



REPORT

on scientific research activities
for **2020**



March 2021

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1. Research infrastructure

1.1 Scientific research capacity and its use for solving scientific projects

Tab. 1 - Scientific research capacity of UPJŠ employees in 2020

average recalculated numbers for 2020

		LF	PF	PrF	FVS	FF	TIP	BZ	UTVaŠ	together UPJŠ
Teachers (without lecturers)	Recalc. count	327	140	49	29	112	2	1	11	671
	VV chap. (tis. hr)	327	140	49	29	112	2	1	11	671
Research employees with university education	Recalc. count	55	54	8	0,6	4	8,5	0	0	130
	VV chap. (tis. hr)	110	108	16	1	8	17	0	0	260
Together	Recalc. count	382	193	57	20	116	11	1	11	801
	VV chap. (tis. hr)	431 (427)*	247 (242)*	65 (63)*	30 (31)*	120 (137)*	19 (20)*	1 (1)	11 (13)*	930 (934)*

* The data in parentheses are given for comparison form 2019

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: 5,80

Associate professors: 8,28

Assistant professors: 43,00

together: 57,08

1.2 Qualification structure of UPJŠ creative employees and new holders of scientific-pedagogical titles, scientific ranks and VKS for the year 2020

Tab. 2 - Qualification structure of UPJŠ creative employees

data in natural persons as of 31.12.2020

	University Teachers (UT)					Research Employees (RE)						Together
	professor *	associate professor*	assistant professor CSc./PhD	assistant professor + assistant without CSc./PhD	UT teachers together	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	research employees together	UPJŠ
FM	48 (4)	48	224	117	437		25	27	13	3	68	505
FS	32 (16)	49 (1)	65		146	2 (2)	24	28	15	2	71	217
FL	7	19	21	4	51	1 (1)		12			13	64
FPA	2	10	17		29			1			1	30
FA	15 (4)	29 (1)	68	2	114			4			4	118
UP (BZ+UTVaŠ +TIP)	4 (2)	2	7	1	14		1	8	1		10	24
together UPJŠ	108 (26)	157(2)	402	124	791 (28)	3 (3)	50	80	29	5	167 (3)	958 (31)

* 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 of data in natural persons as at 31 December 2020

	University Teachers (UT)				Together UPJŠ
	professor	associate professor	assistant professor CSc./PhD	assistant professor + assistant without CSc./PhD	
FM	47	73	200	117	437
FS	32	50	64		146
FL	7	19	21	4	51
FPA	2	10	17		29
FA	16	29	67	2	114
UP (BZ+UTVaŠ +TIP	4	2	7	1	14
together UPJŠ	108	183	376	124	791

New holders of scientific-pedagogical titles, scientific ranks and VKS for the year 2020

a) **professor:** title in 2020 was awarded to: 2

prof. MUDr. **František Sabol**, PhD., MPH, MBA, mim.prof.

Department of Habilitation and Inaugural Surgery

Inaugural Lecture: Surgical Treatment of Rare Diseases of the Thoracic Aorta in Adult Age

Inauguration proceedings before VR UPJŠ FM: 01.10.2019

VR UPJŠ in Košice: 08.11.2019

Title: 14.07.2020

prof. PhDr. **Anna Bérešová**, PhD.

Department of Habilitation Proceedings and Inauguration Proceedings Social Work

Inaugural lecture: Risks and consequences of the profession of social worker

Inaugural proceedings before VR VŠZaSP sv. Alžbety, n.o. in Bratislava: 01.10.2019

Title: 14.07.2020

b) **associate professor:** 6

doc. MUDr. **Mária Rašiová**, PhD.

Department of Habilitation Proceedings and Inauguration Internal Diseases Proceedings

Habilitation lecture: Challenges and limitations in the treatment of abdominal aortic aneurysms

Topic of habilitation thesis: Clinical aspects of selected dilatation and stenotic diseases and their treatment

Defence of habilitation thesis before VR UPJŠ FM: **24.03.2020**

Title: 22.06.2020

doc. MUDr. **Martina Zavacká**, PhD., MPH

Department of Habilitation Procedure and Inauguration Procedure Surgery Habilitation Lecture:

Complex Procedures in the Care of Vascular Approaches in Dialysis Patients

topic of habilitation thesis: Influence of health literacy and care on patients' survival during

treatment of renal replacement function defence of habilitation thesis before VR UPJŠ FM:

06.10.2020 title: 23.10.2020

doc. MUDr. **Martin Janičko**, PhD.

Department of Habilitation Proceedings and Inauguration Internal Diseases Proceedings

Habilitation lecture: A comprehensive view of advanced liver cirrhosis

Thesis topic: Peculiarities of pathogenesis and prognosis of liver cirrhosis from a clinical point of view

Defence of habilitation thesis before VR UPJŠ FM: **06.10.2020** Title: 23.10.2020

doc. MUDr. **Vladimír Sihotský**, PhD.

Department of Habilitation and Inaugural Surgery

Habilitation lecture: Surgical treatment of abdominal aortic aneurysms

Topic of habilitation thesis: The role of carotid endarterectomy in the prevention and treatment of stroke

Defence of habilitation thesis before VR UPJŠ FM: 08.12.2020
Title: 18.12.2020

doc. MUDr. **Eva Feketeová**, PhD.

Department of Habilitation Procedure and Inaugural Procedure Neurology

Habilitation lecture: Hypocretin deficiency in narcolepsy and its causes

Topic of habilitation thesis: Hypocretin-deficient narcolepsy: multifactorial disease

Defence of habilitation thesis before VR UPJŠ FM: 08.12.2020

Title: 18.12.2020

doc. MUDr. **Slavomír Perečinský**, PhD.

Department of Habilitation Proceedings and Inauguration Internal Diseases Proceedings

Habilitation lecture: Occupational lung diseases

Topic of habilitation thesis: Occupational asthma and occupational rhinitis in mutual relations

Defence of habilitation thesis before VR UPJŠ FM: 08.12.2020

Title: 18.12.2020

c) **DrSc.**: the title was not awarded in 2020

d) **PhD.**: 14

Mgr. **Diana Tokárová**, PhD.

Field of study: general medicine

Study program: normal and pathological physiology

Thesis topic: Relation of sleep-disordered breathing to musculoskeletal functional status

Dissertation defence, place: 16.1.2020, UPJŠ in Košice, Faculty of Medicine Award of academic

degree: 16.1.2020, UPJŠ in Košice

MUDr. **Alžbeta Blichárová**, PhD.

Field of study: general medicine

Study program: anatomy, histology and embryology

Thesis topic: Histopathological, immunofluorescence and electron-microscopic manifestations of diabetic nephropathy

Dissertation defence, place: 5.6.2020, UPJŠ in Košice, Faculty of Medicine Award of academic

degree: 5.6.2020, UPJŠ in Košice

MUDr. **Dorota Sopková**, PhD.

Field of study: general medicine

Study program: anatomy, histology and embryology

Thesis topic: Morphological findings in the lungs of premature and full-term newborns

Dissertation defence, place: 30.6.2020, UPJŠ in Košice, Faculty of Medicine Award of academic

degree: 30.6.2020, UPJŠ in Košice

MUDr. **Anna Ťurgeová**, PhD.

Field of study: general medicine

Study program: internal diseases

Thesis topic: Monitoring the effect of treatment with DPP-4 inhibitors depending on the genotype

Dissertation defence, place: 6.7.2020, UPJŠ in Košice, Faculty of Medicine

Academic degree awarded: 6.7.2020, UPJŠ in Košice

MUDr. Martina Gáborová, PhD.

Field of study: general medicine

Study program: normal and pathological physiology

Thesis topic: Glycaemic variability in gestational diabetes mellitus in relation to sleep-disordered breathing

Dissertation defence, place: 19.8.2020, UPJŠ in Košice, Faculty of Medicine Award of academic

degree: 19.8.2020, UPJŠ in Košice

MUDr. Ľudmila Verbóová, PhD.

Field of study: general medicine

Study program: anatomy, histology and embryology

Thesis topic: Histological and immunohistochemical study of malignant melanoma of the skin with significant manifestations of spontaneous regression

Dissertation defence, place: 21.8.2020, UPJŠ in Košice, Faculty of Medicine Award of academic

degree: 21.8.2020, UPJŠ in Košice

MDDr. Eleonóra Ivančová, PhD.

Study field: dentistry Study program: dentistry

Thesis topic: Synchronization of jaw and sledge growth activities

Dissertation defence, place: 24.8.2020, UPJŠ in Košice, Faculty of Medicine Award of academic

degree: 24.8.2020, UPJŠ in Košice

MUDr. Dominik Šafčák, PhD.

Field of study: general medicine

Study program: internal diseases

Thesis topic: Prognostic aspects of hepatocellular carcinoma treatment

Dissertation defence, place: 25.8.2020, UPJŠ in Košice, Faculty of Medicine Award of academic

degree: 25.8.2020, UPJŠ in Košice

MUDr. Dominika Jarčušková, PhD.

Field of study: general medicine

Study program: neurology

Thesis topic: Factors of cognitive dysfunction in patients with epilepsy

Dissertation defence, place: 25.8.2020, UPJŠ in Košice, Faculty of Medicine Award of academic

degree: 25.8.2020, UPJŠ in Košice

MUDr. Vladimír Haň, PhD.

Field of study: general medicine

Study program: neurology

Thesis topic: Non-motor symptoms in patients with dystonia

Dissertation defence, place: 25.8.2020, UPJŠ in Košice, Faculty of Medicine Award of academic

degree: 25.8.2020, UPJŠ in Košice

MVDr. Veronika Bednárová, PhD.

Field of study: general medicine

Study program: epidemiology

Thesis topic: Endoparasitic infections in immunocompromised patients with cancer

Dissertation defence, place: 27.8.2020, UPJŠ in Košice, Faculty of Medicine Award of academic

degree: 27.8.2020, UPJŠ in Košice

RNDr. Veronika Benetinová, PhD.

Field of study: general medicine

Study program: normal and pathological physiology

Thesis topic: The use of biomarkers of inflammation in the diagnosis of respiratory allergies

Dissertation defence, place: 28.9.2020, UPJŠ in Košice, Faculty of Medicine Award of academic

degree: 28.9.2020, UPJŠ in Košice

MUDr. Simona Ujházi, PhD.

Field of study: general medicine

Study program: internal diseases

Thesis topic: Phenotypic manifestations of polycystic ovary syndrome and their relationship to hormonal and metabolic parameters

Dissertation defence, place: 19.11.2020, UPJŠ in Košice, Faculty of Medicine Award of

academic degree: 19.11.2020, UPJŠ in Košice

MUDr. Norbert Leško, PhD.

Field of study: general medicine

Study program: neurology

Thesis topic: Surgical versus endovascular treatment of carotid arteries in the prevention of ischemic stroke

Dissertation defence, place: 25.11.2020, UPJŠ in Košice, Faculty of Medicine Award of

academic degree: 25.11.2020, UPJŠ in Košice

e) **scientific qualification level IIa.** in 2020: 3

MUDr. Zuzana Kalinová, PhD.

Mgr. Jaroslava Kopčáková, PhD.

Mgr. Daniela Husárová, PhD.

f) from employees without PhD. (133) are involved in PhD studies:46

g) professors emeritus at the faculty: 3

prof. **MUDr. Július Vajó, DrSc.**

prof. **MUDr. Andrej Böör, CSc.**

prof. **MUDr. Jozef Kafka, DrSc.**

h) the number of reintegrated staff members or other researchers funded from non-government grants: 14

MUDr. Jaroslav Rosenberger, PhD.
Mgr. Shoshana Chovan
Mgr. Slavomíra Gulová
RNDr. Lucia Homol'ová, PhD.
RNDr. Lívia Kolesár Fecskeová, PhD.
RNDr. Hedviga Košuthová, PhD.
Ing. Jana Papíková
Mgr. Miriam Slavkovská, PhD.
MUDr. Barbara Ivanková MUDr.
Hana Juhášová Mgr. Marián
Jendrichovský, PhD.
MUDr. Miriam Polanová, PhD., MPH
Ing. Henrieta Salokyová Mgr.
Vladimíra Timková, PhD.

POST - PhD students: 2

Mgr. Daniela Husárová, PhD.
Mgr. Jaroslava Kopčáková, PhD.

Average. recalculated number: 10,96

1.3 Science prices, resp. other awards and honours received by faculty staff in 2020 for research results

doc. et. doc. PhDr. Magdaléna Hagovská, PhD., Cert. MDT, Prize for scientific and professional literature for the year 2019 in the category of biological and medical sciences, for the work "Cognitive and physical training of seniors with mild cognitive deficits", awarded by the Literary Fund, Section for Scientific and Professional Literature, 24.9.2020

doc. MUDr. Peter Takáč, PhD., mim. prof., Senior Fellow of European Board of Physical and Rehabilitation Medicine UEMS

doc. MUDr. Matej Škorvánek, PhD., award for the best case study of SNeS

doc. MUDr. Milan Kuchta, CSc., mim. prof., Award for the best book publication of the Slovak Pediatric Society in 2019, Paediatrics I. and II., 3rd edition, Herba, Bratislava 2019

MUDr. Jana Figurová, PhD., Audience Award for the best case report, "Severe hyposmolar hyponatremia in a young woman", III. Case reports in internal medicine, 02/2020

Ličák Ľ., Figurová J., Urdzík P., Lazúrová I.: „It's not too late in the seventies ", the jury award for the best case study, 2nd place, III. Case reports in internal medicine, 02/2020

prof. MUDr. Ivica Lazúrová, DrSc., FRCP, elected as a member of the Presidium of the Slovak Medical Society

MUDr. Mgr. René Hako, PhD., MHA, MPH, MBA, Award for the best professional publication, 3rd place, from the Slovak Gastroenterological Society for publication: „Noninvasive Assessment of Liver Fibrosis in Patients with Chronic Hepatitis B or C by Contrast - Enhance Magnetic Resonance Imaging“, autorov Hako R., Kristian P., Jarčuška P., Haková I., Hockicková I., Schréter I. a Janičko M., published in Canadian Journal of Gastroenterology and Hepatology Volume 2019, Article ID 3024630, 8 pages

prof. MUDr. Vincent Nagy, PhD., MPH, Slovak Medical Society, Medal of the founding of the Medical-Slovak Society

Mgr. Iveta Rajnicova Nagyova, PhD. became President of EUPHA in 2020 – European Public Health Association; top organization for national public health associations in Europe. She was elected at the EUPHA Governing Board meeting by secret ballot of EUPHA member organizations: <https://eupha.org/executive-council>

Mgr. Iveta Rajnicova Nagyova, PhD. became a member of the WHO Advisory Committee in 2020. Technical Advisory Group on Behavioural Insights and Sciences for Health. <https://www.who.int/our-work/science-division/behavioural-insights/TAG-on-behaviouralinsights-and-sciences-for-health-biographies>

Mgr. Iveta Rajnicova Nagyova, PhD. became a member of the WHO / Europe Advisory Committee on Non-Communicable / Chronic Diseases (NCDs) in 2020. Regional Director's Advisory Council on Innovation for Noncommunicable Diseases. <https://www.euro.who.int/en/about-us/regionaldirector/news/news/2020/12/who-europe-forms-ncd-advisory-council-to-inspire-and-reform-prevention-and-management-of-ncds>

Mgr. Iveta Rajnicova Nagyova, PhD. was selected in 2020 as a member of the 7-member Jury of the European Commission "2020 EU Health Award: Call on vaccination". The Commission was composed of representatives of prestigious international organizations and institutions: EC DG SANTE, RTD, EAC; WHO, OECD, UNICEF. Dr. I. Rajničová Nagyová was chosen as the EUPHA representative; https://ec.europa.eu/health/award/call_vaccination_en

Mgr. Iveta Rajnicova Nagyova, PhD. was elected Co-Chair in 2020 of (CoChair)16th World Congress on Public Health - WCPH2020 „Public health for the future of humanity: analysis, advocacy and action“ Online event, 12 - 16 November 2020; <https://wcph2020.com>

MUDr. Dagmar Breznoskova, Ph.D. In 2020, the Association for the Protection of Patients' Rights (AOPP) accepted the proposal of the all-Slovak association ODOS for an award in the category "My doctor"; [Otvorme Dvere, Otvorme Srdcia \(odos-sk.com\)](https://otvorme-dvere.otvorme-srdcia.odos-sk.com)

doc. MVDr. Tatiana Kimáková, PhD., Special Prize for 2nd place in the poster section during the conference Days of Practical Obesity and Metabolic Syndrome (July 16, 2020 - July 18, 2020, Demänovská Valley)

Fábryová Ľ., Holéczy P a kol., Award of the Slovak Diabetological Society for the work "Diabetes: Diabetes and Obesity - Inseparable Twins", Štrbské Pleso, 2020

Fábryová Ľ., Holéczy P a kol., Prize of the Literary Fund for Scientific and Professional Literature for the year 2019 in the category of biological and medical sciences for the work "Diabetes: Diabetes and Obesity - Inseparable Twins", Bratislava, 2020

MUDr. Silvia Farkašová Iannaccone, PhD., P. Vasovčák, MUDr. Dorota Sopková, PhD., P. Švajdler, R. Dettmeyer, A. Rampazzo, MUDr. Daniel Farkaš, Arrhythmogenic Ventricular Cardiomyopathy Associated With Fibromuscular Dysplasia of Ostial Right Main Coronary Artery. American Journal for Forensic Medicine and Pathology, 2019, 40 (2):183-187. ISSN 0195-7910, Prize for the best publication in 2019 awarded by the Slovak Forensic Society of the Slovak Medical Society in 2020

Anna Ürgeová, Martin Javorský, Lucia Klimčáková, Jozef Židzik, Ján Šalagovič, Jaroslav A Hubáček, Pavlína Doubravová, Ivana Gotthardová, Milan Kvapil, Terezie Pelikánová, Ivan Tkáč, Alena Stančáková Yaluri. Boehringer Ingelheim Award and the Slovak Diabetological Society for the publication "Genetic variants associated with glycaemic response to treatment with dipeptidyl peptidase 4 inhibitors" in the journal Pharmacogenomics (21: 317-323, 2020).

2. Scientific research results of the faculty, R&D projects and solved tasks of the faculty and obtained funds for solving projects in 2020 in euros

Tab. 3 Scientific research projects and solved tasks

List of research projects solved in the evaluated period (2020)						
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 (thousand Euro)
Department of Anatomy						
1.	KEGA 019UPJŠ-4/2018	doc. MUDr. Adriana Boleková, PhD.	New subject at medical faculty: "Methods of Effective Learning"	01/2018	12/2020	6.083
2.	VEGA 1/0173/19	doc. MVDr. Jozef Mihalik, CSc.	The effect of entacapone administration on antioxidant status and reproductive parameters of rat males	01/2019	12/2022	8.761
3.	VVGS-20201460	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	2.000
	together					16.844
Department of Epidemiology						
4.	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	11.569
5.	PP-COVID-200064	prof. MVDr. Monika Halánová, PhD.	Prevalence study of herd immunity SARS-CoV-2 in the population of Eastern Slovakia.	09/2020	12/2021	81.310
	together					92.879
Department of Experimental Medicine						

6.	APVV-16-0176	MVDr. Alojz Bomba, DrSc. /	Targeted modulation of gut microbiota and its transplantation in prevention and treatment of	07/2017	06/2021	30.686 (74.496)
		RNDr. Izabela Bertková, PhD.	inflammatory bowel diseases			
7.	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	8.483
8.	VVGS-20191223	RNDr. Jana Štofilová, PhD.	Gut Microbiome in Relation to Inflammatory Diseases and Colon Cancer: Training to Reach State-of-the-art	07/2019	10/2020	0.000
9.	VVGS-20191226	Mgr. Ľuboš Ambro, PhD.	Introduction and validation of advanced molecularbiology based approaches for bacterial taxa quantitation in gut microbiome research	07/2019	12/2020	0.000
10.	OP II 313011V336 Drive4SIFood	MVDr. Alojz Bomba, DrSc./ MVDr. Ladislav Strojný, PhD.	Demand-oriented research for sustainable and innovative foods, Drive4SIFood	07/2019	06/2023	0.000
11.	VEGA 1/0393/20	MVDr. Alojz Bomba, DrSc. / 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	16.842
12.	VVGS-20201506	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	3.000
13.	OP II 313012T288	MVDr. Emília Hijová, PhD.	Functional foods for a healthy life (T 288)	10/2020	05/2023	0.000
	together					59.011 * (102.821)

Department of Pharmacology						
14.	VEGA 1/0753/17	prof. MVDr. Ján Mojžiš, DrSc.	Effect of natural compounds on tumour microenvironment	01/2017	12/2020	20.225
15.	APVV-16-0446	prof. MVDr. Ján Mojžiš, DrSc.	Cell interactions in the tumour microenvironment and their pharmacological modulations	07/2017	06/2021	62.280
16.	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	12.018
17.	VEGA 1/0653/19	RNDr. Martin Kello, PhD.	Lichen secondary metabolites: promising modulators of tumour microenvironment?	01/2019	12/2022	18.271
	together					112.794
Department of Medical and Clinical Biophysics						
18.	COST CA16122	doc. RNDr. Ján Sabo, CSc., mim. prof.	Biomaterials and advanced physical techniques for regenerative and neurology	03/2017	09/2021	0.000
19.	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	0.000
20.	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	10.386
21.	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	23.703
	together					34.089

Department of Medical and Clinical Biochemistry						
22.	COST CA15203	RNDr. Beáta Čižmarová, PhD.	Mitochondrial mapping: Evolution - Age - Gender - Lifestyle - Environment	09/2016	02/2021	0.000
23.	VEGA 1/0559/18	doc. RNDr. Janka Vašková, PhD.	Study of the onset and progression of periodontitis using the latest molecular-biochemical methods	01/2018	12/2020	13.984
24.	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	17.450
25.	VVGS-20191302	RNDr. Ivana Špaková, PhD.	Innovation of Teaching of Practical exercises of Medical Chemistry for foreign Students of General Medicine and	11/2019	10/2020	0.000
			Dentistry			
26.	VVGS-20191303	RNDr. Lukáš Smolko, PhD.	Inovation of practical exercises from medical chemistry	11/2019	10/2020	0.000
27.	VEGA 1/0333/20	doc. RNDr. Vladimíra Tomečková, PhD.	Tear fluid and saliva in preventive, predictive and personalized medicine	01/2020	12/2022	8.937
28.	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	13.565
	together					53.936
Department of Medical and Clinical Microbiology						
29.	VVGS-20191300	RNDr. Katarína Čurová, PhD.	Introduction of effective microbiologic diagnostics of hypervirulent strains Clostridioides difficile	11/2019	04/2021	3.000
	together					3.000
Department of Medical Biology						

30.	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 and in vivo	01/2019	12/2022	20.843
	together					20.843
Department of Medical Physiology						
31.	VEGA 1/0218/18	RNDr. Martin Bona, PhD.	Development of diaschisis in the remodeling process of nerve tissue after ischemic brain damage.	01/2018	12/2020	6.896
32.	VEGA 2/0029/18	RNDr. Martin Bona, PhD.	The role of glutamate transporters of blood cells in ischemic tolerance	01/2018	12/2020	1.518
33.	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	2.825
	together					11.239
Department of Medical Informatics						
34.	Erasmus+ 585980-EPP- 12017-1-DE- EPPKA2-CBHE- JP	doc. Ing. Jaroslav Majerník, PhD.	Training for Medical education via innovative eTechnology (MediTec)	10/2017	10/2020	8.809
35.	ERASMUS+, 2018-1- SK01KA203- 046318	doc. Ing. Jaroslav Majerník, PhD.	Building Curriculum Infrastructure in Medical Education (BCIME)	09/2018	08/2021	101.272

36.	ERASMUS+, 2018-1- RO01KA203- 049412	doc. Ing. Jaroslav Majerník, PhD.	Case-based learning and virtual cases to foster critical thinking skills of students (Clever).	09/2018	08/2021	22.340
37.	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 Problem- Based	01/2019	12/2021	12.510
	together					144.931
Department of Health Psychology and Research Methodology						
38.	APVV-15-0012	doc. Mgr. Zuzana Dankulincová, PhD.	Psychosocial development of children with emotional and behavioural problems in the system of care - longitudinal study.	07/2016	12/2020	29.593
39.	APVV-16-0490	MUDr. Jaroslav Rosenberger, PhD.	How to use health literacy profiles in improvement of chronic disease management.	07/2017	06/2021	56.764
40.	Erasmus+ 2017-1- NL01KA203- 035290	Mgr. Peter Kolarčík, PhD.	IMPACCT: Improving Patient-centered Communication Competences: To build professional capacity concerning Health literacy in medical, nursing and paramedical education	09/2017	08/2020	12.306
41.	Iné granty zahraničné 2019/948409- 0	prof. Mgr. Andrea Madarasová Gecková, PhD.	To support Health Behaviour in School-aged Children study in 2019/2020	05/2019	02/2020	4.955
42.	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

43.	APVV-18-0070	prof. Mgr. Andrea Madarasová Gecková, PhD.	Generation Z - new challenges in youth development	07/2019	06/2023	45.474 * (52.506)
44.	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	6.457
45.	Iné granty domáce UPJŠ- 40/2020	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	15.000
46.	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	46.998
47.	VVGS-20201444	prof. Mgr. Andrea Madarasová Gecková, PhD.	PURE Spreading scientific excellence to improve the health of vulnerable groups	07/2020	06/2021	3.000
48.	COST CA19113	prof. Mgr. Andrea Madarasová Gecková, PhD.	The European Researchers' Network Working on Second Victims	09/2020	09/2024	0.000
	together					220.547 * (227.579)
Department of Social and Behavioural Medicine						

49.	APVV-15-0719	Mgr. Iveta Rajničová Nagyová, PhD.	Longitudinal research on psychosocial innovations in chronic condition management.	07/2016	12/2020	24.953
50.	Iné granty zahraničné 826676	Mgr. Iveta Rajničová Nagyová, PhD.	SCIROCCO Exchange	01/2019	08/2021	0.000
51.	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	16.191
	together					41.144
Department of Public Health and Hygiene						
52.	KEGA 007UPJŠ-4/2018	doc. MUDr. Kvetoslava Rimárová, CSc., mim. prof.	Application of Innovative Multimedia Approaches in Physical Factor Learning Using an Exposure Model for Healthcare Students	01/2018	12/2020	10.400
53.	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	2.763
54.	VVGS-20191221	doc. MUDr. Kvetoslava Rimárová, CSc., mim. prof.	E-learning explaining current global demographic, health and social trends for medical faculty students	11/2019	10/2020	0.000
55.	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	14.117

56.	VVGS-20191356	doc. MVDr. Tatiana Kimáková, PhD.	Implementácia e-learningových kurzov v študijnom programe Medicína na Univerzite tretieho veku pri UPJŠ v Košiciach	01/2020	01/2021	2.000
57.	VVGS-20191383	Mgr. Jana Diabelková, PhD.	E-learning Innovation in Teaching Hygiene and Public Health through Online Learning Scripts	01/2020	01/2021	1.999
58.	VVGS-20201485	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	2.000
59.	VVGS-20201662	Mgr. Jana Diabelková, PhD.	E-learning innovation of teaching the subject Hygiene of children and adolescents	11/2020	10/2021	1.999
	together					35.278
Department of Gynaecology and Obstetrics						
60.	VEGA 1/0873/18	doc. MUDr. Peter Urdzík, PhD., MPH, mim. prof.	Biomarkers of human embryo development and endometrial receptivity in women with multiple implantation failures	01/2018	12/2020	11.713
61.	KEGA 026SPU- 4/2018	prof. MUDr. Alexander Ostró, CSc., MBA	Aplication of embryotechnologies in animal and human assisted reproduction	01/2018	12/2020	3.235
	together					14.948
Department of Surgery						
62.	VEGA 1/0319/20	MUDr. Tomáš Vasilenko PhD.	Development of active wound dressings based on hydrogels containing plant extracts promoting wound healing in healthy and diabetic rats	01/2020	12/2023	18.686
	together					18.686

1st Department of Surgery						
63.	KEGA 022UPJŠ- 4/2018	prof. MUDr. Jozef Radoňak, CSc., MPH	Structuralization of laparoscopic surgical skills acquisition in pregraduate training	01/2018	12/2020	18.614
64.	VEGA 1/0622/20	prof. MUDr. Jozef Radoňak, CSc., MPH	Study of molecular and metabolomic profile of breast carcinoma	01/2020	12/2023	20.880
	together					39.494
1st Department of Internal Medicine						
65.	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	21.533
	together					21.533
1st Department of Cardiology						
66.	VEGA 1/0769/19	prof. MUDr. Peter Mitro, PhD.	Humoral mechanisms of vasovagal syncope and other forms of orthostatic intolerance	01/2019	12/2021	9.645
67.	KEGA 007UPJŠ- 4/2020	prof. MUDr. Ingrid Schusterová, PhD.	Childhood obesity: Etiopathogenesis, diagnosis and treatment.	01/2020	12/2022	10.867
	together					20.512
2nd Department of Surgery						

68.	VVGS-2020-	doc. MUDr. Jozef	Ischemic model of gastric graft survival in the	11/2020	10/2021	0.000
	1648	Belák, PhD.	construction of oesophageal-gastro anastomosis			
	together					0.000
2nd Department of Internal Medicine						
69.	APVV-16-0211	prof. MUDr. Pete Jarčuška, PhD.	Computer-Aided Decision Support System for Hepatic Encephalopathy	07/2017	05/2021	21.988
70.	SHS_SLS _24-19-3033/019	MUDr. Sylvia Dražilová, PhD.	The association between the metabolic syndrome and primary biliary cholangitis	04/2020	04/2021	5.000
	together					26.988
2nd Department of Cardiology						
71.	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	08/2018	06/2022	43.657 * (61.777)
	together					43.657 * (61.777)
4th Department of Internal Medicine						
72.	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	17.381
73.	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	20.932

74.	VVGS-20201494	doc. MUDr. Norbert Lukán, PhD.	Allergic inflammation and obesity	07/2020	06/2021	3.000
	together					41.313
Department of Vascular Surgery						
75.	VVGS-20201486	Koplovets Ivan, CSc.	Detection of predictors of stroke in patients with internal carotid artery stenosis	07/2020	06/2021	3.000
	together					3.000
Department of Dermatovenereology						
76.	313012R720	MUDr. Janette	Elimination of the risk of coherent radiation effects in	12/2020	11/2021	0.000
	Eridok	Baloghová, PhD.	dermatological procedures			
	together					0.000
Department of Gerontology and Geriatrics						
77.	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	14.992
	together					14.992
Department of Infectology and Travel Medicine						
78.	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	46.607 * (79.105)

79.	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	62.878
80.	PP-COVID- 200036	prof. MUDr. Pavol Jarčuška, PhD.	Electrochemical virus detection	09/2020	12/2021	58.960 * (238.407)
	together					168.445* (380.390)
Department of Orthopaedics and Traumatology of Locomotory Apparatus						
81.	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	7.681
	together					7.681
Department of Pneumology and Phtiseology						
82.	VEGA 1/0220/17	MUDr. Pavol Pobeha, PhD.	Cardiovascular parameters and systemic inflammation in patients with respiratory insufficiency and effect of non-invasive ventilation	01/2017	12/2020	18.346
83.	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	51.674 * (57.167)
	together					70.020 * (75.513)
Department of Occupational Medicine and Clinical Toxicology						

84.	APVV-17-0017	prof. MUDr. Ľubomír Legáth, PhD.	Toxicological activities of snake venoms of the selected species	08/2018	06/2022	3.125
	together					3.125
Department of Stomatology and Maxillofacial Surgery						
85.	KEGA 014UPJŠ- 4/2018	MUDr. Adriana Petrášová, PhD.	E-learning modern education and implementation of interactive education in therapeutic dentistry	01/2018	12/2020	15.148
	together					15.148
Department of Traumatology						
86.	VVGS- 20201643	MUDr. Rastislav Burda, PhD.	Application of remote postconditioning in operative treated malleolar fractures	11/2020	10/2021	2.550
	together					2.550
Department of Neurology						
87.	VEGA 1/0057/18	doc. MUDr. Jarmila Szilasiová, PhD.	Neurofilaments and miRNA analysis in relationship with diagnosis, phenotype, activity and treatment responsivity in multiple sclerosis	01/2018	12/2020	12.148
88.	VEGA 1/0380/19	prof. MUDr. Zuzana Gdovinová, CSc.	The relationship of the risk factors to stroke and cognitive impairment.	01/2019	12/2021	10.960
89.	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	17.787

90.	APVV-18-0547	doc. MUDr. Matej Škorvánek, PhD.	Novel biomarkers of prodromal Parkinson's disease	07/2019	06/2023	63.564
	together					104.459
Associated Tissue Bank						
91.	APVV-17-0118	MVDr. Ján Rosocha, CSc.	Exosomes derived from mesenchymal stem cells as potential alternatives to stem cell therapy for treatment of osteoarthritis	08/2018	06/2022	68.396
92.	VEGA 1/0229/20	RNDr. Tímea Špaková, PhD.	Examining the effect of human mesenchymal stem cells derived exosomes on inflammatory chondrocytes in order to compare the effectiveness of cell and cell-free therapy in OA treatment	01/2020	12/2022	13.220
	together					81.616
SUM						1 544.702* (1 831.102)

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

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

Institute of Medical and Clinical Biochemistry UPJŠ FM in Košice

Patent application PA 50010-2020 was filed in cooperation with UK Bratislava and MUNI Brno: Method of non-invasive testing of success of in vitro fertilization process - Rabajdová M., Slabý O., Šoltýs K., Mareková M., Toporcerová S.

PA 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 concerns the possible use of the miRNA profile in the development of an innovative non-invasive diagnostic test as a product of personalized medicine in predicting the success of the in vitro fertilization process in women undergoing artificial insemination. The diagnostic assay would involve two independent ways of identifying prognostic canonical miRNAs and iso-miRNAs as biomarkers. In one case, the miRNA profile would be determined from the plasma of a woman's peripheral blood, in the other from the culture medium of the embryo (days 4-6 of its development).

Information also on <https://www.ctt.muni.cz/technologie/test-ivf>

Institute of Pharmacology UPJŠ FM in Košice

Central Laboratory of Clinical Cytometry of the Institute of Pharmacology UPJŠ FM and Medirex, a.s. - contractual cooperation with practice.

Institute of Medical and Clinical Biophysics UPJŠ FM in Košice

RNDr. Soňa Tkáčiková, PhD.: Expert for SNAS (Slovak National Accreditation Service) in the assessment of accredited laboratories according to the standard STN EN ISO/IEC 17025:2017

Institute of Medical and Clinical Microbiology UPJŠ FM in Košice

Transfec and VVGS project solution

Introduction of molecular-biological diagnostics of *Clostridioides difficile*

For CD-biological CD diagnostics, control CD collection strains and primers were purchased to detect genes encoding toxin production (tcdA, tcdB, cdtA and cdtB) and to confirm CD diagnostics and DNA isolation (gluD and 16S-rDNA). In 2020, anaerobic cultivation of clostridia and a methodological procedure for the extraction of CDI spores by alcohol shock were introduced. This procedure was applied to all stool samples obtained from patients with CDI at UNLP in Košice. Collected (control) CD strains were also cultured under standard conditions, subsequently diagnosed with MALDI-TOF and stored at 80 ° C for further analysis. DNA was isolated for both collection and clinical CD strains for use in the molecular-biological diagnostics of CDI in the following years of the project. A collection of stool samples from patients with CDI took place at the UNLP in Košice from 15 January 2020 to 15 February 2020. All samples were first tested in the ULaKM laboratory for the presence of the enzyme glutamate dehydrogenase (GDH) and toxins (A and B), and based on the results, GDH positive and toxin positive / negative samples were included in further testing.

In the period from January to February 2020, 36 stool samples were included in further testing. All samples were first treated with alcohol and then cultured in anaerostat. Pure colonies of bacteria were used to diagnose CD by MALDI TOF mass spectrometry. The diagnostic results confirmed the CD in 31 stool samples. These CD strains were typed during training in Prague (toxins and ribotypes were determined), and selected 16 strains were also tested for susceptibility to AL.

Institute of Health Psychology and Methodology Research UPJŠ FM in Košice

Department of Health Psychology and Research Methodology, FM UPJŠ in Košice represented by doc. Zuzana Dankulincová, PhD within the Care4Youth project “The trajectory of children and adolescents with emotional and behavioral problems in the system of preventive, social and health care. Longitudinal study”. In 2020, cooperation agreements continued on a research project with several institutions that directly provide care for children and adolescents with emotional and behavioral problems in practice. It was a continuation of agreements specifically with the Children's Psychiatric Hospital Hraň, n.o. and Úsmev ako dar, o.z.

Institute of Public Health and Hygiene UPJŠ FM in Košice

doc. MUDr. Kvetoslava Rimárová, CSc., mim. prof.

Project annotation in 2019 KEGA Rimárová - KEGA project no. 007UPJŠ-4/2018 - Application of innovative multimedia approaches in teaching the effects of physical factors using an exposure model for students of medical disciplines

The presented KEGA project represents the use of innovative multimedia technologies in the practical and theoretical teaching of medical, and non-medical students, especially students of general medicine, public health, nursing, physiotherapy and dentistry. Its purpose is to create, induct, apply and implement multimedia technologies in the teaching of university students, which will allow the evaluation of the impact of physical factors on health. Physical factors can have a negative effect, including the effects of noise, ionizing and non-ionizing radiation, vibrations, commotions and other physical factors on human health. Physical factors can also have a positive effect with use in rehabilitation and physiotherapy - ultrasound, electric currents, laser, heat. The project will increase the knowledge, skills and abilities of students from various fields of medicine and modernize the profile of graduates. The project will introduce and implement the so-called self-assessment model of the effects of physical factors in medical students, as well as the evaluation of basic physiological health determinants. Subsequently, an online model of software will be created, which will be able to evaluate the influence of physical factors on the scale of students' self-assessment, including the possible reactions of physiological changes in the form of measured health parameters. The results of the project will also be reflected in the practical skills of students in the knowledge that is necessary in evaluating the effects of important etiological factors on the development of disease. The output parts of the project include the creation of multimedia and print educational outputs, scientific outputs in the form of publications, practical application of simple evaluation software in the evaluation of the exposure model and its evaluation in determining the human burden of physical factors. The project is also in line with the basic EU requirements for the so-called impact of the risk.

prof. Mgr. MUDr. Erik Dorko, PhD. MPH, MBA

Project annotation in 2020 KEGA Dorko - KEGA project no. 008UPJŠ- 4/2020 - Multimedia technologies in teaching cardiovascular risk and population health studies for university students using freely available software applications

The presented KEGA project represents the use of innovative multimedia technologies in the practical and theoretical teaching of medical, and non-medical students, especially students of general medicine, public health, nursing, physiotherapy and dentistry. Its purpose is to create, induct, apply and implement multimedia technologies in the teaching of university students, which will allow the assessment of the impact of risk factors on cardiovascular health. Risk factors of cardiovascular diseases and knowledge of them in the future of health professionals are the basis for prevention and reduction of morbidity and mortality of the population. The project will increase the knowledge, skills and abilities of students from various fields of medicine and modernize the profile of graduates. The project will introduce and implement the so-called self-assessment model of the effects of possible risk factors in medical students, together with the evaluation of basic physiological objective health determinants. Subsequently, an online software model will be created, which will be able to evaluate the impact of risk factors on the scale of students' self-assessment, including possible physiological changes in the form of measured health parameters. The results of the project will also be reflected in the practical skills of students in the knowledge that is necessary in evaluating the effects of important etiological factors on the development of disease. The output parts of the project include the creation of multimedia and print educational outputs, scientific outputs in the form of publications, practical application of simple evaluation software in the evaluation of the exposure model and its evaluation in determining the human burden of risk factors. The project is also in line with the basic EU requirements for the so-called "risk assessment", where knowledge of the evaluation of possible health impacts within EU programs is required.

doc. MVDr. Tatiana Kimáková, PhD.

Project annotation in 2019 KEGA Kimáková - KEGA project no. 005UPJŠ-4/2019 - Analysis of lifestyle risk factors of university students and students of the University of the Third Age

The proposed project is a comparative study to find out the current state of somatic and mental health, including living conditions and lifestyles of university students and students of the University of the Third Age, as well as changes that occurred during the study of the same and other students in progressively higher years of study. The findings of the sub-studies to date point to the need to examine the main risk factors affecting the health of this population. Based on the findings, preventive intervention measures will be proposed to protect and promote the health of at-risk individuals and preventive intervention measures to protect and promote health.

Mgr. Jana Diabelková, PhD.

vvgs-2019-1383 - E-learning innovation of teaching Hygiene and public health through online learning scripts

The project is focused on a new educational e-learning material in the form of online scripts, which will enable students to better and faster orientation in the subject of Hygiene and subjects taught at the Department of Public Health. The aim of the project is to create, apply and implement online scripts for students that could improve students' knowledge, skills and abilities and can modernize the profile of graduates of medical and non-medical disciplines, especially the Department of Public Health. The output parts of the project will speed up the process of a long search for more teaching materials and books, as they will provide a clear comprehensive list of the most important

basic definitions, terms, limits and abbreviations from Public Health, which has been lacking so far. These terms will be specifically from Nutrition Hygiene, Environmental Hygiene, Child and Adolescent Hygiene, Epidemiology, Preventive Occupational Medicine and General Prevention.

vvgs-2020-1662 - E-learning innovation of teaching the subject Hygiene of children and youth

The project is focused on online teaching materials that will enable students to better and faster orientation in the subject of Hygiene of Children and Youth. The aim of the planned IPEL project is the creation, application and implementation of online text, which will be supplemented by online tests. The student will have the opportunity to test after studying the mentioned material before taking the exam in the subject and thus evaluate their preparation. The online material will also contain the URL addresses of the most important laws, decrees and regulations in the field of Hygiene of Children and Youth, which the graduate working in this field will have to control and use in their practice. The online material will be on the e-learning portal of the Pavel Jozef Šafárik University in Košice lms.upjs.sk, which students are increasingly using and searching for in this period.

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 / co-authorship of the following technical documents and national guidelines:

1. Expert opinion of the Slovak Pneumological and Phthisiological Society - Indications of a long-term home treatment using mechanical insufflation - exsufflation using the CoughAssist device.

In: *Respiro* : journal for continuing education in pneumology and phthisiology. - ISSN 1335-3985. - Yr. 18, no. 2 (2020), p. 6-13.

[POBEHA, Pavol - SOLOVIČ, Ivan - NEUMANNOVÁ, Kateřina - HÁJKOVÁ, Marta - JAKUBIČKA, Juraj - MATULA, Bohumil - DRUGDOVÁ, Mária - KOŠTURIÁKOVÁ, Gabriela - LAŠŠÁN, Štefan - KOCAN, Ivan - MUCSKA, Imrich]

2. Pulmonary rehabilitation and respiratory physiotherapy in post Covid 19 patients: (information about the planned rehabilitation program).

In: *Respiro* : journal for continuing education in pneumology and phthisiology - ISSN 1335-3985. - Yr. 18, no. 3 (2020), p. 19-21.

[POBEHA, Pavol - JENDRICHOVSKÝ, Marián]

3. Brief recommendations for outpatient specialists regarding the management of patients in the current epidemiological situation and the risk of transmission of SARS-COV-2 (COVID-19).

In: *Respiro* : journal for continuing education in pneumology and phthisiology - ISSN 1335-3985. - Yr. 18, no. 1 (2020), p. 22-24.

[POBEHA, Pavol]

Department of Infectious Diseases and Travel Medicine UPJŠ FM and UNLP in Košice

- fecal bacteriotherapy for patients (paid from ZP) - implemented by MUDr. Martin Novotný, PhD.

Department of Angiology UPJŠ FM and VÚSCH, a. c. in Košice

- doc. MUDr. Eva Szabóová, PhD.: Member of the OPS of the Ministry of Health of the Slovak Republic for the Prevention of Cardiovascular Diseases within the project "Creation of new and innovated procedures for prevention and their introduction into medical practice".
- under the guidance of the guarantor for the accredited SF of Angiology at UPJŠ FM in cooperation with the lecturers for the practical part: repeated training stays at the clinic (5 attestants) within the pre-certification preparation from the special. field: angiology

I. Cardiology clinic UPJŠ FM and VÚSCH, a. c. in Kosice

- under the guidance of the guarantor for the accredited SF of Cardiology at UPJŠ FM: 4-week educational course dedicated to current topics in cardiology within the pre-certification training in special. field: cardiology

Department of Vascular Surgery UPJŠ FM and VÚSCH, a. c. in Kosice

- biomedical research project VÚSCH, a.c. - Whole-gen sequencing of samples after endarterectomy in order to optimize the current therapy carried out in cooperation with the Laboratory of Cell Interactions CKPV MediPark UPJŠ FM and University Medical Center Utrecht - researcher for the Department of Vascular Surgery MUDr. Peter Berek, PhD.

Department of Orthopedics and Traumatology of the Musculoskeletal System 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 Orthopedics and Traumatology of the Musculoskeletal System UPJŠ FM and UNLP Košice.

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

3.1 Publishing and lecture activities of faculty employees in 2020

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.

Statistics of categories of publishing activities of the Faculty of Medicine for the year 2020 (as of 18.03.2021):

AAB - Scientific monographs published by domestic publishers

6

ABA - Studies of the nature of a scientific monograph in journals and collections published by foreign publishers 1

ABC - Chapters in scientific monographs published by foreign publishers	5
ABD - Chapters in scientific monographs published by domestic publishers	7
ACB - University textbooks published by domestic publishers	7
ACD - Chapters in university textbooks published by domestic publishers	10
ADC - Scientific papers in foreign scientific journals	129
ADD - Scientific papers in domestic scientific journals	2
ADE - Scientific papers in other foreign journals	41
ADF - Scientific papers in other domestic journals	116
ADM - Scientific papers in foreign journals register. in the WoS or SCOPUS databases	54
ADN - Scientific papers in domestic journals registered in the Web of Science or SCOPUS	22
AEC - Scientific works in foreign peer-reviewed scientific proceedings, monographs	15
AED - Scientific works in domestic peer-reviewed scientific proceedings, monographs	42
AFB - Published invited papers at domestic scientific conferences	3
AFC - Published papers at foreign scientific conferences	3
AFD - Published papers at domestic scientific conferences	22
AFE - Abstracts of invited papers from foreign scientific conferences	4
AFF - Abstracts of invited papers from domestic scientific conferences	2
AFG - Abstracts of papers from foreign scientific conferences	19
AFH - Abstracts of papers from domestic scientific conferences	41
BBB - Chapters in professional book publications published by domestic publishers	5
BCI - Scripts and textbooks	7
BCK - Chapters in textbooks	9
BDC - Professional work in foreign journals	3
BDE - Professional work in other foreign magazines	3
BDF - Professional work in other domestic magazines	65
BDN - Professional papers in domestic journals regist. in the WoS or SCOPUS databases	1
BEE - Professional works in foreign collection (conference and non-conference)	2
BEF - Professional work in domestic collection (conference and non-conference)	17
BFA - Abstracts of professional works from foreign events (conferences ...)	4
BFB - Abstracts of professional works from domestic events (conferences ...)	16
DAI - Dissertation and habilitation works	25

FAI - Book compilations (bibliographies, encyclopaedias, catalogues, dictionaries, collections, atlases ...)	2
GHG - Works published in a way that allow mass access	1
GII - Various publications and documents that cannot be included in any of the previous categories	6
SUM	717

Tab. 1 - University publications in 202

údaje 29.3.2021

	FM	FS	FL	FPA	FP	TIP	Together UP (BZ+UTVaŠ)	Together UPJŠ*
AAA – Scientific monographs published by foreign publishers			2	1	1			4
AAB – Scientific monographs published by domestic publishers	6		3	1	18			28
ABA – Studies of the nature of a scientific monograph in journals and collections published by foreign publishers	1	1	1		1			4
ABB – Studies in journals and proceedings of a scientific monograph published by domestic publishers			7		1			8
ABC – Chapters in scientific monographs published by foreign publishers	5			1	5			11
ABD – Chapters in scientific monographs published by domestic publishers	7		11	1	3			22
ACA – University textbooks published by foreign publishers					1			1

ACB – University textbooks published by domestic publishers	7	1	2	4	7			20
ACC – Chapters in university textbooks published abroad publishers			2					2
ACD – Chapters in university textbooks published by domestic publishers	10		14		4			28
ADC – Scientific work in foreign scientific journals	132	366	1	2	10	28	15	510
ADD – Scientific papers in domestic scientific journals	2	3						4
ADE – Scientific papers in other foreign journals	40	9	24	4	15		2	93
ADF – Scientific papers in other domestic journals	119	18	43	14	13		5	209
ADM – Scientific work foreign journals registered in WoS databases or Scopus	54	37	4	8	15	1	6	120
ADN – Scientific work in the dom. journals registered in WoS databases or Scopus	23	9			10			42
AEC – Scientific works in foreign peer-reviewed scientific proceedings, monographs	15	14	18	3	14	1	3	62
AED – Scientific works in domestic peer-reviewed scientific proceedings, monographs	42		34	22	18	1	3	120

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	3	37	21	6	19	4	1	85
AFD – Published papers at domestic scientific conferences	22	35	77	25	44	1	3	203
AFE – Abstracts of invited papers from foreign scientific conferences	4	1						5
AFF – Abstracts of invited papers from domestic scientific conferences	2	1						3
AFG – Abstracts of papers from foreign scientific conferences	19	23			1	3		46

AFH – Abstracts of papers from domestic scientific conferences	41	110			2	12	7	155
AFK - Posters from foreign conferences		4						4
AFL – Posters from home conferences		3				2		3
AGJ – Patent applications, utility model applications,.		1						1
BAA – Professional book publications published by foreign publishers								
BAB – Professional book publications published by domestic publishers		1						1
BBA – Chapters in professional book publications published foreign publishers								
BBB – Chapters in professional book publications published in dom. publishers	5		2					7
BCB – Textbooks for secondary and primary schools								
BCI – Scripts and textbooks	7	22		1		2	4	33
BCK – Chapters in textbooks	9							9
BDA – Passwords in professional terminological dictionaries and encyclopaedias published by foreign publishers			2					2

BDC – Professional work foreign journals	3				1			4
BDD – Professional work in domestic journals					2			2
BDE – Professional work in other foreign magazines	3	1			3			7
BDF – Professional work in other domestic magazines	66	3	35		6		6	112
BDM – Professional work foreign magazines registered in WoS databases or Scopus								
BDN – Professional work in the dom. magazines registered in WoS databases or Scopus	1				6			7
BEE – Professional work in foreign proceedings (conference and non-conference)	2	2	7			1		11
BEF – Professional work in domestic proceedings (conference and non-conference)	17	4		1				22
BFA – Abstracts of professional works from foreign events	4	9			2		1	14
BFB – Abstracts of professional works from domestic events	16	1					1	17
CAB – Artistic monographs, translations, author's catalogues published by domestic publishers					1			1

CDF – Works of art and translations in other domestic journals								
CED – Works of art and translations in anthologies, book publications and group catalogues published by domestic publishers			1					1
EAJ – Professional translations of publications					3			3
EDI – Reviews in magazines and proceedings		1	2	2	15			20
EDJ – Review works, professional works, translations of standards; professional translations in magazines			2	1	4		2	9
FAI – Book compilation work ...	2	6	9	1	13	2	1	34
GHG – Works published in a way that allow mass access	1	2	1		10			14
TOGETHER 2020	693	725	325	99	269	58	60	2128
TOGEHTER 2019	991	864	309	161	388	55	63	2722
TOGEHTER 2018	884	835	355	144	489	115		2716
TOGEHTER 2017	945	922	261	114	510	48		2744
TOGEHTER 2016	848	852	259	123	401	41		2460

* data from the EPC database excluding duplicates

3.1.1 Titles published at the faculty

1.	M. Frankovičová a kol.	Chirurgia tepnožilových spojení pre potreby dlhodobej hemodialýzy
2.	M. Vidová Ugurbas	Plastic Surgery
3.	K. Rimárová a kol.	Celiakia
4.	P. Berek	Chirurgická liečba cerebrovaskulárnej insuficiencie
5.	Z. Dankulincová a kol.	Cesta labyrintom: Dospievajúci s emocionálnymi problémami a problémami...- grafika
6.	E. Mechírová, I. Domoráková	Praktikum z histológie
7.	E. Mechírová, I. Domoráková	Histology - Practical lessons
8.	S. Perečinský	Profesionálne ochorenia respiračného systému
9.	I. Babinská, M. Halánová	Návody na praktické cvičenia z epidemiológie
10.	J. Firment a kol.	Anesteziológia a intenzívna medicína
11.	I. Domoráková	Mikroskopická anatómia pre odbor zubného lekárstva
12.	I. Hodorová	Ultrasound Anatomy 1
13.	E. Slabá a kol.	Biológia - praktické cvičenia
14.	M. Frankovičová a kol.	Komplexné riešenie dialyzovaných pacientov
15.	M. Mareková	Lekárska biochémia-semináre
16.	J. Mihalik a kol.	Topografická pitva hornej a dolnej končatiny
17.	M. Pallayová	Textbook of Practical Physiology I
18.	A. Kováčová, P. Šalamon	The Basic of Graeco-Latin Medical Terminology
19.	S. Rybárová a kol.	Anatómia pre nelekárske zdravotnícke odbory
20.	I. Hodorová a kol.	Pracovný zošit z anatómie
21.	M. Hagovská a kol.	Praktická kinezioterapia
22.	M. Mareková a kol.	Základy lekárskej klinickej a laboratórnej biochémie
23.	R. Beňačka	Folia Medica Cassoviensia 2/2019
24.	D. Pella	Ateroskleróza 1-2/2020
25.	D. Pella	Ateroskleróza 3-4/2020
26.	S. Dražilová, L. Gombošová, M. Janičko, Ľ. Skladaný, E. Veseliny	Vybrané kapitoly z hepatológie a gastroenterológie
27.	A. Boleková	23. KOŠICKÝ MORFOLOGICKÝ DEŇ
28.	S. Mišíková	Poruchy srdcového rytmu

29.	A. Boleková a kol.	HOW TO STUDY AND NOT FORGET - Principles of braincompatible learning
30.	A. Boleková a kol.	AKO SA UČIŤ A NEZABÚDAŤ – Princípy mozgovokompatibilného učenia
31.	P. Berek	Chirurgická liečba cerebrovaskulárnej insuficiencie
32.	J. Varga	Základy onkogynekológie
33.	E. Dosedla	Laparoskopická hysterektómia
34.	E. Dosedla	Ultrazvuková charakteristika jazvy po cisárskom reze
35.	Z. Dankulincová a kol.	Cesta labyrintom: Dospievajúci s emocionálnymi problémami a problémami v správaní v systéme starostlivosti
36.	M. Mareková	Clinical Biochemistry
37.	J. Diabelková	Stručný online prehľad základných pojmov a skratiek v Hygiene a vo Verejnom zdravotníctve
38.	M. Kozárová	Novinky v diabetológii a lipidológii
39.	R. Suchanová, L. Dimunová	Komunikácia v zdravotníckej praxi

3.1.2 List of non-conference requested lectures of faculty employees in 2020 at major foreign universities and academic institutions

Mgr. Iveta Rajničová Nagyová, PhD., Interdisciplinary Evidence-based Public Health: Moving from Silos to Synergies. Jubilee Scientific Conference with International Participation. 'New Approaches in Public Health and Health Policy'. Pleven, Bulgaria, 26–28.11.2010 (invited lecture)

Mgr. Iveta Rajničová Nagyová, PhD., Moving from Silos to Synergies. 16th World Congress on Public Health 2020 'Public health for the future of humanity: analysis, advocacy and action', Online event, 12 – 16 October 2020 CET (keynote lecture)

Mgr. Iveta Rajničová Nagyová, PhD., Applying translational behavioural science to improve people's health. 16th World Congress on Public Health 2020, Online event, 12 – 16 October 2020 CET (lecture)

MUDr. Dagmar Breznoščáková, Ph.D., Psychoeducation as part of the implemented national guidelines – a new standard to the prevention of depression relapses. 5th Annual Conference on Brain Disorders, Neurology and Therapeutics. Tokyo, Japan, 20 – 21 April 2020 (lecture)

MUDr. Zuzana Katreniaková, PhD., (expertnal panel) "Participation and handicap". NP PARTI - AFTER PARTI - final conference of ÚSV SR ROS within the national project "Support of partnership and dialogue in the field of participatory public policy making", 06.-07. August 2020, Bratislava

MUDr. Zuzana Katreniaková, PhD., (active participation in the expert panel) Final conference NP PARTI - AFTER PARTI Participation and handicapped 28. August 2020, Bratislava

MUDr. Zuzana Katreniaková, PhD., Mgr. Iveta Rajničová Nagyová, PhD., (lecture) Motivačno-sankčné mechanizmy v primárnej prevencii nádorových ochorení. 41st Annual Conference SSVPL, 15.-17. October 2020, Horný Smokovec

Krajčíková K., Tomečková V. a kol., Diagnostický potenciál pri depresívnej poruche, X. International Czech-Slovak Neuropsychiatric Symposium (25. – 27. 9. 2020, Červený Kláštor)

prof. Mgr. Andrea Madarasová Gecková, PhD., Pandémia ako výzva pre rast a rozvoj. Webinar The impact of a pandemic on the future of patient care. 30.11.2020 SANDOZ d.d.

<https://youtu.be/VISd8-ql4gg>

prof. MUDr. Viliam Donič, CSc., distance lectures at anesthesiologists' congresses 9.10.2020 from 13.10 to 13.30 organized by Prof. Gomonov of the University of Pirogov in Vinnitsa, Ukraine „Súčasná metóda ventilácie pľúc u pacientov s poruchami dýchania jeho systému zapríčinených Covid-19“ Autori V. Donič, P. Torok.

doc. MUDr. Matej Škorvánek PhD., DBS for dystonia treatment (5.2.2020) - Medical Center Hospital of President's Affairs administration of the Republic of Kazakhstan, Nur-Sultan / Kazakhstan

doc. MUDr. Matej Škorvánek PhD., DBS for Parkinson's disease treatment (6.2.2020) - Medical Center Hospital of President's Affairs administration of the Republic of Kazakhstan, Nur-Sultan / Kazakhstan

doc. MUDr. Matej Škorvánek PhD., DBS for tremor treatment (7.2.2020) - Medical Center Hospital of President's Affairs administration of the Republic of Kazakhstan, Nur-Sultan / Kazakhstan

doc. MUDr. Matej Škorvánek PhD., How to use the MDS-UPDRS – 15.9.2020 – International Parkinson and Movement Disorder Society Virtual Congress, Philadelphia USA

prof. MUDr. Zuzana Gdovinová, CSc., Vplyv epidémie COVID na manažment CMP na Slovensku, 48th CZECH AND SLOVAK CEREBROVASCULAR CONGRESS, 9-11.12.2020, virtual congress

MUDr. Marianna Vitková, PhD., VII. year of the Sclerosis Multiplex School with international participation, lecture on the topic: Zlepšuje sa prognóza pacientov so sclerosis multiplex v kontexte meniacich sa diagnostických kritérií dostupnosti DMT? – results from the MS Base registry

MUDr. Lívia Sladká, PhD., Hemangiómy v ústnej dutine, Kazuistiky z našej praxe, 14. - 16.2.2020, Polish Chamber DM

MUDr. Ján Kučera, PhD., Príspevok aktivovaných tvrdých zubných tkanív v reparatívnych pochodoch kosti a zubov, 18. - 19.9.2020, Dental clinic

prof. MUDr. Peter Jarčuška, PhD., 6th Adriatic Liver Forum - digital conference: Treatment of PBC, 25.9.2020, (Croatia - online)

3.2 Responses in 2020

Statistics of FM responses for the year 2020 (data as of 18.03.2021):

[1] Citations in foreign publications registered in the WoS and SCOPUS database	3858
[2] Citations in domestic publications registered in the WoS and SCOPUS database	11
[3] Citations in foreign publications not registered in citation indices	84
[4] Citations in domestic publications not registered in citation indices	19
[5] Reviews in foreign publications	1
SUM	3973

Tab. 5 - Quotes and other responses to the work of University staff in 2020

data as of 29.3.2021

Code	Category name *	Faculties of UPJŠ a UP							together**
		FM	FS	FL	FPA	FP	TIP	together UP (BZ+UTVaŠ)	
1	Citations in foreign publications registered in the Web of Science citation indexes and the SCOPUS database	3897	3984	28	32	225	57	45	7847
2	Citations in domestic publications registered in the Web of Science citation indexes and the SCOPUS database	11	7			12		2	30
3	Citations in foreign publications not registered in citation indices	85	95	145	28	108		20	456
4	Citations in domestic publications not registered in citation indices	19	12	394	48	86		3	555
5	Reviews in foreign publications	1	1	2		3		1	7
6	Reviews in domestic publications		1	3		10			13
7	Art critics in foreign publications								

8	Art critics in domestic publications								
	Together 2020	4013	4100	572	108	444	57	71	8908
	Together 2019	2920	3121	599	128	431	51	24	6 994
	Together 2018	2888	2812	534	135	433		64	6592
	Together 2017	2226	2786	357	124	563		31	5809
	Together 2016	2272	2867	438	114	404		9	5850
	Together 2015	1855	2172	462	112	345		32	4785
	Together 2014	911	871	172	54	131		30	2060
	Together 2013	1355	2351	378	140	393		41	4520
	Together 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*

3.3 Scientific events in 2020

JUNE 2020

9th NEONATOLOGY CONFERENCE IN KOŠICE

Date: 8th – 12th June 2020
Congress Venue: Live stream
Organizing subjects: Non-profit organisation NOVORODENEC.SK
Faculty of Medicine, Pavol Jozef Šafárik University in Košice
Open Medical Institute - American Austrian Foundation
Slovak Medical Chamber
Coordinator: Peter Krcho MD., PhD.
Congress Language: English
Note: [Programme](#)

OCTOBER 2020

36th conference of the Department of Children and Adolescents, Faculty of Medicine, UPJŠ and DFN

XII. Démants' day

Date: 22nd October 2020
Place: Košice, webinar
Organizing subjects: Slovak Pediatric Society
Children's University Hospital Košice
Faculty of medicine UPJŠ in Košice
Department of Children and Adolescents, FM,
UPJŠ and DFN Košice
Coordinators: doc. MUDr. Veronika Vargová, PhD.
Note: [Programme](#)

NOVEMBER 2020

14th INTERNATIONAL SCIENTIFIC CONFERENCE ON PROBIOTICS, PREBIOTICS, GUT MICROBIOTA AND HEALTH – IPC 2020

Date: 11th November 2020 (virtual)
Organizing subjects: CLS Consulting Ltd.
Pavol Jozef Šafárik University in Košice,
Faculty of Medicine,
Institute of Experimental Medicine
Coordinator: Alojz Bomba, MVD. DrSc.
Congress Language: English
Web: <http://www.probiotic-conference.net>

6. the course CEEA

Date: 23. – 25. nov. 2020
Place: Online via MS Teams
Organizing subjects: Slovak center CEEA
European Society of Anesthesiology
Slovak Society of Anesthesiology and Intensive Care
1st Department of Anaesthesiology and Intensive Care, UPJŠ FM and UNLP Košice
Society for the Critically Ill at I. KAIM
Coordinator: MUDr. Štefan Trenkler, PhD., Slovak center CEEA
Note: Programme

DECEMBER 2020

XXIX. Schwarz' day

Date: 17th December 2020
Form: Teleconferencing through the program ZOOM
Organizing subjects: Slovak Gynecological and Obstetrical Society SLS
UPJŠ in Košice, Faculty of Medicine
Coordinator: prof. MUDr. Alexander Ostró, CSc., MBA
Web a registration: <https://sgps-kongres.sk/schwarzovden/>
Note: Programme

Institute of Social and Behavioural Medicine UPJŠ FM in Košice

Name: What next with primary disease prevention during a pandemic?
Organisers: Prevention Forum
Date and place: 26.11.2020 at 09:30 – 10:00, online briefing
26.11.2020 at 10:30 – 12:00, online round table discussion
Number of participants: 20 / Representatives of the Ministry of Health of the Slovak Republic (State Secretary, Reform Agenda Section (Behavioral and Experimental Team), Department of Public Health, Screening and Prevention), employers and NGOs
Cooperation: Z. Katreniaková as a professional guarantor of the Prevention Forum, she presented the results of a survey among general practitioners, the aim of which was to identify the biggest barriers to primary prevention (also in the time of COVID-19) and to find out what would help general practitioners the most.
Name: 16th World Congress on Public Health 2020 / Workshop: 22.B - “Behavioural insights and public health “
Organizers: World Federation of Public Health Associations (WFPHA), European Public Health Association (EUPHA), Italian Society of Hygiene, Preventive Medicine and Public Health (SIItI)
Date and place: Online event, 12 – 16 October 2020 CET | 15 Oct 2020· 15:45 – 16:45

Number of participants: 75 (foreign)

Cooperation: I. Nagyová is the president of the European Public Health Association (EUPHA), a member of the IBTN and a member of the WHO EACHR

Conference website: <https://wcph2020.com/>

Publication: Workshop abstracts are published in European Journal of Public Health 2020, 30, Issue suppl_5, ckaa165.1072, <https://doi.org/10.1093/eurpub/ckaa165.1072>

I. Department of Dentistry UPJŠ FM and UNLP in Košice

Name: XIX. Stomatologické dni Košice

Organizing Committee: MUDr. Jozef Ivančo, CSc., Dr.h.c.prof. MUDr. Andrej Jenča, CSc., MPH, MUDr. Jana Kaiferová, PhD., prof. MUDr. Neda Markovská, CSc., MUDr. Jozef Minčík, PhD., MUDr. Vladimíra Schwartzová, PhD., MPH, MUDr. Silvia Timková, PhD., Mgr. Juliana Tomková

Date and place: 9. - 10.9.2020 - Social pavilion, Tr.SNP no.61, Košice Number of participants: 200

Department of Anatomy, UPJŠ FM in Košice

- 23rd KOŠICE MORPHOLOGY DAY. May 2020. Proceedings of scientific works. E-publication online. Doc. MUDr. Adriana Boleková, Ph.D. (ed.). <https://unibook.upjs.sk/sk/medicina/1347-kosicky-morfologicky-den>

Institute of Medical Physiology and Sleep Laboratory UPJŠ FM in Košice

- Lecture at the webinar of the Slovak Diabetological Society held on April 21, 2020 live stream webinar. Author Donič. Name: Current possibilities of ventilation treatment in a patient with Covid-19.

Institute of Nursing UPJŠ FM in Košice

- Alexander Dubček University of Trenčín in Trenčín, International Scientific Virtual Conference: Nursing and Health October 8, 2020 in Trenčín

- University of Health and Social Work St. Elizabeth in Bratislava, International Scientific Conference: Evidence-Based Practice in Assisting Professions, 13 November 2020 Michalovce

- Technical University of Liberec, Faculty of Medical Studies, Conference of non-medical disciplines: Multidisciplinary cooperation in non-medical health disciplines, December 9, 2020, Liberec, Czech Republic

- International Scientific Conference of Doctoral Students and Assistant Professors: QUAERE 2020, June 22 - 26, 2020, Hradec Králové, Czech Republic.

Department of Gerontology and Geriatrics UPJŠ FM and UN - Hospital of St. Michala

co-organizer of the Congress of the Slovak Gerontological and Geriatric Society, Štrbské pleso, May 2020, 150 participants, 10 foreign participants

- co-organizer of the Days of Practical Obesity and Metabolic Sy., 11.-13.6.2020, Chopok, Slovakia, 155 participants, 12 foreign p.
- MUDr. Peter Olexa, PhD. as a co-organizer of XXV. Congress of the Slovak Society of Cardiology, distance form, 23.-30.11.2020, Bratislava, Slovakia, 780 participants, 12 foreign

Department of Infectious Diseases and Travel Medicine UPJŠ FM and UNLP in Košice

- doc. MUDr. Pavol Kristian, Current treatment of hepatitis B and its direction, webinar Trends in hepatology in 2020, 26.11.2020, <https://www.slovhep.sk/verejnost/clanok/69-webinar1-trendy-v-hepatologii-v-roku-2020>

I. Department of Internal Medicine UPJŠ FM and UNLP in Košice

- 43rd Endocrinological Days with International Participation, October 22-24, 2020, Horný Smokovec, High Tatras, number of participants 300, .organizer: prof. MUDr. I. Lazúrová, DrSc., FRC - President of the Congress.
- 3rd Case Studies in Internal Medicine and Cardiology, Žilina, 5.-6.2.2020 - event organizer and chairman of the program committee, prof. MUDr. Ivica Lazurova, DrSc., FRCP.
- New Year's Rheumatology Seminar, January 24 - 25, 2020, Košice, number of participants: 130 co-organizers, Doc. MUDr. Ž. Macejová, PhD., Mim.prof.
- 22. 01. – 24. 01. 2020: XXV. Year of Gastroforum 2020, Štrbské Pleso - co-organizer - MUDr. L. Gombošová, Ph.D. 300 participants

Department of Children and Adolescents, UPJŠ FM and DFN in Košice

- 13th Pediatrics Case Festival, Žilina Holiday Inn, 12 - 13 June 2020, 500 participants, Organizers: DFN Košice, CLC Consulting

Department of Geriatrics and Nursing UPJŠ FM and VŠOÚG sv. Lukáša, n.o. in Kosice

XXXV. Congress of SHS and Conference of PS preventive cardiology SKS, 2020, Bratislava
Implemented for the pandemic situation at the end of the year virtually

Department of Neurology, UPJŠ FM and UNLP in Košice

2nd Kosice hand-on (virtual) school of Movement Disorders, Kosice, 19.-20. november 2020
Organizator: doc. MUDr. Matej Škorvánek, PhD
Co-organizers – MUDr. Vladimír Haň PhD, MUDr. Alexandra Mosejová, MUDr. Kristína Kulcsárová, MUDr. Miriam Ostrožovičová, MUDr. Joaquim Ribeiro Ventosa

Domestic participants - 87

Foreign participants - 4 (2x Czech Republic, 1x UK, 1x Germany)

Doc. MUDr. Jarmila Szilasiová, PhD

Main organizer:

1. Online seminar Sclerosis multiplec and COVID-10, which took place 19.10. 2020- 30.10.2020 (place: www.medicinskyportal.sk) under the guarantee of SNeS, Multiple Sclerosis Section SneS, Department of Neurology JLF and UN Martin and Department of Neurology UPJŠ FM and UNLP Košice, Content: 5 lectures, Presenting: prof. Jarčuska Pavol, prof. Kurča Egon, MUDr. Vitková Marianna, Doc. Szilasiová Jarmila, Mgr. Grossmann Ján.

Co-organizer:

1. 7th year of the SM School: Voff-line Webinar 29.6.- 29.12.2020, organizers: Multiple Sclerosis Section of the Slovak Neurological Society (SNeS), under the auspices of the Slovak Medical Society, Department of Neurology, Faculty of Health Sciences, University of Prešov in Prešov and University Hospital with JA Polyclinic Reimana Prešov,

MUDr. Eva Feketeová, PhD

Courses and webinars:

20-21. 1. 2020 Epileptology - basic III - full-time

Organized by NK UPJŠ and UNLP Košice, organizer: E. Feketeová

17.6.2020 Autoimmune encephalitis - webinar with international participation - Department of Neurology 2.LF UK and FN Motol orof. MUDr. P. Marusič, Ph.D., MUDr. M. Elišák

Organized by NK UPJŠ and UN LP Košice, organizers: E. Feketeová, Z. Gdovinová, M. Fedičová

30.9.2020 Epilepsy- ON-LINE discussion case study seminar

Organized by NK UPJŠ and UNLP Košice, organizers: E. Feketeová, B. Hofericová, G. Rivera

prof. MUDr. Zuzana Gdovinová, CSc., FESO, FEAN

Regional seminar of the Košice region

Management - diagnosis and treatment of patients with sudden stroke (meeting of neurological and radiological departments)

Organizer: Department of Neurology, Faculty of Medicine, UPJŠ and UNLP Košice

Guarantor: Prof. MUDr. Zuzana Gdovinová, CSc., FESO, FEAN

Place: Marathon Hotel Hall, Bačíkova ul., Košice, 30.9.2020

Regional seminar of the Prešov region

Management - diagnosis and treatment of patients with sudden stroke (meeting of neurological and radiological departments)

Organizer: Department of Neurology, Faculty of Medicine, UPJŠ and UNLP Košice

Guarantor: Prof. MUDr. Zuzana Gdovinová, CSc., FESO, FEAN

Place: Patriot Hotel Hall, Vranov nad Topľou, 9/29/2020

4. Employees in the editorial boards of journals in 2020

Folia Medica Cassoviensia: 2 issues in 2020

Doc. MUDr. Roman Beňačka, CSc., mim. prof.: Chairman of the Editorial Board

Atherosclerosis

2 double numbers 1-2 / 2020, 3-4 / 2020 prof. MUDr. Daniel Pella, PhD .: editor-in-chief doc.

MUDr. M. Kuchta, CSc., Mim. prof .: deputy editor-in-chief

Czech-Slovak Pediatrics: 8 issues in 2020 doc. MUDr. M. Kuchta, CSc.,
mim. prof.: deputy editor-in-chief

Pediatrics (Bratislava): 6 issues in 2020

doc. MUDr. Veronika Vargová, CSc .: member of the editorial board

doc. MUDr. M. Kuchta, CSc., Mim. prof .: member of the editorial board

doc. MUDr. M. Kuchta, CSc., Mim. prof .: professional proofreader

Laboratory diagnostics: 2 issues in 2020

Doc. MUDr. Oliver Rácz, CSc .: editor-in-chief

Bratislava medical records: 12 issues in 2020

prof. MUDr. Ladislav Mirossay, DrSc .: scientific editor

Athero Review: 3 numbers in r. 2020

prof. MUDr. Daniel Pella, PhD .: Chief Editor

Cardiology for practice: 4 issues in 2020

prof. MUDr. Daniel Pella, PhD .: Member of the Editorial Board

Practical medicine: 4 issues in 2020

prof. MUDr. Daniel Pella, PhD .: Member of the Editorial Board

Vascular medicine: 2 numbers in r. 2020

prof. MUDr. Daniel Pella, PhD .: Member of the Editorial Board

Forum diabetologicum: 3 issues in 2020

prof. MUDr. Daniel Pella, PhD .: Member of the Editorial Board

5. The most significant scientific research results of the faculty for the year 2020

Research area 18: **Medical and Pharmaceutical sciences**

ADC - Scientific papers in foreign journals

Zech M, Jech R, Boesch S, Škorvánek M, Weber S, Wagner M, Zhao C, Jochim A, Necpál J, Dincer Y, Vill K, Distelmaier F, Stoklosa M, Krenn M, Grunwald S, Bock-Bierbaum T, Fečíková A, Havráňková P, Roth J, Příhodová I, Adamovičová M, Ulmanová O, Bechyně K, Danhofer P, Veselý B, Haň V, Pavelekova P, Gdovinová Z, Mantel T, Meindl T, Sitzberger A, Schröder S, Blaschek A, Roser T, Bonfert MV, Haberlandt E, Plecko B, Leineweber B, Berweck S, Herberhold T, Langguth B, Švantnerová J, Minár M, Ramos-Rivera GA, Wojcik MH, Pajusalu S, Öunap K, Schatz UA, Pölsler L, Milenkovic I, Laccone F, Pilshofer V, Colombo R, Patzer S, Iuso A, Vera J, Troncoso M, Fang F, Prokisch H, Wilbert F, Eckenweiler M, Graf E, Westphal DS, Riedhammer KM, Brunet T, Alhaddad B, Berutti R, Strom TM, Hecht M, Baumann M, Wolf M, Telegrafi A, Person RE, Zamora FM, Henderson LB, Weise D, Musacchio

T, Volkmann J, Szuto A, Becker J, Cremer K, Sycha T, Zimprich F, Kraus V, Makowski C, Gonzalez-Alegre P, Bardakjian TM, Ozelius LJ, Vetro A, Guerrini R, Maier E, Borggraefe I, Kuster A, Wortmann SB, Hackenberg A, Steinfeld R, Assmann B, Staufner C, Opladen T, Růžicka E, Cohn RD, Dymant D, Chung WK, Engels H, Ceballos-Baumann A, Ploski R, Daumke O, Haslinger B, Mall V, Oexle K, Winkelmann J. Monogenic variants in dystonia: an exome-wide sequencing study.

Lancet Neurol. 2020 Nov;19(11):908-918. doi: 10.1016/S1474-4422(20)30312-4. PMID: 33098801.

A large proportion of dystonic syndromes can be explained by the presence of pathogenic genetic variants, the composition of which is highly heterogeneous. While in the past a targeted approach to testing according to known clinical phenotypes dominated the genetic diagnosis of dystonia, with the development of next-generation sequencing methods there has been a significant boom in this area with the discovery of many new genes, new disease phenotypes as well as the identification of large numbers of new candidate genes. This work presents an analysis of the world's largest cohort of patients with dystonia examined using whole exome sequencing.

In a cohort of 764 patients with dystonia, we identified a causal or possibly causal monogenic cause in 135 patients in 78 different genes, with the highest positives being observed in patients with complex dystonia, followed by combined and isolated dystonia. In addition, we identified 12 new candidate genes in relation to dystonic syndromes, with the most robust predictive results being found for the IMPDH2 gene, for which the index family was supplied from our site. In addition, we propose new predictive clinical scores that will increase the yield of whole-exome sequencing when testing patients with dystonic syndromes.

Grant support:

Funding from the Else Kröner-Fresenius-Stiftung and by in-house institutional funding from Technische Universität München, Munich, Germany, Helmholtz Zentrum München, Munich, Germany, Medizinische Universität Innsbruck, Innsbruck, Austria, and Charles University, Prague, Czech Republic (PROGRES Q27). This study was also funded by the Czech Ministry of Education (AZV: NV19-04-00233) and under the frame of the European Joint Programme on Rare Diseases (825575) and by the Slovak Grant and Development Agency (APVV-18-0547) and the Slovak Research and Grant Agency (VEGA 1/0596/19) to MŠ, VH, PP, and ZG. MZ was supported by Physician Scientists for Groundbreaking Projects at Helmholtz Zentrum München, Munich, Germany. FD was supported by a grant of the German Research Foundation (DI 1731/2-2) and by a grant of the Elterninitiative Kinderkrebsklinik (Düsseldorf; 701900167). FF and HP were supported by the German Bundesministerium für Bildung und Forschung through the Personalised Medicine project Personalised Mitochondrial Medicine (01KU2016A). WKC was supported by Simons Foundation Autism Research Initiative and the Jeffry Barbara Picower Foundation. SaP and KÕ were supported by the Estonian Research Council (PRG471 and

PUTJD827). We thank the Genomics and Proteomics Core Facility and the Omics IT and Data Management Core Facility of the German Cancer Research Center for providing sequence data. Sequencing and analysis were provided by the Broad Institute of MIT and Harvard Center for Mendelian Genomics (Cambridge, MA) and was funded by the National Human Genome Research Institute, the National Eye Institute, and the National Heart, Lung and Blood Institute (UM1 HG008900) and in part by National Human Genome Research Institute (R01 HG009141).

MIHALIK, Jozef – KREHEĽOVÁ, Andrea – KOVAŘÍKOVÁ, Veronika – SOLÁR, Peter – DOMORÁKOVÁ, Iveta – PAVLIUK-KARACHEVTSEVA, Andriana – HLADOVÁ, Alena – RYBÁROVÁ, Silvia – HODOROVÁ, Ingrid:

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

Int J Mol Sci. 2020 Aug 31;21(17):6313. doi: 10.3390/ijms21176313. PMID: 32878231; PMCID: PMC7503774.

The work was focused on the detection of the presence of glutathione peroxidase 8 (GPx8) in rats during the preimplantation phase of pregnancy. We found out that in oocytes, GPx8 is dispersed in the cytoplasm, while after fertilization it is concentrated in granules. From the 4-cell stage to the blastocyst, GPx8 is located in the perinuclear region. In the ovary, we observed GPx8 in granulosa cells, plasma, and Graafian follicles. In the fallopian tube, GPx8 was detected in plasma and extracellular mass (ECM). In the uterus, GPx8 was detected in the uterine glands, plasma and ECM. Densitometry revealed that the highest amount of GPx8 is in early pregnancy. To our knowledge, this is the first article to describe the presence of GPx8 in mammalian embryos and genitals in mammals.

Project: Influence of entacapone administration on antioxidant status and reproductive parameters of male rats - VEGA 1/0173/19

This study aimed to detect the presence of glutathione peroxidase 8 (GPx8) in rat during preimplantation period of pregnancy. We found that GPx8 is dispersed in the cytoplasm of oocytes, while after fertilization, it is concentrated in granules. From 4-cell stage till blastocyst, GPx8 reaction was found in the perinuclear region. In the ovary, GPx8 was seen in granulosa cells, in plasma of blood vessels, and inside Graafian follicles. In oviduct, GPx8 was detected in the plasma and in the extracellular matrix (ECM). In uterus, GPx8 was observed in the uterine glands, in the plasma, and in ECM. Densitometry revealed that the highest amount of GPx8 was on beginning of pregnancy. To our knowledge, this is the first paper describing GPx8 presence in embryos, and female genital organs in mammals.

BIRKOVÁ, Anna - OBORIL, Július - KRÉTA, Richard - ČÍŽMÁROVÁ, Beáta - HUBKOVÁ, Beáta - ŠTEFFEKOVÁ, Zuzana - GENČI, Ján - PARALIČ, Ján - MAREKOVÁ, Mária:

Human fluorescent profile of urine as a simple tool of mining in data from autofluorescence spectroscopy

Biomedical Signal Processing and Control, 2020, ISSN 1746-8094, Roč. 56, č. 2, s. 16931693, IF: 4.49, Q2

PALLAYOVÁ, Mária (31%) - BRENIŠIN, Marek (6%) - PUTRYA, Alina DOK-51-I (3%) - VRŠKO, Martin DOK-51-I (3%) - DRAŽILOVÁ, Sylvia (3%) - JANIČKO, Martin (21%) - MAREKOVÁ, Mária (3%) - PELLA, Daniel (3%) - MADARASOVÁ GECKOVÁ, Andrea (3%) - URDŽÍK, Peter (3%) - JARČUŠKA, Peter (21%)

Roma Ethnicity and Sex-Specific Associations of Serum Uric Acid with Cardiometabolic and Hepatorenal Health Factors in Eastern Slovakian Population: The HepaMeta Study / Maria Pallayova ... [et al.]. - Project: Center of Excellence for Health Factors Research focusing on a group of marginalized and immunocompromised people (CEMIO) - EÚ ŠF ITMS 26220120058 ; Grant of European Regional Development Fund-Project - FNUSA-ICRC No. CZ.1.05/1.1.00/02.0123 ; Grant from the Visegrad fund.

International Journal of Environmental Research and Public Health: Open Access Journal=IJERPH. - ISSN 1661-7827. - Roč. 17, č. 20 (2020), Art. N. 7673 , s. 1-15. - DOI 10.3390/ijerph17207673

MACICHOVÁ, Michaela - GROCHOVÁ, Monika - RÁCZ, Oliver - FIRMENT, Jozef - MITNÍKOVÁ, Miriam - ROSENBERGER, Jaroslav - ŠIMONOVÁ, Jana - HUDÁK, Vladimír. Improvement of mortality prediction accuracy in critically ill patients through combination of SOFA and APACHE II score with markers of stress haematopoiesis.

Internat J Labor Hematol - ISSN 1751-553X. - Roč. 42, č. 6 (2020), s. 796-800. - DOI 10.1111/ijlh.13308

Early diagnosis and subsequent intervention determine the fate of critically ill patients. There are number of scoring systems and biochemical parameters to predict the mortality of critically ill patients that use available biochemical parameters. However, only basic parameters such as leukocyte count, hematocrit, hemoglobin and platelet count are still used among the hematological parameters. With the development of technology and the use of flow cytometry in blood cell analyzers comes the possibility of using the absolute number of erythroblasts and immature granulocytes in the peripheral blood to predict mortality in critically ill patients in a daily routine blood count with differential leukocyte count.

We evaluated the importance of erythroblast determination in critically ill adults. We found out that leaching of erythroblasts into the peripheral blood has a significant effect on the mortality of critically ill patients at KAIM. The presence of erythroblasts in blood was also significantly related to the prediction of septic shock. The risk of death in critically ill patients between 6 months and 1 year was 10.55-fold higher in patients who had erythroblasts flushed into the peripheral blood than in NRBC-negative patients. We have developed a regression model that takes into account age, clinical condition as well as erythropoiesis and shows higher diagnostic efficiency than commonly used biochemical parameters such as PCT or lactate. The results of the first phase of the research were published in a peer-reviewed journal with IF 2.14. The results of the second phase are ready for publication and are included together with the results of the first phase in the submitted dissertation of the first author.

HUŇÁKOVÁ, Kristína (5%) - HLUCHÝ, Marian (35%) - ŠPAKOVÁ, Tímea (40%) - MATEJOVÁ, Jana (4%) - MUDROŇOVÁ, Dagmar (10%) - KURICOVÁ, Mária (2%) - ROSOCHA, Ján (2%) - LEDECKÝ, Valent (2%): Study of bilateral elbow joint osteoarthritis treatment using conditioned medium from allogeneic adipose tissue-derived MSCs in Labrador. Research in Veterinary Science : a journal of the British Veterinary Association. - ISSN 00345288. - Roč. 132, (2020), s. 513-520. - DOI 10.1016/j.rvsc.2020.08.004.

Dysplázia laktového kĺbu u psov je častou príčinou krívania predných končatín u psov a môže viesť k rozvoju osteoartritídy (OA). Cieľom štúdie bolo zistiť profil vybraných mediátorov s

potenciálnym klinickým významom vo vzorkách synoviálnej tekutiny (SF) psov trpiacich s OA a analyzovať rozsah pohybu (ROM) pred a po liečbe bezbunkovým prípravkom derivovaným z mezenchýmových kmeňových buniek (MKB). Kondiciované médium bolo pripravené z alogénnych MKB izolovaných z tukového tkaniva psov a aplikované do oboch laktových kĺbov s OA šiestim labradorským retrieverom v deň 0 a 14. Hladiny MMP-3, TIMP-1, IL-6 a TNF- α v SF vykazovali významné rozdiely pred a po liečbe ($P < 0,05$). Medzi dňom 0 a 42 ($P < 0,001$) došlo k významnému zlepšeniu ROM. Získané výsledky podporujú podporný účinok bezbunkového kondiciovaného média ako neinvazívneho terapeutického nástroja na zvládanie bolesti OA laktových kĺbov u psov. Táto štúdia bola realizovaná projektom Medical University Park v Košiciach (MediPark, Košice) ITMS: 26220220185 a 313011D103.

Canine elbow dysplasia is a common cause of forelimb lameness in dogs and can lead to development of osteoarthritis (OA). The aim of study was to identify the profile of selected mediators of potential clinical relevance in synovial fluid (SF) samples of dogs with elbow OA and analyse the range of motion (ROM) before and after cell-free MSCs-based treatment. Conditioned medium from allogeneic canine adipose tissue - derived MSC (CM-AD-MSC) was prepared and administered into both elbow joints with OA in six Labrador retriever dogs ($n=6$) on day 0 and 14.

Concentration levels of MMP-3, TIMP-1, IL-6 and TNF- α in SF showed significant differences before and after the treatment ($P < .05$). There was a significant improvement in ROM between day 0 and 42 ($P < .001$). Results support the potential supportive effect of CM-AD-MSC as a noninvasive therapeutic tool for pain management of OA elbow joints in dogs. This study was realised by the project Medical University Park in Košice (MediPark, Košice) ITMS: 26220220185 and 313011D103.

KOVÁČ, Ivan - MELEGOVÁ, Nikola - ČOMA, Matúš - TAKÁČ, Peter - KOVÁČOVÁ, Katarína - HOLLY, Martin - ĐURKÁČ, Ján - URBAN, Lukáš - KAŇUCHOVÁ, Miriam - ŠVAJDLENKA, Emil - MOJŽISOVÁ, Gabriela - ZAJÍČEK, Róbert - SZABÓ, Pavol - MUČAJI, Pavel - GÁL, Peter:

Aesculus hippocastanum L. extract does not induce fibroblast to myofibroblast conversion but increases extracellular matrix production in vitro leading to increased wound tensile strength in rats - Projekt: Vývoj aktívnych krytí rán na báze hydrogélů obsahujících rostlinné extrakty stimulující hojení rán u zdravých a diabetických potkanů - VEGA 1/0319/20 ; Modulácia hojenia rán rastlinnými extraktmi u zdravých a diabetických potkanů so zameraním na repík lekárske - VEGA 1/0561/18 ; Cell interactions in the tumor microenvironment and their pharmacological influence - APVV APVV-16-0446 ; Complex injuries and functional disorders of the spine, pelvis, limbs and syntopically close organs and structures - PROGRES Q37 ; BIOCEV – Biotechnology and Biomedicine Centre of the Academy of Sciences and Charles University project (CZ.1.05/1.1.00/02.0109), ; Comprehensive oncology program II - Program Progres Q28 ; Medical University Science Park in Košice (MediPark, Košice - Fáza II.) - ITMS2014+ 313011D103.

Molecules: a Journal of Synthetic Chemistry and Natural Product Chemistry. - ISSN 14203049, Roč. 25, č. 8 (2020), art. no. 1917, s. [1-14], online. - Method of access: <https://www.scopus.com/record/display.uri?eid=2-s2.0-85083767654&origin=resultslist>. - DOI 10.3390/molecules25081917

MACEJOVÁ, Želmíra (22%) - KRISTIAN, Pavol (22%) - JANIČKO, Martin (5%) - HALÁNOVÁ, Monika (5%) - DRAŽILOVÁ, Sylvia (5%) - ANTOLOVÁ, Daniela (5%) -

MAREKOVÁ, Mária (5%) - PELLA, Daniel (5%) - MADARASOVÁ GECKOVÁ, Andrea (5%) - JARČUŠKA, Peter (21%)

The Roma Population Living in Segregated Settlements in Eastern Slovakia Has a Higher Prevalence of Metabolic Syndrome, Kidney Disease, Viral Hepatitis B and E, and Some Parasitic Diseases Compared to the Majority Population / Zelmira Macejova ... [et al.].

International Journal of Environmental Research and Public Health: Open Access Journal=IJERPH. - ISSN 1661-7827. - Roč. 17, č. 9 (2020), art. no. 3112, s. 1-12. - DOI 10.3390/ijerph17093112

ÜRGEOVÁ, Anna (10%) - JAVORSKÝ, Martin (10%) - KLIMČÁKOVÁ, Lucia (10%) - ŽIDZIK, Jozef (10%) - ŠALAGOVICH, Ján (10%) - HUBÁČEK, Jaroslav A. (5%) - DOUBRAVOVÁ, Pavlína (5%) - GOTTHARDOVÁ, Ivana (10%) - KVAPIL, Milan (5%) - PELIKÁNOVÁ, Terezie (5%) - TKÁČ, Ivan (10%) - YALURI, Alena (10%)

Genetic variants associated with glycemic response to treatment with dipeptidylpeptidase 4 inhibitors / Anna Ürgeová ... [et al.]. - Projekt: Sledovanie asociácií vybraných génových variantov s odpoveďou na liečbu orálnymi antidiabetikami gliptínmi - VEGA 1/0027/16 ; Úloha chronickej intermitentnej hypoxie a inzulínovej rezistencie v patogenéze subklinickej aterosklerózy a myokardiálneho poškodenia u pacientov s obštrukčným spánkovým apnoe - VEGA 1/0208/16 ; Obesity, sleep apnea and obesity-hypoventilation syndrome: the effect of hypoxia on cardiovascular parameters in obesity-associated respiratory diseases and the possibilities of their treatment - APVV APVV-16-0158.

Pharmacogenomics. - ISSN 1462-2416. - Roč. 21, č. 5 (2020), s. 317-323. - DOI 10.2217/pgs2019-0147

TIMKOVÁ, Silvia (16.67%) - KLAMÁROVÁ, Tatiana (16.666%) - KOVALOVÁ, Eva (16.666%) - NOVÁK, Bohuslav (16.666%) - KOLARČIK, Peter (16.666%) - MADARASOVÁ GECKOVÁ, Andrea (16.666%)

Health literacy associations with periodontal disease among Slovak adults [elektronický zdroj] / Silvia Timková ... [et al.]. - Projekt: Využitie profilu zdravotnej gramotnosti na skvalitnenie manažmentu chronických ochorení - APVV APVV-16-0490.

International Journal of Environmental Research and Public Health: Open Access Journal=IJERPH. - ISSN 1660-4601. - Roč. 17, č. 6 (2020), art. no. 2152, s. [1-12]. - Spôsob prístupu: <https://www.scopus.com/record/display.uri?eid=2-s2.0-85082726178&origin=resultslist>. - DOI 10.3390/ijerph17062152

6. Other results in the field of scientific research

Institute of Epidemiology UPJŠ FM in Košice

The department has an accredited laboratory for COVID - 19 diagnostics using the RT PCR method. In 2020, it provided regular testing of UPJŠ employees and students in Košice for the presence of SARS-COV-2

Institute of Medical and Clinical Biochemistry UPJŠ FM in Košice

Completion of project solutions:

VEGA 1/0559/18: Study of the origin and progression of periodontitis using the latest molecular biochemical methods - responsible researcher: doc. RNDr. Janka Vašková, PhD.:

The VEGA 1/0559/18 project focused on the analysis of saliva in patients with periodontal disease by studying selected clinical-biochemical biomarkers. Samples were taken from patients with gingivitis, a chronic and aggressive form of periodontitis, and then compared with a group of healthy individuals. Within the monitored antioxidant parameters, it is an important finding that the activity of superoxide dismutase is significantly reduced in patients with gingivitis, but in the more advanced stage of the disease, in aggressive and chronic periodontitis it is increased. The differences between the individual patient groups are significant. Glutathione peroxidase activity has the opposite character. Previous studies have suggested that elevated SIRT1 levels can be considered a parameter in preventing periodontal disease progression, and agree that SIRT-1 levels were not found to differ between all three groups of patients. However, levels of SIRT2, which is involved in the regulation of antioxidant enzyme expression, have been significantly increased. Changes in mRNA expression of selected specific matrix metalloproteinases (eg MMP2, MMP9) and IL1-beta were also monitored. One of the most important results achieved in the solution of the VEGA 1/0559/18 project is the finding of up-regulation of the IL1-beta gene in both aggressive and chronic periodontitis. The analyzed results suggest that IL1-beta, as an inflammatory cytokine, plays a key role in activation for inflammatory proteins.

The achieved scientific-research results were published in 4 scientific-research works in extenso in scientific domestic and foreign journals. Two papers are registered in the Web of Science database and one thesis was published in a foreign scientific journal (IF: 1.216), also registered in the WoS / Scopus databases. The results were presented at domestic and foreign conferences and published in the form of abstracts (3) as well as published papers (7). Theses are registered in CU UPJŠ and a complete list of publications is also available on the CU UPJŠ website: https://aleph.upjs.sk/F/7MCUFUA1PPU88Y2FRQTTHU74T9REDC8AE879GSQTCJ5F7159Q-40009?func=find-c-0&local_base=epc01

Institute of Social and Behavioral Medicine UPJŠ FM in Košice

Membership of the institute's staff in international committees, bodies and expert advisory committees in 2020:

President of EUPHA - European Public Health Association: the umbrella organization for national public health associations in Europe - Mgr. Iveta Rajničová Nagyová, PhD <https://eupha.org/executive-council>

Member of the WHO Advisory Committee. Technical Advisory Group on Behavioural Insights and Sciences for Health - Mgr. Iveta Rajničová Nagyová, PhD; <https://www.who.int/our-work/sciencedivision/behavioural-insights/TAG-on-behavioural-insights-and-sciences-for-health-biographies>

Member of the WHO / Europe Advisory Committee on Health and Sustainable Development Goals - Advisory Expert Group on Health and Sustainable Development Goals - Mgr. Iveta Rajničová Nagyová, PhD; <http://www.euro.who.int/en/health-topics/health-policy/sustainable-development-goals>

Member of the WHO / Europe Advisory Committee on Non-Communicable / Chronic Diseases (NCDs). Regional Director's Advisory Council on Innovation for Noncommunicable Diseases - Mgr. Iveta Rajničová Nagyová, PhD; <https://www.euro.who.int/en/about-us/regional->

[director/news/news/2020/12/whoeurope-forms-ncd-advisory-council-to-inspire-and-reform-prevention-and-management-of-ncds](https://ec.europa.eu/health/award/call_vaccination_en)

Member of the 7-member Jury of the European Commission "2020 EU Health Award: Call on vaccination". The Commission was composed of representatives of prestigious international organizations and institutions: EC DG SANTE, RTD, EAC; WHO, OECD, UNICEF. Mgr. Iveta Rajničová Nagyová, PhD, was selected as the EUPHA representative; https://ec.europa.eu/health/award/call_vaccination_en
Member of the International Scientific Committee 16th World Congress on Public Health 2020, Online event, 12–16 October 2020 CET;

Member of the Commission of the Ministry of Health of the Slovak Republic for the creation, implementation and revision of standard procedures for the implementation of PpPV prevention - as a representative of the scientific / academic community - Mgr. Iveta Rajničová Nagyová, PhD; <https://www.standardnepostupy.sk/komisia-mz-sr-pre-ppv/>

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) - MUDr. Zuzana Katreniaková, PhD.

Expert guarantor of the informal platform "Prevention Forum" (cooperation with Seesame)- MUDr. Zuzana Katreniaková, PhD.

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") - MUDr. Zuzana Katreniaková, PhD.

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. Zuzana Katreniaková, PhD.

MH SR-OPS main - for psychiatry - preparation of psychiatric care reform; OPS for SOP (standard operating procedure) - preparation of SOP for suicidal patient (chairman); OPS for ŠDTP (chairman) - finalization and commenting about 8 ŠDTP - MUDr. Dagmar Breznoščáková, Ph.D.

Psychopharmacological Section SPsS SLS- organization and professional guarantee + program of the all-Slovak psychopharmacological symposium (approx. 180 participants) - November 2020- MUDr. Dagmar Breznoščáková, Ph.D.

Council of Europe - CPT: weekly plenary session - online (November 2020), membership in MHG - expert in psychopharmacology - finalization of the document "PRN treatment"- MUDr. Dagmar Breznoščáková, Ph.D.

Institute of Medical Physiology and Sleep Laboratory UPJŠ FM in Košice

Prof. MUDr. Viliam Donič, CSc.

A laboratory for research into advanced methods of artificial lung ventilation and rare gas inhalation (VYMUVEP) was established on 10th floor in the MEDIPARK premises. Head of laboratory prof. Donich.

Prof. MUDr. Viliam Donič, CSc.

Submitted: NFP313010ASX1 "Design and implementation of advanced methods of ventilation treatment and diagnosis of viral pneumonias, including Covid-19 with the possibility of their rapid adoption" (project guarantor, Prof. Viliam Donič, MD, CSc.) The project worth EUR 4.3 million was approved by the VVA.

Prof. MUDr. Viliam Donič, CSc.

He submitted a project under the EXPO 2020 DUBAI COVID-19 CALL FOR PROPOSALS on 31.12.2020 entitled Implementation of advanced lung ventilation and diagnostic methods in Covid-19, importance for today and tomorrow.

Department of Pathological Physiology UPJŠ FM

In the years 2011-2020, the interdepartmental cooperation of the Institute of Pathological Physiology (Doc. MUDr. Roman Beňačka, CSc., M.prof.,) within the project: In-depth spectrophotometric measurement of brain tissue oxygenation using NIRS (near-infrared spectroscopy) in critically ill newborns. in cooperation with the Department of Neonatology DFN (P. Krcho, MD, PhD, S. Rusnáková, MD, external aspirator ÚPF FM UPJŠ monitoring and evaluation of oxygenation parameters in high-risk newborns)

Joint Tissue Bank UPJŠ FM and UNLP in Košice

Based on the cooperation agreement between the Košice self-governing region and UPJŠ, ZTB employees, in addition to other scientific activities, regularly performed viral RNA isolation and diagnostics of the presence of Covid-19 using real-time PCR. In the period from 05 / 2020-12 / 2020, more than 2,000 samples of buccal mucosa from the throat and nose were examined in our country.

Department of Nuclear Medicine UPJŠ FM and Institute of Nuclear and Molecular Medicine

In 2020, new diagnostic methods were introduced:

1. 99mTc-ERY - MUGA test SPECT / CT for evaluation of ventricular cardiac function in patients with management of cardiotoxic chemotherapy complications - the only workplace in the Slovak Republic.
2. Introduction of examinations with new generator radiopharmaceuticals using Gallium-68 for PET / CT - 68Ga-DOTA-TOK for the diagnosis of neuroendocrine tumors and 68Ga-PSMA for the diagnosis of prostate cancer - only 3 workplaces in Slovakia.