice in the treatment of early stages of osteoarthritis.

DO PHAM, Duy Dinh - JENCOVA, Vera - KAŇUCHOVÁ, Miriam - BAYRAM, Jan - GROSSOVA, Ivana - SUCA, Hubert, URBAN, Lukáš - HAVLICKOVA, Kristyna - NOVOTNY, Vit - MIKES, Petr - MOJR, Viktor - ASATIANI, Nikifor - KUZELOVA KOSAKOVA, Eva - MAIXNEROVA, Martina - VLKOVA, Alena - VITOVSKA,

Dragana - SANDEROVA, Hana - NEMEC, Alexandr - KRASNY, Libor - ZAJICEK, Robert - LUKAS, David - REJMAN, Dominik - **GÁL, Peter**: Novel lipophosphonoxin-loaded polycaprolactone electrospun nanofiber dressing reduces Staphylococcus aureus induced wound infection in mice. In: Scientific Reports, 11, (2021), art. no. 17688, IF 4,38 2020 Q1

Granty: APVV-20-0017.

Aktívne krytia rán priťahujú veľkú pozornosť pri hojení kožných rán infikovaných baktériami. Predstavujeme tu nový koncept krytia rán založený na polykaprolaktónovom nanovláknennom lešení (NANO) uvoľňujúcom ako antibakteriálnu látku lipofosfonoxíny druhej generácie (LPPO). Najprv sme preukázali, že LPPO uvoľnený z NANO vykazuje antibakteriálnu aktivitu, pričom nezhoršoval proliferáciu/diferenciáciu fibroblastov a keratinocytov. Následne sme použitím myšacieho modelu ukázali, že NANO s LPPO významne znížilo nálož Staphylococcus aureus v infikovaných ranách, ako sme hodnotili 7 dní po operácii. Taktiež sme ukázali, že rýchlosť degradácie a následné uvoľnenie LPPO v infikovaných ranách zrýchľujú lytické enzýmy vylučované samotnými baktériami. LPPO vykazovalo zanedbateľnú až žiadnu systémovú absorpciu. Záverom môžeme povedať, že kompozitné antibakteriálne krytie na báze NANO-LPPO znižuje bakteriálnu záťaž a podporuje hojenie kože s potenciálom liečiť rany v klinických podmienkach.

Active wound dressings are attracting extensive attention in bacteria-infected skin wound healing. We present here a new concept of wound dressings based on the polycaprolactone nanofiber scaffold (NANO) releasing second generation lipophosphonoxin (LPPO) as antibacterial agent. Firstly, we demonstrated that LPPO released from NANO exerted antibacterial activity while not impairing proliferation/differentiation of fibroblasts and keratinocytes. Secondly, using a mouse model we showed that NANO loaded with LPPO significantly reduced the Staphylococcus aureus counts in infected wounds as evaluated 7 days post-surgery. Furthermore, the rate of degradation and subsequent LPPO release in infected wounds was also facilitated by lytic enzymes secreted by inoculated bacteria. Finally, LPPO displayed negligible to no systemic absorption. In conclusion, the composite antibacterial NANO-LPPO-based dressing reduces the bacterial load and promotes skin repair, with the potential to treat wounds in clinical settings.

6. Other results in scientific research

Department of Medical and Clinical Biochemistry UPJŠ FM in Košice

- *Membership of the institute's employees in foreign / domestic committees and bodies*
- Member of the Steering Committee COST MITOEAGLE (European Cooperation in Science and Technology, related to mitochondrial function in health and disease related to Evolution, Age, Gender, Lifestyle and Environment) CA15203 - Management committee member, Slovak representative (RNDr. Beáta Čižmárová, PhD.)
- Member of the Council for Medical Sciences of the Agency for the Support of Research and Development of the Ministry of Education, Youth and Sports of the Slovak Republic: prof. Ing. Mária Mareková, CSc.; <https://www.apvv.sk/agentura/organizacna-struktura/rady-agentury/rada-pre-lekarske-vedy.html>
- Member of the Scientific Council Medirex Group Academy: doc. RNDr. Marek Stupák, PhD., doc. RNDr. Miroslava Rabajdová PhD.; <http://www.medirexgroupacademy.sk/vedecká-rada/>
- Member of the Editorial Board of a foreign magazine Journal of Health Sciences of Kocaeli University: doc. RNDr. J. Vašková, PhD. – section editor <https://dergipark.org.tr/tr/pub/kusbed/board>
- Member of the Editorial Board of a foreign magazine *Disease Markers*, Hindawi (IF 3.43, Q2): MUDr. Anna Birková, PhD. – academic editors <https://www.hindawi.com/journals/dm/editors/>
- Member of the review committee of journals: *Molecules*, MDPI (IF 4.41, Q1) and Clinical and experimental obstetrics and gynaecology, IMR Press (IF 0.2, Q4): MUDr. Anna Birková, PhD.
- Member of the Editorial Board of the domestic journal Laboratory Diagnostics: Ing. Beáta Hubková PhD.

Department of Social and Behavioral Medicine UPJŠ FM

ÚSBM Employees, as members of several international and national advisory committees and bodies, participate in the formulation of health policies, as well as in the review and preparation of strategic documents and recommendations for clinical practice at the global, European and national levels.

Mgr. Iveta Rajničová Nagyová, PhD

- President EUPHA – European Public Health Association: head organization for national public health associations in Europe; <https://cutt.ly/AAs2iXH> - strategic management and formal representation of the largest professional public health association in Europe
- WHO / Europe National Contact Point for Behavioral and Cultural Sciences - National Focal Point for Behavioural and Cultural Insights; <https://cutt.ly/AAs2ecO>
- Member of the World Health Organization (WHO) Technical Advisory Committee on Behavioral and Social Sciences – WHO Technical Advisory Group on Behavioural Insights and Sciences for Health; <https://cutt.ly/KAs2gJy>
- Member of the WHO / Europe Advisory Committee on Non - Communicable / Chronic Diseases (NCDs) - Regional Director's Advisory Council on Innovation for Noncommunicable Diseases; <https://cutt.ly/uAs2218>
- Member of the WHO / Europe Advisory Committee on Health and Sustainable Development - Advisory Expert Group on Health and Sustainable Development Goals; <https://cutt.ly/tAs2j6I>

- Member of the WHO / Europe Advisory Committee on Health Research - European Advisory Committee on Health Research (EACHR), Vice-Chair of the Implementation Research Section; <https://cutt.ly/1AUWZSU>
- Member of the Advisory Committee of World Federation of Public Health Associations - WFPHA Public Health Leadership Coalition; <https://cutt.ly/iAs2MmG>
- Member of the European Commission's project assessment expert group H2020
- Member of the Commission of the Ministry of Health of the Slovak Republic (MH SR) for the creation, implementation and revision of standard procedures for the implementation of PpPV prevention - as a representative of the scientific / academic community - <https://www.standardnepostupy.sk/komisia-mz-sr-pre-ppv/>

MUDr. Zuzana Katreniaková, PhD

- National Coordinator of the Working Group for Strengthening the Public Health Workforce through Professionalization (BCA cooperation of the Ministry of Health of the Slovak Republic and WHO / Europe)
- Expert guarantor of the informal platform "Prevention Forum" (cooperation with Seesame)
- Member of the advisory group of the crisis staff of the city of Košice for solving the problem of people in housing need in the context of the COVID-19 pandemic (part of a long-term cooperation within the goal "Košice - a city with housing accessible to everyone")
- Member of the Intervention Team of the Ministry of Health of the Slovak Republic for selected residential ZSS - implementation of the alert and emergency intervention project in connection with the COVID-19 pandemic

MUDr. Dagmar Breznoščáková, Ph.D

- Member of the Council of Europe CPT (European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment)
 - Chairman of the Expert Working Group (OPS) for Psychiatry of the Ministry of Health of the Slovak Republic - preparation of the reform of psychiatric care; OPS for SOPs (Standard Operating Procedures)
 - Expert guarantor - Psychopharmacological Section of the SPsS Slovak Medical Society (SLS)

Institute of Public Health and Hygiene UPJŠ FM

- Multimedia technologies in the teaching of cardiovascular risk and population health studies for university students using freely available software applications - KEGA 008/UPJŠ-4/2020; Dorko
- Application of innovative multimedia approaches in teaching the effects of physical factors using an exposure model for medical students - KEGA 007UPJŠ-4/2018; Rimárová
- Implementation of multimedia technologies in the teaching of preventive interventions in medical and non-medical fields - KEGA 010UPJŠ-4/2021; Rimárová
- E-learning innovation of the subject Hygiene of children and youth - VVGS 2020-1662; Rimárová
- Analysis of the occurrence and composition of urinary stones in association with disease risk factors - VVGS VUaVP35 vvgs-2020-1653; Drabiščák

- Implementation of e-learning preventive interventions in the teaching of medical and non-medical disciplines - VVGS-2020-1485. Rimárová

Department of Nursing UPJŠ FM

Obesity school - cooperation between the Department of Children and Adolescents of the UPJŠ Medical Faculty and the Children's University Hospital in Košice and the Department of Nursing of the Medical Faculty of the UPJŠ in Košice within the interdisciplinary outpatient program "Obesity School". Theoretical-practical educational meetings focused on the treatment of childhood obesity take place under the guidance of several experts (doctor, nurse, psychologist, nutritionist, nutritionist, physiotherapist and others) and are intended for the child patient, his parents and siblings. Selected topics of the educational program are also presented by university teachers from our workplace, students from the field of nursing are also involved in professional activities. Part of the mentioned cooperation is also the preparation of university textbooks entitled: Obesity in children and adolescents - etiopathogenesis, diagnosis, treatment and prevention.

University without borders - The Department of Nursing has been actively involved in the University without Borders project called HEROES IN ACTION. The Faculty of Medicine of Pavel Jozef Šafárik University in Košice welcomed primary school students who became acquainted with individual health professions who were involved in the care of patients in hospitals and social facilities or at home during the COVID-19 pandemic. They learned the correct procedure for disinfecting hands, putting on and taking off protective gloves and mastered the use of other personal protective equipment useful in combating infections.

Student drop of blood - The Department of Nursing, together with the Slovak Red Cross in Košice - okolie on November 23, 2021, took part in the Student Drop of Blood event. The event was attended by students of the 2nd year of the Nursing study program from Pavel Jozef Šafárik University, Faculty of Medicine in Košice. At the National Transfusion Station in Košice, they "gave" a helping hand precisely by donating blood.

STOP for decubituses 2021– As part of the World Day for the prevention of bedsores, which falls on the third Thursday in November every year, the Department of Nursing participated in the media in promoting the issue of decubituses outside and during the COVID 19 pandemic.

Obtaining a certificate of professional qualification - „ Creation of concept maps ” (Czech Republic)

Training for Medical education via innovative eTechnology (MediTec) - The Department of Nursing participated in the project in the form of lectures and exercises focused on nursing care and nursing techniques for students from the University of Jordan.