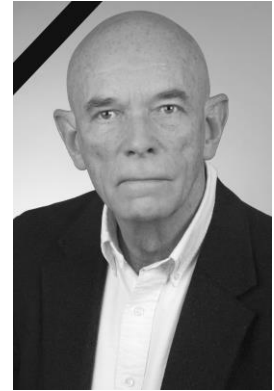


# Curriculum Vitae

## Prof. Dr. med. Dr. h.c. Michael Frotscher



### Education and Professional Experience

May 1, 2011 - May 27, 2017	Hertie Professor for Neuroscience, Center for Molecular Neurobiology Hamburg (ZMNH), Institute for Structural Neurobiology (ISN)
1989-2011	Professor of Neuroanatomy, Inst. of Anatomy & Cell Biol., Univ. of Freiburg
1983-1989	Associate Professor (C3), Inst. of Anatomy, Univ. of Frankfurt/Main
1985	Visiting Professor, Dept. of Obstetrics & Gynecol., Yale Univ, New Haven
1982	Assistant Professor (C2) Inst. of Anatomy & Cell Biol., Univ. of Heidelberg
1981	Habilitation, Univ. of Frankfurt (advisors: Prof. R. Hassler, Prof. H. Braak)
1979-1981	Research Fellowship, Max Planck Inst. for Brain Research, Frankfurt/Main
1974-1979	Scientific Assistant, Inst. of Anatomy, Humboldt University, Berlin
1974	Postdoc, 1st Dept. of Anatomy, Semmelweis Univ., Budapest, Hungary
1974	Dr. med., Humboldt University, Berlin (advisor: Prof. W. Kirsche)
1966-1973	Study of medicine, Humboldt University, Berlin

### Research Fields

Development and plasticity of hippocampal connections, neuronal migration, structure and function of central synapses.

### Activities in the scientific community, honors, awards

2013	Jacob Henle Medal of the University of Göttingen
2011	Fellow of the American Association for the Advancement of Science
2009	Dr. honoris causa, Univ. of Frankfurt/Main

2009	DFG Senate for SFBs
2007	Hertie Senior Professor for Neuroscience
2007	Senator, Section of Neuroscience, German Academy of Sciences Leopoldina
2006	Dean for Research, Medical Faculty, Univ. of Freiburg
2004	Vize Chairman, Neuroscience Panel, DFG
2002	Ernst Jung Award for Medical Research
2001	Research Prize of Baden-Württemberg
2000	Max Planck Award for International Cooperation
1999	President of the German Anatomical Society
1998	Feldberg Award (Feldberg Foundation for Anglo-German Scientific Exchange)
1995	Member of the German Academy of Sciences Leopoldina
1995	Coordinator SFB 505
1993	President of the German Neuroscience Society (NWG)
1993	Leibniz Award of the Deutsche Forschungsgemeinschaft (DFG)
1992	Wolfgang Bargmann Prize
1992	Coordinator SFB 325

## Editorial Boards (present and past):

J Neurosci, J Comp Neurol, Neuroscience, Eur J Neurosci, Exp Neurol, Hippocampus, Exp Brain Res, Restor Neurol Neurosci, Cell Tiss Res, Anat Embryol, Cells Tissues Organs, Neuroforum, Adv Anat Embryol Cell Biol, Brain Structure and Function, Frontiers Neurosci

## Selected Publications

1. Chai X, Zhao S, Fan L, Zhang W, Lu X, Shao H, Wang S, Song L, Failla AV, Zobiak B, Mannherz HG, **Frotscher M** (2016) Reelin and cofilin cooperate during the migration of cortical neurons: a quantitative morphological analysis. *Development* 143:1029-1040.
2. Guzman SJ, Schlogl A, **Frotscher M**, Jonas P (2016) Synaptic mechanisms of pattern completion in the hippocampal CA3 network. *Science* 353:1117-1123.
3. Dieni S, Nestel S, Sibbe M, **Frotscher M**, Hellwig S (2015) Distinct synaptic and neurochemical changes to the granule cell-CA3 projection in Bassoon mutant mice. *Front Synaptic Neurosci* 7:18.
4. Studer D, Zhao S, Chai X, Jonas P, Graber W, Nestel S, **Frotscher M** (2014) Capture of activity-induced ultrastructural changes at synapses by high-pressure freezing of brain tissue. *Nature Protoc* 9:1480-1495.
5. Hellwig S, Hack I, Kowalski J, Brunne B, Jarowjy J, Unger A, Bock HH, Junghans D, **Frotscher M** (2011) Role for Reelin in neurotransmitter release. *J Neurosci* 31:2352-2360.
6. **Frotscher M** (2010) Role for Reelin in stabilizing cortical architecture. *Trends Neurosci* 33:407-414.

7. Chai X, Förster E, Zhao S, Bock HH, **Frotscher M** (2009) Reelin stabilizes the actin cytoskeleton of neuronal processes by inducing n-cofilin phosphorylation at serine3. *J Neurosci* 29:288-299.
8. Förster E, Zhao S, **Frotscher M** (2006) Laminating the hippocampus. *Nature Rev Neurosci* 7:259-267.
9. Förster E, Tielsch A, Saum B, Weiss KH, Johanssen C, Graus-Porta D, Müller U, **Frotscher M** (2002) Reelin, Disabled 1, and beta1 integrins are required for the formation of the radial glial scaffold in the hippocampus. *Proc Natl Acad Sci (USA)* 99:13178-13183.
10. Vida I, **Frotscher M** (2000) A hippocampal interneuron associated with the mossy fiber system. *Proc Natl Acad Sci USA* 97:1275-1280.
11. Markram H, Lübke J, **Frotscher M**, Sakmann B (1997) Regulation of synaptic efficacy by coincidence of postsynaptic APs and EPSPs. *Science* 275:213-215.
12. Del Río JA, Heimrich B, Borrell V, Förster E, Drakew A, Alcántara S, Nakajima K, Miyata T, Ogawa M, Mikoshiba K, Derer P, **Frotscher\*** M, Soriano E\* (1997) A role for Cajal-Retzius cells and reelin in the development of hippocampal connections. *Nature* 385:70-74. \*equal contribution.
13. **Frotscher M**, Heimrich B (1993) Formation of layer-specific fiber projections to the hippocampus in vitro. *Proc Natl Acad Sci USA* 90:10400-10403.