

Curriculum Vitae
Dr. Milán Somogyvári



Personal details

- Place and time of birth: Szigetvár, 1986.01.11.
- Nationality: Hungarian
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Professional experience

- 2021.08.02. to present | assistant professor (Department of Molecular Biology, Semmelweis University Budapest, Hungary) Workgroup of Dr. Csaba Sőti.

As a member of the research group, I am involved in two types of research. Firstly, I am investigating the regulation of lipid metabolism by SIR-2.1 and HSF-1 in the roundworm *C. elegans*. This aims to deepen our understanding of their connection to aging and stress response processes. Secondly, as part of a project supported by a grant from the Hungarian Scientific Research Fund, I am creating inducibly expressed strains of *C. elegans* with biotin-ligase-fused Hsp90 protein. Through this, I explore the interactome of this heat shock protein in the roundworm.

As an instructor at the Department, I participate in teaching medical chemistry and molecular cell biology to medical students, sharing my knowledge to the best of my ability. Additionally, I coordinate research activities for student groups and potentially supervise undergraduate and PhD student projects.

- 2020.02.01. to 2021.08.01. | assistant lecturer (Institute of Medical Chemistry, Molecular Biology and Pathobiochemistry, Semmelweis University Budapest, Hungary)
- 2017 to 2020.08.01. assistant research fellow (Institute of Medical Chemistry, Molecular Biology and Pathobiochemistry, Semmelweis University Budapest, Hungary)

Education

- 2011.09.01. to 2019.07.15. | PhD student (Doctoral School of Molecular Medicine, Institute of Medical Chemistry, Molecular Biology and Pathobiochemistry, Semmelweis University Budapest, Hungary)
 - Dissertation title: Investigation of the biological role of HSP-90 chaperone in *C. elegans*.
- 2004.09.01. to 2011.01.25. | Major in Biology (Eötvös Loránd University Budapest, Hungary)
 - Thesis title: The effect of sirtuins and resveratrol on lifespan and stress response.

Other research activities

- 2007-2010: The relationship between stress responses and aging. Students' Scientific Association, Semmelweis University, Institute of Medical Chemistry, Molecular Biology and Pathobiochemistry. Supervisor: Dr. Csaba Sőti.
- 2009: 3-month study trip, collaborative research on the role of resveratrol and sirtuins in lifespan regulation, London (*C. elegans* Aging Laboratory, Institute of Healthy Aging, University College London)

Educational activities:

- 2012-: Molecular Medicine Research seminar lecture
- 2020-: Medical Chemistry lab practice in English, German and Hungarian
- 2021-: Molecular Cell Biology 1 and 2 lab practices in English, German and Hungarian
- 2022-: Fundamentals of Medical Chemistry, Medical Chemistry and Molecular Cell Biology lectures in English and Hungarian
- 2022-: Co-Supervision with Dr. Csaba Sőti of PhD candidate Saba Khatatneh in the Doctoral School of Molecular Medicine.

Publications:

1. Burnett C, Valentini S, Cabreiro F, Goss M, Somogyvári M, Piper MD, Hoddinott M, Sutphin GL, Leko V, McElwee JJ, Vazquez-Manrique RP, Orfila AM, Ackerman D, Au C, Vinti G, Riesen M, Howard K, Neri C, Bedalov A, Kaerberlein M, Soti C, Partridge L, Gems D. (2011) Absence of effects of Sir2 overexpression on lifespan in *C. elegans* and *Drosophila*. *Nature* 477(7365), 482-485.
2. Spiró Z, Arslan MA, Somogyvári M, Nguyen MT, Smolders A, Dancsó B, Németh N, Elek Z, Braeckman BP, Csermely P, Sőti C. (2012) RNA interference links oxidative stress to the inhibition of heat stress adaptation. *Antioxid Redox Signal* 17(6), 890-901.
3. Somogyvári M, Gecse E, Sőti C. (2018) DAF-21/Hsp90 is required for *C. elegans* longevity by ensuring DAF-16/FOXO isoform A function. *Sci Rep* 8(1), 12048.
4. Nguyen MT, Somogyvári M, Sőti C. (2018) Hsp90 Stabilizes SIRT1 Orthologs in Mammalian Cells and *C. elegans*. *Int J Mol Sci* 19(11), 3661.
5. Griñán-Ferré C, Bellver-Sanchis A, Izquierdo V, Corpas R, Roig-Soriano J, Chillón M, Andres-Lacueva C, Somogyvári M, Sőti C, Sanfeliu C, Pallàs M. (2021) The pleiotropic neuroprotective effects of resveratrol in cognitive decline and Alzheimer's disease pathology: From antioxidant to epigenetic therapy. *Ageing Res Rev* 67, 101271.
6. Somogyvári M, Khatatneh S, Sőti C. (2022) Hsp90: From Cellular to Organismal Proteostasis. *Cells* 11(16), 2479.
7. Hajdú G, Somogyvári M, Csermely P, Sőti C. (2023) Lysosome-related organelles promote stress and immune responses in *C. elegans*. *Commun Biol* 6(1), 936.

Selected conference participations:

- European Worm Meeting 2014, Berlin, Germany

- FEBS3+, From molecules to living systems 2018, Siófok, Hungary
- *C. elegans* Development, Cell Biology and Gene Expression 2018, Barcelona, Spain
- Workshop on Autophagy in model organisms 2018, Budapest, Hungary
- European Worm Meeting 2020 ONLINE
- 23rd International *C. elegans* Conference 2021 ONLINE
- Hungarian Life Sciences Conference 2021 Eger, Hungary
- 24th International *C. elegans* Conference 2023 ONLINE
- The 2024 European Worm Meeting, Utrecht, the Netherlands
- The 12th Aging Research and Drug Discovery Meeting 2025, Copenhagen, Denmark

Language skills

- English (intermediate)
- German (basic)

Skills

- User-level computer skills (Windows, Microsoft Office)
- Use of statistical software (Origin, SPSS)
- Use of image analysis software (e.g.: ImageJ).
- Use of bioinformatics tools
- Molecular biological methods
- *Caenorhabditis elegans* physiological studies, creation of transgenic animals

Interests

- Aging research
- Genetic engineering
- Evolutionary biology
- Teaching
- Social science
- Literature, philosophy
- Music