

**ATTILA, GLATZ PhD***Senior scientist*

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Laboratory of
Molecular Stress
Biology[PUBLICATION SUMMARY](#)[LIST OF PUBLICATIONS](#)**PERSONAL DATA**

Born 1963

QUALIFICATIONS

MSc 1988, Biology (Molecular Biology and Biotechnology)

PhD 2000, Biology

PROFESSIONAL EXPERIENCE

1992- Institute of Biochemistry, Biological Research Centre (BRC), Szeged, Hungary

2004-2005 Visiting postdoc, Section of Microbiology, University of California, Davis, USA

RESEARCH INTEREST

The roles of membranes and chaperones in the heat shock response of poikilotherm Eucaryotes (fission yeast)

Molecular biology

LANGUAGES

Hungarian (mother tongue)

English (advanced in written and spoken)

Russian (intermediate in written and spoken)

HONORS & FELLOWSHIPS

2001-2004 János Bolyai Research Fellowship, Hungarian Academy of Sciences

1999: NRC Postdoctoral Research Fellowship, NAS, USA (NASA, Ames Research Center, Moffett Field, CA (cancelled for familiar reasons))

RESEARCH GRANTS

2001-2004 János Bolyai Research Fellowship: Yeast in the oven: What happens with the cellular membranes?

TEACHING ACTIVITY

1990-1992	Theoretical and practical courses on genetics (Dept. of Genetics, Attila József University of Sciences, Szeged, Hungary)
2005-2017	Theoretical courses on the heat shock response of living organisms (ITC course, Szeged, Hungary)

THESIS SUPERVISION

BSc/MSc supervision 2/3

MEMBERSHIPS

1993- Member of the Hungarian Biochemical Society

OTHER ACTIVITIES

2000-2001 Member of the Software Council of Hungarian Academy of Sciences
1999-2017 Member of the Computational Comette of BRC

SELECTED PUBLICATIONS

Makarova, M., Peter, M., Balogh, G., Glatz, A., MacRae J. I., Lopez, M. N., Booth, P., Makeyev E., Vigh L., Oliferenko, S. (2020) Delineating the Rules for Structural Adaptation of Membrane-Associated Proteins to Evolutionary Changes in Membrane Lipidome CURRENT BIOLOGY (0960-9822 1879-0445): 30 pp 367-380

Péter, M., Glatz, A., Gudmann, P., Gombos. I., Török, Z. Horváth, I., Vigh, L., Balogh G. (2017) Metabolic crosstalk between membrane and storage lipids facilitates heat stress management in *Schizosaccharomyces pombe*. PLOS ONE 12:(3) p. e0173739

Glatz, A., Pilbat A. M., Németh G. L., Vince-Kontár, K., Jósavay, K., Hunya, Á., Udvardy, A., Gombos, I., Péter, M., Balogh, G., Horváth, I., Vigh, L., Török, Z. (2016) Involvement of small heat shock proteins, trehalose, and lipids in the thermal stress management in *Schizosaccharomyces pombe*. Cell Stress & Chaperones 21, 327-338.

Glatz, A., Török, Z, Vigh, L. and Horváth, I. (2013) Heat stress management in *Synechocystis* PCC 6803: the interplay between membranes and stress protein molecular chaperones In: Stress biology of Cyanobacteria: Molecular mechanisms to cellular responses. (Srivastava, A. K, Rai, A. N., Neilan B. A., Eds) Boca Raton FL: CRC Press, pp. 145-153.

Horváth, I., Glatz, A., Nakamoto, H., Mishkind, M. L., Munnik, T., Saidi, Y., Goloubinoff, P., Harwood, J. L. and Vigh L. (2012) Heat shock response in photosynthetic organisms: Membrane and lipid connections. Prog. Lipid. Res. 51, 208-220.

Glatz A., Vass I., Los., D. A. and Vigh L. (1999) The *Synechocystis* model of stress: From molecular chaperones to membranes . Plant Physiol. Biochem. 37, 1-12.

Horváth, I., Glatz, A., Varvasovszki, V., Török, Z., Páli, T., Balogh, G., Kovács, E., Nádasy, L., Benkő, S., Joó, F. and Vigh, L. (1998) Membrane physical state controls the signaling mechanism of the heat shock response in *Synechocystis* PCC 6803: identification of hsp17 as a novel "fluidity gene" Proc. Natl. Acad. Sci. USA 95, 3513-3518.

Glatz, A., Horváth, I., Varvasovszki, V., Kovács, E., Török, Zs. and Vígh, L. (1997)
Chaperonin genes of the *Synechocystis* PCC 6803 are differentially regulated under
light-dark transition during heat stress. *Biochem. Biophys. Res. Commun.* 239, 291-297

Vígh, L., Literáti, N.P., Horváth, I., Török, Z., Balogh, G., Glatz, A., Kovács, E., Boros, I.,
Ferdinandy, P., Farkas, B., Jaszlits, L., Jednákovics, A., Korányi, L. and Maresca, B. (1997)
Bimoclomol: A nontoxic, hydroxylamine derivative with stress protein-inducing activity
and cytoprotective effects. *Nature Medicine* 3, 1150-1154..