

Prof. Dr. Thomas Misgeld

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Training

- 1991 - 1998 Studies of Medicine, TU Munich
1993 - 1999 Dr. med. (Neuroimmunology), 'summa cum laude', Max Planck Institute of Neurobiology, Supervisor: H. Wekerle
1998 - 2000 Resident ("Arzt im Praktikum"), LMU Munich, Germany
2000 - 2004 Postdoctoral fellow with Jeff Lichtman and Joshua Sanes, Washington University in St. Louis
2004 - 2006 Postdoctoral fellow with Jeff Lichtman and Joshua Sanes, Harvard University, Cambridge

Academic positions & appointments

- since 2006 Faculty, Neurobiology Course. Marine Biological Laboratory, Woods Hole
2006 - 2011 Sofja Kovalevskaja Group Leader, TU Munich
2008 - 2012 Hans Fischer Tenure Track Fellow Institute of Advanced Studies, TU Munich
since 2009 Member, CIPSM Excellence Cluster
2009 - 2012 Tenure Track W3 Professor for Biomolecular Sensors, TU Munich
Principal Investigator, CIPSM Excellence Cluster
since 2012 Full Professor and Director, Institute of Neuronal Cell Biology, TU Munich
Co-Coordinator and Principal Investigator, SyNergy Excellence Cluster
Member, German Center for Neurodegenerative Diseases
Associate Investigator, CIPSM Excellence Cluster
since 2013 Member, Munich Center for Neuroscience (MCN)
since 2014 Faculty, TUM Graduate School of Bioengineering (GSB)
Associate Faculty, Graduate School of Systems Neuroscience (GSN)
since 2018 Co-Coordinator, TUM Elite MSc 'Biomedical Neuroscience'

Awards & honors

- 1991 - 1997 Scholarship for gifted students by the Bavarian government
1993 - 1998 Fellow of the German Academic National Foundation ('Studienstiftung')
1999 Thesis award for the best thesis in medicine, TU Munich
2002 Emmy Noether Fellowship, phase I, DFG
2004 Wyeth Young Investigator Award for multiple sclerosis research
2005 Robert Feulgen Prize, Society for Histochemistry
2006 Sofja Kovalevskaja Award, Alexander von Humboldt Foundation
2007 Schilling Award, German Neuroscience Society
2008 Hans Fischer Tenure Track Fellowship, TUM Institute for Advanced Studies
2012 Hans und Ilse Breuer Award in Alzheimer's Disease and Neurodegeneration
2014 ERC Consolidator Grant

10 key publications

Misgeld T. & Schwarz T. 2017 Mitostasis in neurons: Maintaining mitochondria in an extended cellular architecture. *Neuron*, 96:651-666.

Brill M.S., Kleele T., Ruschkies L., Wang M., Marahori N.A., Reuter M., Hausrat T.J., Weigand E., Fisher M., Ahles A., Engelhardt S., Bishop D.L., Kneussel M. and **Misgeld T.** 2016 Branch-specific microtubule destabilization mediates axon branch loss during neuromuscular synapse elimination. *Neuron*, 92: 845-56.

Breckwoldt, M.O., Pfister, F., Bradley, P.M., Marinkovic, P., Williams, P.W., Brill, M.S., Plomer, P., Schmalz, A., St. Clair, D.K., Naumann, R., Griesbeck, O., Schwarzländer, M., Godinho, L., Bareyre, F.M., Dick, T.P., Kerschensteiner, M. and **Misgeld, T.** 2014. Multi-parametric optical analysis of mitochondrial redox signals during neuronal physiology and pathology *in vivo*. *Nature Medicine* 20: 555-560.

Sorbara, C.D., Wagner, N.E., Ladwig, A., Nikić, I., Merkler, D., Kleele, T., Marinković, P., Naumann, R., Godinho, L., Bareyre, F.M., Bishop, D., **Misgeld, T.*** and Kerschensteiner, M. 2014. Pervasive axonal transport deficits in multiple sclerosis models. *Neuron* 84: 1183-1190. (* equal senior author)

Williams P.R., Marincu B.N., Sorbara C.D., Mahler C.F., Schumacher A.-M., Griesbeck O., Kerschensteiner M. & **Misgeld T.** 2014 A recoverable state of axon injury persists for hours after spinal cord contusion *in vivo*. *Nature Communications* 5, p5683.

Nikić, I., Merkler, D., Sorbara, C., Brinkoetter, M., Kreutzfeld, M., Bareyre, F.M., Brück, W., Bishop, D., **Misgeld, T.*** and Kerschensteiner, M. 2011. A reversible form of axon damage in experimental autoimmune encephalomyelitis and multiple sclerosis. *Nature Medicine* 17: 495-499. (* equal senior author)

Bishop, D., Nikic, I., Brinkoetter, M., Knecht, S., Potz, S., Kerschensteiner, M., and **Misgeld, T.** 2011. NIRB – near infrared branding efficiently correlates light and electron microscopy. *Nature Methods* 8: 568-570.

Misgeld, T., Kerschensteiner, M., Bareyre, F.M., Burgess, R.W., and Lichtman, J.W. 2007. *In vivo* imaging axonal transport of mitochondria in mammals. *Nature Methods* 4: 559–561.

Misgeld T. & Kerschensteiner M. 2006 *In vivo* imaging of the diseased nervous system. *Nature Reviews Neuroscience* 7: 449-63

Kerschensteiner, M., Schwab, M.E., Lichtman, J.W., and **Misgeld, T.** 2005. *In vivo* imaging of axonal degeneration and regeneration in the injured spinal cord. *Nature Medicine* 11: 572-577.