MÁRIA PÉTER, PhD
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Laboratory of Molecular Stress Biology

[PUBLICATION SUMMARY]
[LIST OF PUBLICATIONS]

PERSONAL DATA

Born	1973

QUALIFICATIONS

MSc	1996, Chemistry (JATE, Szeged, Hungary)
PhD	2001, Pharmaceutical Sciences (SZTE, Hungary)

PROFESSIONAL EXPERIENCE

2007-	Research Associate, Institute of Biochemistry, Biological Research Centre (BRC), Szeged, Hungary
1998 (2 months)	CEEPUS fellowship, Comenius University, Slovakia
1997 (6 months)	Copernicus fellowship, University of Ghent, Belgium

RESEARCH INTEREST AND SKILLS

- Invertigation of lipidome composition in tissues and cell cultures under normal and pathophysiological conditions
- Studying the alterations in lipid metabolism in acute and chronic stresses
- Detailed knowledge of the lipidomic workflow from lipid extraction through mass spectrometry-based shotgun lipidomics to statistical evaluation of results

LANGUAGES

Hungarian (mother tongue)
English (advanced in written and spoken)
German (intermediate in written and spoken)

HONORS & FELLOWSHIPS

2001-2002	OTKA postdoctoral fellowship
2001	Best PhD dissertation in pharmaceutics
2001	SZAB Dissertation Competition, 1st place
2000	1-year grant of the SOROS Foundation for graduating doctoral (PhD) students
1998	1st prize at the IV. Ottó Clauder Memorial Contest

1997	Pro Scientia Gold Medal
1997	1st prize at the XXIII. National Conference for Young Scientists, section: Chemistry and Chemical Industry (OTDK 1997)

RESEARCH GRANTS

2001-2002	OTKA postdoctoral fellowship

TEACHING ACTIVITY

2015-2019	Practical demonstrations on lipidomics (ITC course, Szeged, Hungary)

THESIS SUPERVISION

MSc supervision	1

MEMBERSHIPS

Member of the Hungarian Biochemical Society

OTHER ACTIVITIES

Mother of 2 children

SELECTED PUBLICATIONS

- Péter, M. et al. Cerebrospinal fluid lipidomic biomarker signatures of demyelination for multiple sclerosis and Guillain–Barré syndrome. Sci. Rep. 10, (2020).
- Makarova, M. et al. Delineating the Rules for Structural Adaptation of Membrane-Associated Proteins to Evolutionary Changes in Membrane Lipidome. Curr. Biol. 30, 367-380.e8 (2020).
- Balogh, G. et al. Sustained maternal smoking-associated changes in the physico-chemical properties of fetal RBC membranes might serve as early markers for vascular comorbidities. Biochim. Biophys. Acta - Mol. Cell Biol. Lipids 1865, (2020).
- Szűcs, G. et al. Prediabetes Induced by Fructose-Enriched Diet Influences Cardiac Lipidome and Proteome and Leads to Deterioration of Cardiac Function prior to the Development of Excessive Oxidative Stress and Cell Damage. Oxid. Med. Cell. Longev. 2019, (2019).
- Péter, M. et al. Metabolic crosstalk between membrane and storage lipids facilitates heat stress management in Schizosaccharomyces pombe. PLoS One 12, (2017).
- Laurinyecz, B. et al. Reduced expression of CDP-DAG synthase changes lipid composition and leads to male sterility in Drosophila. Open Biol. 6, (2016).
- Antal, O. et al. Lipidomic analysis reveals a radiosensitizing role of gamma-linolenic acid in glioma cells. Biochim. Biophys. Acta - Mol. Cell Biol. Lipids 1851, 1271–1282 (2015).
- Balogh, G. et al. Key role of lipids in heat stress management. FEBS Letters 587, 1970–1980 (2013).
- Péter, M. et al. Nutritional lipid supply can control the heat shock response of B16 melanoma cells in culture. Mol. Membr. Biol. 29, 274–289 (2012).
- Balogh, G. et al. Lipidomics reveals membrane lipid remodelling and release of potential lipid mediators during early stress responses in a murine melanoma cell line. Biochim. Biophys. Acta - Mol. Cell Biol. Lipids 1801, 1036–1047 (2010).