

Michael Thomas Heneka, Prof. Dr. med.

German, male

Academic Qualifications

- 2016-present Full Professor (W3), Director of the Department of Neurodegenerative Disease and Geriatric Psychiatry/Neurology, University of Bonn
- 2013-present Adjunct Professor, Department of Medicine, University of Massachusetts Medical School, Worcester, MA, USA
- 2010-present Cooperation Unit Leader Neuroinflammation, German Center for Neurodegenerative Diseases (DZNE), Bonn

Postgraduate Professional Career

- 2010-2016 Head of the Neurodegeneration Outpatient Unit, University Hospital Bonn
- 2004-2008 C3 Professor of Molecular Neurology and Senior Clinical Fellow, Department of Neurology, University of Münster
- 2003-2004 Senior Clinical Fellow, Department of Neurology, University Hospital Bonn
- 2002 Board certification Clinical Neurology, University Hospital Bonn

Research Expertise

Prof. Heneka and his group are involved in basic science and translational research with a focus on neurodegeneration and neuroinflammation. Major diseases of interest and research topics include Alzheimer's disease, amyotrophic lateral sclerosis, septic encephalopathy and multiple sclerosis. In clinical neurology, Prof. Heneka holds special expertise in neurodegenerative and autoimmune CNS disorders.

Honors and Awards

- 2018-present Editorial Board, *ASN Neuro*
- 2019 Highly cited researcher "interdisciplinary"
- 2019-present Associate Editor, *Alzheimer Research & Therapy*
- 2016-2019 Editorial Board, *Alzheimer Research & Therapy*
- 2014-present Associate Editor, *Neurology 'Neuroimmunology and Neuroinflammation'*
- 2013-present Program Committee Member, Society for Neuroscience, U.S.A.
- 2012-present Steering Committee Member, Cluster of Excellence "ImmunoSensation/ImmunoSensation²", University of Bonn
- 2012-present Executive Board Member, Else-Kröner-Research College, Bonn
- 2012-present Executive Board Member, Task Force "Dementia" of the European Federation of Neurological Societies (EFNS)
- 2012-present Editorial Board, *Molecular Neurobiology*
- 2008-present Editorial Board, *Journal of Neurochemistry*
- 2007-present Expert Panel Member „S3 guideline for dementia“
- 2013 Hans und Ilse Breuer Alzheimer Research Award
- 2011 Christa Lorenz ALS Research Prize
- 2007-2013 Speaker, DFG Clinical Research Unit 177 "Innate Immunity in Chronic Neurodegeneration", University of Bonn
- 2007-2010 Executive Board Member, Network of Competence "Degenerative Dementia" (KNDD) of the Federal Ministry for Education and Science (BMBF)
- 1999 Attempto Award, University of Tübingen
- 1990-1996 Fellow of the 'Studienstiftung des deutschen Volkes' (German National Academic Foundation)

Selected Publications

1. Ising, C., Venegas, C., Zhang, S., Scheiblich, H., Schmidt, S.V., Vieira-Saecker, A., Schwartz, S., Albasset, S., McManus, R., Tejera, D., Griep, A., Santarelli, F., Brosseon, F., Opitz, S., Stunden, J., Merten, M., Kaye, R., Golenbock, D.T., Blum, D., Latz, E., Buée, L., Heneka, M.T. (2019). NLRP3 inflammasome activation drives tau pathology. *Nature*, 575, 669-673.
2. Venegas C, Kumar S, Franklin BS, Dierkes T, Brinkschulte R, Tejera D, Vieira-Saecker A, Schwartz S, Santarelli F, Kummer MP, Griep A, Gelpi E, Beilharz M, Riedel D, Golenbock DT, Geyer M, Walter J, Latz E, **Heneka MT**. (2017) Microglia-derived ASC specks cross-seed amyloid- β in Alzheimer's disease. *Nature* 552(7685):355-361
3. Willem, M., Tahirovic, S., Busche, M.A., Ovsepian, S.V., Chafai, M., Kootar, S., Hornburg, D., Evans, L.D., Moore, S., Daria, A., Hampel, H., Muller, V., Giudici, C., Nuscher, B., Wenninger-Weinzierl, A., Kremmer, E., **Heneka, M.T.**, Thal, D.R., Giedraitis, V., Lannfelt, L., Muller, U., Livesey, F.J., Meissner, F., Herms, J., Konnerth, A., Marie, H., and Haass, C. (2015). γ -Secretase processing of APP inhibits neuronal activity in the hippocampus. *Nature* 526, 443-447.
4. **Heneka, M.T.**, Kummer, M.P., Stutz, A., Delekate, A., Schwartz, S., Vieira-Saecker, A., Griep, A., Axt, D., Remus, A., Tzeng, T.C., Gelpi, E., Halle, A., Korte, M., Latz, E., and Golenbock, D.T. (2013). NLRP3 is activated in Alzheimer's disease and contributes to pathology in APP/PS1 mice. *Nature* 493, 674-678.
5. Kummer, M.P., Hermes, M., Delekate, A., Hammerschmidt, T., Kumar, S., Terwel, D., Walter, J., Pape, H.C., König, S., Roeber, S., Jessen, F., Klockgether, T., Korte, M., and **Heneka, M.T.** (2011). Nitration of tyrosine 10 critically enhances amyloid beta aggregation and plaque formation. *Neuron* 71, 833-844.