MARCELL CSERHALMI

Semmelweis University
1st Department of Paediatrics

Address: Bókay János u. 53-54., H-1083 Budapest, Hungary

RESEARCH AREA

I joined the „Momentum" Diabetes Research Group of Prof. Andrea Fekete as a postdoctoral researcher, a year ago. During my work, I deal with drug development and identify new mechanisms of action and therapeutic targets applicable to the multiorgan complications of diabetes. Our research focus is the Sigma-1 receptor and its signaling pathways. I am currently focusing on multiorgan complications caused by hyperglycemia, primarily eye and kidney damage in animal experiments and in vitro cell culture models.

TECHNIQUES AVAILABLE IN THE LAB

I have more than 10 years of experience in molecular biological methods (e.g.: Western blot, qPCR, ELISA, immunocytochemistry, confocal microscope, flow cytometry, in vitro cell culture, techniques on cell lines, protein, DNA, RNA extraction, protein production in eukaryotic and prokaryotic organisms). We also use a significant part of them in our research.

SELECTED PUBLICATIONS

Bozsik, A., Butz, H., Grolmusz, VK., Polgár, C., Patócs, A., Papp, J. (2023) Genome sequencing-based discovery of a novel deep intronic APC pathogenic variant causing exonization. **Eur J Hum Genet 31:** 7 pp. 841-845.

Butz, H., **Bozsik, A.**,* Grolmusz, V., Szőcs, E., Papp, J., Patócs, A. (2023) Challenging interpretation of germline TP53 variants based on the experience of a national comprehensive cancer centre. **Sci Rep 13:** 1 Paper: 14259.

Butz, H., Nagy, P., Papp, J., **Bozsik, A.**, Grolmusz, VK., Pócza, T., Oláh, E., Patócs, A. (2023) PALB2 Variants Extend the Mutational Profile of Hungarian Patients with Breast and Ovarian Cancer. **Cancers 15:** 17 Paper: 4350.

Grolmusz, VK., Nagy, P., Likó, I., Butz, H., Pócza, T., **Bozsik, A.**, Papp, J., Oláh, E., Patócs, A. (2023) A common genetic variation in GZMB may associate with cancer risk in patients with Lynch syndrome. **Front Oncol 13** Paper: 1005066.

Pálla, S., Tőke, J.,* **Bozsik, A.**,* ; Butz, H., Papp, J., Likó, I., Kuroli, E., Bánvölgyi, A., Hamar, M., Bertherat, J. et al. (2023) Whole genome sequencing resolves 10 years diagnostic odyssey in familiar myxoma. **Sci Rep 13:** 1 Paper: 14658.

Bozsik, A., Papp, J., Grolmusz, VK., Patócs, A., Oláh, E., Butz, H. (2022) Reclassification of Five BRCA1/2 Variants with Unknown Significance Using Complex Functional Study. **Cancer Res Treat 54:** 4 pp. 970-984.

Butz, H., Lövey, J.,* Szentkereszty, M., **Bozsik, A.**, Tóth, E., Patócs, A. (2022) Case Report: A Novel Pathomechanism in PEComa by the Loss of Heterozygosity of TP53. **Front Oncol 12** Paper: 849004.