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**Univ.-Prof. Dr. Michael K. E. Schäfer**

\*29.11.1972

Professor of Experimental Anesthesiology  
Working Group Leader

Klinik für Anästhesiologie  
University Medical Center of the Johannes Gutenberg University Mainz  
D-55131 Mainz, Langenbeckstr. 1, building 102  
Tel: +49-6131-17 3568  
[michael.schaefer@unimedizin-mainz.de](mailto:michael.schaefer@unimedizin-mainz.de)  
[www.unimedizin-mainz.de/anaesthesiologie/forschung/experimentelle-arbeitsgruppen/neuroprotektion.html](http://www.unimedizin-mainz.de/anaesthesiologie/forschung/experimentelle-arbeitsgruppen/neuroprotektion.html)

**Academia**

2000 - 2004      Doctorate (Dr. rer. nat.), Max-Delbrück-Center for Molecular Medicine, Berlin

1994 - 2000      Studies in biology (diploma) at universities of Marburg and Heidelberg

**Career**

since 2012      Professor of Experimental Anesthesiology, University Medical Center of the Johannes Gutenberg University Mainz

2008 - 2011      Working group leader, Institute for Anatomy and Cell Biology, University of Freiburg

2004 - 2007      Postdoc, Institut de Neurobiology de la Méditerranée, Marseille (France)

**Awards**

since 2018      Editorial Board Member BMC Neuroscience

2017              Symposium chair European Meeting on Glial Cells in Health and Disease

2004              INSERM stipend award „young investigator”

## Selected Publications

Poplawski GHD, Lie R, Hunt M, Kumamaru H, Kawaguchi R, Lu P, **Schäfer MKE**, Woodruff G, Robinson J, Canete P, Dulin JN, Geoffroy CG, Menzel L, Zheng B, Coppola G, Tuszynski MH. Adult rat myelin enhances axonal outgrowth from neural stem cells. *Science Translational Medicine*. 2018 May 23;10(442).

Singh K, Loreth D, Pöttker B, Hefti K, Innos J, Schwald K, Hengstler H, Menzel L, Sommer CJ, Radyushkin K, Kretz O, Philips MA, Haas CA, Frauenknecht K, Lilleväli K, Heimrich B, Vasar E, **Schäfer MKE**. Neuronal Growth and Behavioral Alterations in Mice Deficient for the Psychiatric Disease-Associated Negr1 Gene. *Frontiers in Molecular Neuroscience*. 2018 Feb 9;11:30.

Pöttker B, Stöber F, Hummel R, Angenstein F, Radyushkin K, Goldschmidt J, **Schäfer MK**. Traumatic brain injury causes long-term behavioral changes related to region-specific increases of cerebral blood flow. *Brain Structure and Function*. 2017 Dec;222(9):4005-4021.

Krämer T, Grob T, Menzel L, Hirnet T, Griemert E, Radyushkin K, Thal SC, Methner A, **Schäfer MKE**. Dimethylfumarate treatment after traumatic brain injury prevents depletion of antioxidative brain glutathione and confers neuroprotection. *Journal of Neurochemistry*. 2017 Dec;143(5):523-533.

Menzel L, Kleber L, Friedrich C, Hummel R, Dangel L, Winter J, Schmitz K, Tegeder I, **Schäfer MK**. Progranulin protects against exaggerated axonal injury and astrogliosis following traumatic brain injury. *Glia*. 2017 Feb;65(2):278-292.

**Schäfer MK**, Bellouze S, Jacquier A, Schaller S, Richard L, Mathis S, Vallat JM, Haase G. Sensory neuropathy in progressive motor neuronopathy (pmn) mice is associated with defects in microtubule polymerization and axonal transport. *Brain Pathology*. 2017 Jul;27(4):459-471.

Bender RA, Zhou L, Vierk R, Brandt N, Keller A, Gee CE, **Schäfer MK**, Rune GM. Sex-dependent regulation of aromatase-mediated synaptic plasticity in the basolateral amygdala. *Journal of Neuroscience*. 2017 Feb 8;37(6):1532-1545.

Menzel L, Paterka M, Bittner S, White R, Bobkiewicz W, van Horssen J, Schachner M, Witsch E, Kuhlmann T, Zipp F\*, **Schäfer MK\***. Down-regulation of neuronal L1 cell adhesion molecule expression alleviates inflammatory neuronal injury. *Acta Neuropathologica*. 2016 Nov;132(5):703-720 (\*equal contribution).

Huang C, Sakry D, Menzel L, Dangel L, Sebastiani A, Krämer T, Karram K, Engelhard K, Trotter J, **Schäfer MK**. Lack of NG2 exacerbates neurological outcome and modulates glial responses after traumatic brain injury. *Glia*. 2016 Apr;64(4):507-23.

Jolivel V, Bicker F, Binamé F, Ploen R, Keller S, Gollan R, Jurek B, Birkenstock J, Poisa-Beiro L, Bruttger J, Opitz V, Thal SC, Waisman A, Bäuerle T, **Schäfer MK\***, Zipp F\*, Schmidt MH\* (\*equal contribution). Perivascular microglia promote blood vessel disintegration in the ischemic penumbra. *Acta Neuropathologica* 2015 Feb;129(2):279-95.