



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 6489

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Scienze Farmacologiche e Biomolecolari**

Scientist- in - charge: Prof. Cristofani Riccardo Maria

**Mária Brodňanová**

## CURRICULUM VITAE

### PERSONAL INFORMATION

Surname	Brodňanová
Name	Mária

### PRESENT OCCUPATION

Appointment	Structure
Postdoc researcher	Laboratory of Proteomics and Mitochondriopathies, Biomedical Centre Martin, Jessenius Faculty of Medicine in Martin, Comenius University in Bratislava, Slovakia

### EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree			
Specialization			
PhD	Medical Biochemistry	Comenius University	2021
Master	Genetics	Comenius University	2017
Degree of medical specialization			
Degree of European specialization			
Other			

### REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date	of	Association	City
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registration		
10.2.2020	Slovak Society for Neuroscience	Košice, Slovakia
26.4.2022	European Society for Neurochemistry	Birmingham, UK
26.4.2022	Federation of European Neuroscience Societies	Brussels, Belgium
28.4.2022	International Society for Neurochemistry	
22.11.2023	Slovak Society for Biochemistry and Molecular Biology	Bratislava, Slovakia

## FOREIGN LANGUAGES

Languages	level of knowledge
English	B2

## AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2017	Grant for PhD students and young researchers at Comenius University
2021	XI. Memorial of Prof. Drobnica Award-winning oral presentation
2022	ISN Travel Award to attend the ISN-APSN 2022
2022	Travel Award to attend 42. Magnesium-Symposium der Gesellschaft für Magnesium-Forschung
2023	ISN Travel Award to attend the ISN-ESN 2023

## TRAINING OR RESEARCH ACTIVITY

18.2.2018 - 24.2.2018	IFCC IX. Beginners Course in Molecular Diagnostics
3.8.2023 - 7.8.2023	ISN ISN Advanced School - New challenges and opportunities in neurochemical studies - novel tools and approaches

## PROJECT ACTIVITY

Year	Project
2023 - current	Identification of components of magnesium homeostasis and study of the regulation in blood-brain barrier cells
2019 - current	Analysis of mitochondrial fitness for diagnostics and prediction of Parkinson's disease
2018 - 2021	The role of STAT-signaling pathway in the regulation of promoter of <i>SLC41A1</i> Na <sup>+</sup> /Mg <sup>+</sup> exchanger: From inflammation to Parkinson's disease
2016 - 2021	The role of cellular organelles and their interactions in process of protein synthesis, modification and degradation in relation to ischemia-induced delayed neuronal death
2017 - 2021	The impact of changes in expression of gene encoding magnesium transporter on cell response mechanisms in different models of endoplasmic reticulum stress



## PATENTS

Patent

## CONGRESSES AND SEMINARS

Date	Title	Place
8.8.2023 - 11.8.2023	ISN-ESN Meeting	Porto, Portugal
3.8.2023 - 7.8.2023	2023 ISN Advanced School: New challenges and opportunities in neurochemical studies - novel tools and approaches	Caminha, Portugal
7.7.2023 - 4.7.2023	6th World Parkinson Congress	Barcelona, Spain
10.11.2022 - 12.11.2022	42. Symposium der Gesellschaft für Magnesium-Forschung	Bielefeld, Germany
28.8.2022 - 1.9.2022	ISN-ASPN Meeting	Honolulu, USA
2.9.2021 - 4.9.2021	XI. Memorial of Prof. Drobnica	Trenčín, Slovakia
29.8.2021 - 1.9.2021	XXVI. Annual Congress of Czech and Slovak Societies for Biochemistry and Molecular Biology	České Budejovice, Czech Republic
11.7.2020 - 15.7.2020	12th FENS Forum of Neuroscience	Virtual Forum
21.9.2019 - 24.9.2019	Biochemical Days (SSBMB)	Horný Smokovec, Slovakia
11.9.2019 - 13.9.2019	X. Memorial of Prof. Drobnica	Stará Lesná, Slovakia
1.9.2019 - 4.9.2019	23rd ESN Biennial Meeting	Milan, Italy
4.7.2019 - 7.7.2019	5th World Parkinson Congress	Kyoto, Japan

## PUBLICATIONS

Books

Articles in reviews
Žiaková Katarína, Pilchová Ivana, Dibdiaková Katarína, Brodňanová Mária, Pokusa Michal, Kalenská Dagmar, Račay Peter. Involvement of Proteasomal and Endoplasmic Reticulum Stress in Neurodegeneration After Global Brain Ischemia (2023) <i>Molecular Neurobiology</i>
Cibulka Michal, Brodňanová Mária, Grendár Marián, Necpal Jan, Benetin Jan, Han Vladimír, Kurča Egon, Nosál Vladimír, Škorvánek Matej, Veselý Branislav, Štanclová Andrea, Lasabova Zora, Pös Zuzana, Szemes Tomáš, Stuchlík Stanislav, Grofik Milan, Kolísek Martin. Alzheimer's Disease-Associated SNP rs708727 in SLC41A1 May Increase Risk for Parkinson's Disease: Report from Enlarged Slovak Study (2022) <i>International Journal of Molecular Sciences</i>
Evinová Andrea, Hatoková Zuzana, Tatarková Zuzana, Brodňanová Mária, Dibdiaková Katarína, Račay Peter. Endoplasmic reticulum stress induces mitochondrial dysfunction but not mitochondrial unfolded protein response in SH-SY5Y cells (2022) <i>Molecular and Cellular Biochemistry</i>



Brodňanová Mária, Hatoková Zuzana, Evinová Andrea, Cibulka Michal, Račay Peter. Differential impact of imipramine on thapsigargin- and tunicamycin-induced endoplasmic reticulum stress and mitochondrial dysfunction in neuroblastoma SH-SY5Y cells (2021) <i>European Journal of Pharmacology</i>
Cibulka Michal, Brodňanová Mária, Grendár Marián, Grofik Milan, Kurča Egon, Pilchová Ivana, Osina Oto, Tatarková Zuzana, Dobrota Dušan, Kolísek Martin. SNPs rs11240569, rs708727, and rs823156 in SLC41A1 Do Not Discriminate Between Slovak Patients with Idiopathic Parkinson's Disease and Healthy Controls: Statistics and Machine-Learning Evidence (2019) <i>International Journal of Molecular Sciences</i>
Saksonová Simona, Brodňanová Mária, Dibdiaková Katarína, Pilchová Ivana, Klačanová Katarína, Hatok Jozef, Račay Peter. Cobalt chloride affects the death of SH-SY5Y cells induced by inhibition of ubiquitin proteasome system. Role of heat shock protein 70 and caspase 3 (2018) <i>General Physiology and Biophysics</i>
<b>Congress proceedings</b>
Mária Brodňanová, Michal Cibulka, Martin Kolísek. A putative impact of IL-6 on the expression of magnesiotropic genes through the activation of the JAK/STAT3 pathway; oral presentation; 42. Symposium der Gesellschaft für Magnesium-Forschung, Bielefeld, Germany (2022)
Mária Brodňanová, Michal Cibulka, Peter Račay. How can magnesium deficiency interfere with cell response to endoplasmic reticulum stress?; oral presentation; XI. Memorial of Prof. Drobica, Trenčín, Slovakia (2021)
Mária Brodňanová, Michal Cibulka, Ivana Pilchová, Peter Račay. How can magnesium deficiency interfere with cell response to endoplasmic reticulum stress?; oral presentation; X. Memorial of Prof. Drobica, Stará Lesná, Slovakia (2019)
Mária Brodňanová, Michal Cibulka, Milan Grofik, Natália Huňarová, Andrea Ižarik Verešpejová, Egon Kurča, Martin Kolísek. Apoptosis-related Proteins in PBMC as Markers for Parkinson's Disease Development - A Pilot Study; poster communication; ISN-ESN Meeting, Porto, Portugal (2023)
Mária Brodňanová, Michal Cibulka, Milan Grofik, Egon Kurča, Natália Huňarová, Andrea Ižarik Verešpejová, Martin Kolísek. Apoptosis-Related Markers from Peripheral Blood Mononuclear Cells as Potential Biomarkers of Parkinson's Disease; poster communication; 6th World Parkinson Congress, Barcelona, Spain (2023)
Mária Brodňanová, Michal Cibulka, Martin Kolísek. IL-6: A Putative Link between Neuroinflammation and Disturbed Magnesium Homeostasis?; poster communication; ISN-ASP Meeting, Honolulu, USA (2022)
Mária Brodňanová, Zuzana Hatoková, Michal Cibulka, Andrea Evinová, Peter Račay. Impact of Imipramine on Unfolded Protein Response and Mitochondrial Dysfunction; poster communication; XXVI. Annual Congress of Czech and Slovak Societies for Biochemistry and Molecular Biology, České Budejovice, Czech Republic (2021)
Mária Brodňanová, Michal Cibulka, Peter Račay. Imipramine as an enhancer of the cell response to endoplasmic reticulum stress; poster communication; 12th FENS Forum (2020)
Mária Brodňanová, Simona Saksonová, Katarína Dibdiaková, Ivana Pilchová, Katarína Klačanová, Jozef Hatok, Peter Račay. Effect of cobalt chloride on death induced by inhibition of ubiquitin proteasome system; poster communication; 23rd ESN Biennial Meeting, Milan, Italy (2019)
Mária Brodňanová, Michal Cibulka, Ivana Pilchová, Peter Račay. Imipramine potentiates thapsigargin and tunicamycin-induced endoplasmic reticulum stress (2019) <i>Biochemical Days (SSBMB)</i> , Horný Smokovec, Slovakia (2019)
Mária Brodňanová, Michal Cibulka, Martin Kolísek, Ivana Pilchová, Zuzana Tatarková, Milan Grofik, Egon Kurča, Oto Osina, Peter Račay. Association between SNIP of SLC41A1 and Parkinson's disease risk in the central Europe population; poster communication; 5th World Parkinson Congress, Kyoto, Japan (2019)



## OTHER INFORMATION


Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

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Place and date: Martin, 28.3.2024