



## List of doctoral theses of PhD students

Field of study: *General Medicine*

Study program: *Clinical Biochemistry*

### *Content*

List of doctoral theses of PhD students .....	1
Doctoral theses started in academic year 2025/2026 .....	2
Doctoral theses started in academic year 2024/2025 .....	2
Doctoral theses started in academic year 2023/2024 .....	3
Doctoral theses started in academic year 2022/2023 .....	3
Doctoral theses started in academic year 2021/2022 .....	4
Doctoral theses started in academic year 2020/2021 .....	4
Doctoral theses started in academic year 2019/2020 .....	5
Doctoral theses started in academic year 2018/2019 .....	5
Doctoral theses started in academic year 2017/2018 .....	6
Doctoral theses started in academic year 2016/2017 .....	6
Doctoral theses started in academic year 2015/2016 .....	7
Doctoral theses started in academic year 2014/2015 .....	7
Doctoral theses started in academic year 2013/2014 .....	7
Doctoral theses started in academic year 2012/2013 .....	8
List of defended doctoral theses solved between academic years 2005/2006 and 2011/12.....	8



## Doctoral theses

Department of Medical and Clinical Biochemistry



### Doctoral theses started in the academic year 2025/2026

Dissertations - PhD theses						
Topic	Type	A. year	Language	Supervisor	Student	SP
Urinary metabolome in girls with puberty onset disorders	DZP	2025/2026	SK	doc. RNDr. Beáta Čižmárová, PhD.	MUDr. Miroslava Majerníková	KBde
Studying the role of TGF- $\beta$ signalling pathway proteins in gastrointestinal tract tumors	DZP	2025/2026	SK	prof. Ing. Mária Mareková, CSc.	Mgr. Ladislav Görög	KBd
Biomarkers of inflammation in tear fluid as predictors of neurodegenerative diseases	DZP	2025/2026	SK	prof. RNDr. Vladimíra Tomečková, PhD.	MUDr. Adriána Rašiová	KBde
New possibilities for non-invasive diagnosis of embryo quality in the in vitro fertilization process	DZP	2025/2026	SK	doc. MUDr. Silvia Toporcerová, PhD.	RNDr. Martina Martonová	KBde

### Doctoral theses started in academic year 2024/2025

Dissertations - PhD theses						
Topic	Type	A. year	Language	Supervisor	Student	St. prog.
Study of selected clinical-biochemical parameters in severe infections in children	DZP	2024/2025	SK	doc. Ing. Katarína Dubayová, PhD.	MUDr. Milan Kurák	KBde
Use of laboratory methods in embryo profiling in the IVF process	DZP	2024/2025	SK	doc. MUDr. Silvia Toporcerová, PhD., MBA	RNDr. Dominika Šeršeň	KBde
Profiling of endometrial receptivity in the process of assisted reproduction	DZP	2024/2025	SK	doc. RNDr. Miroslava Rabajdová, PhD., univerzitná profesorka	Mgr. Nicole Fabianová, MHA	KBd
Clinical-biochemical markers of eye diseases	DZP	2024/2025	SK	doc. RNDr. Vladimíra Tomečková, PhD., univerzitná profesorka	MUDr. Simona Knížová	KBde
New approaches in the diagnosis of the ocular surface and tear fluid	DZP	2024/2025	SK	doc. RNDr. Vladimíra Tomečková, PhD., univerzitná profesorka	MUDr. Tereza Ilavská	KBde
Analysis of selected subfractions of lipoprotein particles in ischemic heart disease	DZP	2024/2025	SK	prof. Ing. Mária Mareková, CSc.	Jana Lukáčová, M.Sc.	KBd



## Doctoral theses

### Department of Medical and Clinical Biochemistry



Use of clinical-biochemical methods in the study of erysipelas and cellulitis	DZP	2024/2025	SK	prof. Ing. Mária Mareková, CSc.	MUDr. Vladimíra Nagyová	KBde
Endometrial redox status and its effect on IVF receptivity	DZP	2024/2025	SK	prof. RNDr. Janka Vašková, PhD.	Mgr. Jakub Pudelský	KBd

### Doctoral theses started in academic year 2023/2024

Dissertations - PhD theses						
Topic	Type	A. year	Language	Supervisor	Student	St. prog.
Association of markers of inflammation and oxidative stress with the development of postoperative cognitive dysfunction	DZP	2023/2024	SK	doc. RNDr. Janka Vašková, PhD.	Mgr. Gabriela Sabolová	KBd
Study of the presence of sexually transmitted pathogens in seminal plasma on male fertility using methods at the molecular level	DZP	2023/2024	SK	prof. Ing. Mária Mareková, CSc.	RNDr. Zuzana Váczy	KBde
Application of fluorescence techniques for the analysis of body fluids for early and non-invasive diagnosis of selected serious diseases	DZP	2023/2024	SK	prof. Ing. Katarína Dubayová, PhD.	RNDr. Katarína Fiedlerová	KBde
Study of the relationship between the frequency of examination of selected biochemical parameters and the health status of patients	DZP	2023/2024	SK	prof. MUDr. Ivan Tkáč, PhD.	Mgr. Martin Selvek	KBde

### Doctoral theses started in academic year 2022/2023

Dissertations - PhD theses					
Topic	Type	Language	Supervisor	Student	St. prog.
Diagnostic and predictive-prognostic use of molecular-biochemical methods in the pathology of neoplastic conditions	DZP	SK	prof. Ing. Mária Mareková, CSc.	MUDr. Peter Bohuš	KBde



## Doctoral theses

### Department of Medical and Clinical Biochemistry



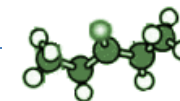
Characterization of the inflammation-induced microenvironment in polytrauma	DZP	SK	doc. RNDr. Miroslava Rabajdová, PhD.	Mgr. Eva Kriváková	KBd
Study of clinical-biochemical biomarkers in diseases of the cardiovascular system	DZP	SK	prof. Ing. Mária Mareková, CSc.	Mgr. Peter Artimovič	KBd
Study of specific biomarkers in acute and chronic damage to the body	DZP	SK	doc. MUDr. Jozef Firment, PhD.	MUDr. Ester Tomajková	KBd

### Doctoral theses started in academic year 2021/2022

Dissertations - PhD theses					
Topic	Type	Language	Supervisor	Student	St. prog.
Study of the metabolomics profile of breast cancer	DZP	SK	doc. RNDr. Miroslava Rabajdová, PhD.	Mgr. Anna Hurajtová	KBd
Study and analysis of miRNAs in the process of embryogenesis in IVF	DZP	SK	doc. MUDr. Silvia Toporcerová, PhD.	Mgr. Lucia Peterová	KBde

### Doctoral theses started in academic year 2020/2021

Dissertations - PhD theses					
Topic	Type	Language	Supervisor	Student	St. prog.
Study of selected biomarkers in reproductive disorders	DZP	SK	doc. RNDr. Miroslava Rabajdová, PhD.	Mgr. Michaela Abrahamovská	KBd
Molecular and cellular factors of the origin and development of synovitis and osteoarthritis of the weight-bearing joints	DZP	SK	MVDr. Ján Rosocha, CSc.	Mgr. Marko Morávek	KBd
Fluorescence profile analysis of body fluids as a diagnostic tool for monitoring cancer	DZP	SK	doc. Ing. Katarína Dubayová, PhD.	PharmDr. Valentína Pribulová	KBde
Study of molecular-biochemical diagnostically important biomarkers in cancer	DZP	SK	prof. Ing. Mária Mareková, CSc.	Mgr. Monika Švecová	KBd
Diagnostic potential of saliva in periodontal diseases	DZP	SK	doc. RNDr. Marek Stupák, PhD.	Mgr. Ivana Večurkovská	KBd



### Doctoral theses started in academic year 2019/2020

Dissertations - PhD theses					
Topic	Type	Language	Supervisor	Student	St. prog.
Non-coding RNAs as biomarkers of gynaecological malignancies	DZP	SK	doc. RNDr. Miroslava Rabajdová, PhD.	Mgr. Zuzana Klepcová	KBd
Use of non-coding RNAs in an infertility study	DZP	SK	doc. RNDr. Miroslava Rabajdová, PhD.	Mgr. Katarína Kalinová	KBd
Study of surface and secreted proteins of new isolates of probiotic bacteria	DZP	SK	Doc. Ing. Katarína Dubayová, PhD.	MUDr. Ivana Lukáčová	KBd

### Doctoral theses started in academic year 2018/2019

Dissertations - PhD theses					
Topic	Type	Language	Supervisor	Student	St. prog.
Analysis of molecular biochemical changes in chronically dialysis patients	DZP	SK	doc. RNDr. Miroslava Rabajdová, PhD.	Mgr. Andrea Obušeková	KBd
A comprehensive approach to detect the progression of Alzheimer's disease	DZP	SK	doc. Mgr. Peter Urban, PhD.	Mgr. Petra Lamancová	KBd
Fluorescence analysis of saliva as a diagnostic marker of oral disease	DZP	SK	doc. Ing. Katarína Dubayová, PhD.	MDDr. Petra Bejdová	KBde
Use of molecular biochemical methods in the study of <i>in vitro</i> fertilization	DZP	SK	doc. RNDr. Miroslava Rabajdová, PhD.	Mgr. Dominika Veselinyová	KBde
Study of hard dental tissue diseases and periodontium using laser and clinical-biochemical methods	DZP	SK	doc. RNDr. Vladimíra Tomečková, PhD.	MDDr. Jana Ohlasová	KBde
Association of markers of oxidative stress with the progression of periodontitis	DZP	SK	doc. RNDr. Janka Vašková, PhD.	MDDr. Jana Kluknavská	KBde



### Doctoral theses started in academic year 2017/2018

Dissertations - PhD theses					
Topic	Type	Language	Supervisor	Student	St. prog.
Use of molecular biochemical analyzes in the study of endometrial cancer	DZP	SK	prof. Ing. Mária Mareková, CSc.	Mgr. Zuzana Biščáková	KBd
Biomarkers of developmental competence of human embryos <i>in vitro</i>	DZP	SK	doc. MUDr. Silvia Toporczerová, PhD.	RNDr. Petra Bojčíková.	KBd
Acetylcholinesterase polymorphisms in relation to its efficacy in patients with postoperative residual curarization	DZP	SK	Doc. RNDr. Janka Vašková, PhD.	MUDr. Lukáš Čuchráč	KBde

### Doctoral theses started in academic year 2016/2017

Dissertations - PhD theses					
Topic	Type	Language	Supervisor	Student	St. prog.
Study and monitoring of omega-3 polyunsaturated fatty acids in cardiovascular diseases	DZP	SK	doc. RNDr. Vladimíra Tomečková, PhD.	Mgr. Monika Široká	KBd
Study of endogenous sirtuins and possibilities of their use in clinical-biochemical diagnostics	DZP	SK	doc. RNDr. Vladimíra Tomečková, PhD.	Mgr. Kristína Krajčíková	KBd
The effect of long - term opiate treatment on the redox state of patients	DZP	SK	doc. MVDr. Ladislav Vaško, CSc.	MUDr. Daniela Ogurčáková	KBde
Metabolic factors influencing the progression of chronic viral hepatitis C	DZP	SK	prof. Ing. Mária Mareková, CSc.	MUDr. Lenka Oravcová	KBde
Clinical-biochemical markers of benign ovarian tumors	DZP	SK	doc. RNDr. Marek Stupák, PhD.	MUDr. Lenka Kraus	KBde
Clinical-biochemical markers of malignant ovarian tumors	DZP	SK	prof. Ing. Mária Mareková, CSc.	MUDr. Vladimír Kraus	KBde



Doctoral theses started in academic year 2015/2016

Dissertations - PhD theses					
Topic	Type	Language	Supervisor	Student	St. prog.
Profile fluorescence analysis and molecular markers in the diagnosis of breast cancer	DZP	SK	prof. Ing. Mária Mareková, CSc.	Mgr. Michaela Ferenčáková	KBd
Influence of selected natural substances of plant origin on the parameters of oxidative stress	DZP	SK	doc. MVDr. Ladislav Vaško, CSc.	MVDr. Martin Haus	KBd

Doctoral theses started in academic year 2014/2015

Dissertations - PhD theses					
Topic	Type	Language	Supervisor	Student	St. prog.
Use of POCT in clinical-biochemical diagnostics	DZP	SK	prof. Ing. Mária Mareková, CSc.	RNDr. Klára Lakatošová	KBde

Doctoral theses started in academic year 2013/2014

Dissertations - PhD theses					
Topic	Type	Language	Supervisor	Student	St. prog.
Vitamin D as a clinical-biochemical marker	DZP	SK	prof. Ing. Mária Mareková, CSc.	Mgr. Ivana Špaková	KBd
Influence of antioxidant status and selected lipid parameters by natural substances of plant origin	DZP	SK	doc. MVDr. Ladislav Vaško, CSc.	Mgr. Radka Džurinová	KBd
Diagnostic potential of tears in ophthalmology	DZP	SK	doc. RNDr. Vladimíra Tomečková, PhD.	MUDr. Gabriela Švehlíková	KBd
Phosphorylation of protein markers of lymphocytes in multiple sclerosis	DZP	SK	doc. MUDr. Jarmila Szillasiová, PhD.	RNDr. Marina Maďarová	KBde
Influence of humic acids on the activity of antioxidant enzymes and selected metabolites in the blood and in organs	DZP	SK	doc. MVDr. Ladislav Vaško, CSc.	Mgr. Daniel Žatko	KBd



**Doctoral theses started in academic year 2012/2013**

<b>Dissertations - PhD theses</b>					
<b>Topic</b>	<b>Type</b>	<b>Language</b>	<b>Supervisor</b>	<b>Student</b>	<b>St. prog.</b>
Monitoring of selected clinical and biochemical parameters in assessing the health status of marginalized groups	DZP	SK	prof. Ing. Juraj Guzy, CSc.	Mgr. Gabriel Bódy	KBd
Study of clinical-biochemical changes at the molecular level in cardiovascular diseases	DZP	SK	prof. Ing. Mária Mareková, CSc.	Mgr. Zuzana Guľašová	KBd
Laboratory diagnosis of periodontitis	DZP	SK	prof. Ing. Mária Mareková, CSc.	MUDr. Beáta Bolerázska	KBd
Influence of humic substances on the resorption of some heavy metals and pesticides from GIT	DZP	SK	doc. MVDr. Ladislav Vaško, CSc.	MVDr. Klára Krempaská	KBd

**List of defended doctoral theses solved between academic years 2005/2006 and 2011/12**

<b>Dissertations - PhD theses</b>					
<b>Topic</b>	<b>Type</b>	<b>Language</b>	<b>Supervisor</b>	<b>Student</b>	<b>St. prog.</b>
Influence of osteoporosis treatment on osteomarkers and local bone factors	DZP	SK	prof. Ing. Juraj Guzy, CSc.	Mgr. Anton Vaňuga	KBde
Determination of selected metabolites in the urine of marginalized and immunocompromised population groups	DZP	SK	prof. Ing. Juraj Guzy, CSc.	Ing. Beáta Hubková	KBd
Humic substances and oxidative status of the organism	DZP	SK	doc. MVDr. Ladislav Vaško, CSc.	MVDr. Andrea Fejerčáková	KBd
Influence of PUFA on gastrointestinal colonization	DZP	SK	doc. MVDr. Ladislav Vaško, CSc.	MVDr. Anna Supuková	KBd
Content and ratio of FA with a focus on $\omega$ -6 and $\omega$ -3 in vegetable oils, nutritional supplements and blood serum and the effect of $\omega$ -3 FA intake on selected lipid and atherogenic blood parameters	DZP	SK	doc. MVDr. Ladislav Vaško, CSc.	RNDr. Zdenka Hertelyová	KBd



## Doctoral theses

### Department of Medical and Clinical Biochemistry



Use of selected protein markers in clinical-biochemical diagnostics	DZP	SK	prof. Ing. Juraj Guzy, CSc.	MUDr. Renáta Lenártová	KBde
Pathobiochemical changes on mucosal and tissue surfaces - monitoring using 3-D fluorescence spectra	DZP	SK	prof. Ing. Mária Mareková, CSc.	RNDr. Marcela Valko-Rokytovská	KBd
The main fluorescent components of urine (urinary metabolome) and their diagnostic use	DZP	SK	prof. Ing. Mária Mareková, CSc.	RNDr. Lucia Lichardusová,	KBd
Influence of low molecular weight ligands on mitochondria and their interactions with DNA	DZP	SK	prof. Ing. Mária Mareková, CSc.	RNDr. Miroslava Revická	KBd
Early diagnosis of cancer in women by profile fluorescence analysis	DZP	SK	prof. Ing. Mária Mareková, CSc.	MVDr. Zuzana Štefeková	KBd
Current possibilities of laboratory diagnostics and monitoring of monoclonal gammopathy	DZP	SK	prof. Ing. Juraj Guzy, CSc.	MUDr. Eva Ďurovcová	KBde
Use of new biochemical and molecular markers in clinical-biochemical diagnostics	DZP	SK	prof. Ing. Mária Mareková, CSc.	RNDr. Miroslava Rabajdová	KBde
Metabolic profiling and its diagnostic possibilities	DZP	SK	doc. Ing. Mária Mareková, CSc.	MUDr. Anna Birková	KBde
Antioxidant systems and their participation in pathological conditions	DZP	SK	prof. Ing. Juraj Guzy, CSc.	MUDr. Pavel Kočan	KBde
Study of biochemical aspects of the influence of natural and synthetic antioxidants at the subcellular level	DZP	SK	prof. Ing. Juraj Guzy, CSc.	RNDr. Martina Poškrobová	KBde
Relationship between lipid and humoral-immunological profile in cardiovascular diseases	DZP	SK	doc. Ing. Ivan Kron, CSc.	RNDr. Judita Koprovičová	KBde
Amino acid metabolites as potential markers of renal cell carcinoma	DZP	SK	doc. Ing. Ivan Kron, CSc.	RNDr. Patrik Jalč.,	KBd