

Curriculum Vitae Prof. Dr. Marius Lemberg

Academic Career

since 2021	Full Professor for Biochemistry (W3), Medical Faculty, University of Cologne.
2017 - 2021	W2 Professor, Faculty of Biosciences, Heidelberg University.
2016 - 2021	Elected member of the study commission of the faculty of Biosciences, Heidelberg University.
2016	Teaching certificate in Molecular Biology, Faculty of Biosciences, Heidelberg University.
2015 & 2012	Positive evaluation and extension as ZMBH group leader, Heidelberg University.
2007 - 2012	Junior group leader at the ZMBH, Heidelberg University.
2004 - 2007	Postdoctoral fellow, MRC Laboratory of Molecular Biology, Cambridge, UK.
2000 - 2004	PhD student, Institute of Biochemistry, ETH Zürich, Switzerland.
1997 - 2000	Diploma studies in Natural Sciences, ETH Zürich, Switzerland.
1995 - 1997	Undergraduate studies in Biochemistry, Eberhard Karls University Tübingen.

Fellowships and Awards

2005	Fellowship for Advanced Researchers from the Swiss National Science Foundation.
2004	Award and Silver Medal for a distinguished PhD thesis, ETH Zürich.
2003	EMBO long-term fellowship.
2001	PhD-student fellowship from the Boehringer Ingelheim Fonds.

Activities in the Scientific Community

Wellcome Trust Expert Review Group Cell Biology, UK.

Editorial Board of the Journal of Biological Chemistry.

Mercator-Fellow of DFG-funded Research Training Group GRK 2606 ProtPath, University of Freiburg.

Meeting Organizer:

EMBO ER Workshop, Lucca (Italy), planned November 2021.

GBM/DGZ Fall Conference 2019 on Age-Related Human Diseases Special Focus: Autophagy, Tübingen, September 2019.

ER & Redox Club meeting 2019, Ammersee, October 2019.

EMBO ER Workshop, Lucca (Italy), October 2018.

EMBO ER Conference, Girona (Spain), October 2016.

DKFZ-ZMBH Alliance Forum Cellular Protein Transport, Heidelberg, October 2009.

Key Publications

Dederer, V, Khmelinskii, A, Huhn, A, Okreglak, V, Knop, M., **Lemberg, M.K.** (2019) Cooperation of mitochondrial and ER factors in quality control of tail-anchored proteins. *Elife* 8, e45506.

In this paper we performed a systematic analysis of factors involved in degradation of tail-anchored proteins mislocalized to mitochondria revealing a link to the ERAD E3 ubiquitin ligase Doa10.

Meissner C., Lorenz H., Hehn B., **Lemberg M.K.** (2015) Intramembrane protease PARL defines a negative regulator of PINK1- and PARK2/Parkin-dependent mitophagy. *Autophagy* 11, 1484-1498.

This paper reveals a central role of the rhomboid protease PARL in the control of the PINK1/Parkin-mediated mitophagy pathway.

Avci D., Fuchs S., Schrul B., Fukumori A., Breker M., Frumkin I., Chen C., Biniossek M.L., Kremmer E., Schilling O., Steiner H., Schuldiner M. *, **Lemberg M.K.** * (2014). The yeast ER-intramembrane protease Ypf1 refines nutrient sensing by regulating transporter abundance. *Mol. Cell* 56, 630-640. (* co-corresponding)

Here we define a new regulatory arm of ERAD and demonstrate that intramembrane proteolysis is an evolutionary conserved mechanism in membrane protein degradation.

Chen C., Malchus N.S., Hehn B., Stelzer W., Avci D., Langosch D., **Lemberg M.K.** (2014). Signal peptide peptidase functions in ERAD to cleave the unfolded protein response regulator XBP1u. *EMBO J* 33, 2492-2506.

This paper shows that the rhomboid pseudoprotease Derlin1 primes the intramembrane protease SPP for ERAD and reveals that the UPR regulator XBP1u is a membrane protein substrate for this so far unrecognized activity.

Fleig L., Bergbold N., Sahasrabudhe P., Geiger B., Kaltak L., **Lemberg M.K.** (2012). Ubiquitin-Dependent Intramembrane Rhomboid Protease Promotes ERAD of Membrane Proteins. *Mol. Cell* 47, 558-569.

First report that ER proteases contribute to ERAD.