

Katrin Kierdorf, Dr. rer. nat.

Institution: Institute of Neuropathology, Medical Faculty, University of Freiburg
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Position: Juniorprofessor for Neuroimmunology

Academic education including academic degrees

2008 Diploma thesis at the Institute of Reconstructive Neurobiology, University Bonn, Prof. Dr. Harald Neumann: "Differentiation of Human and Murine Embryonic Stem Cells to Microglia"
Academic degree: Diploma in Molecular Biomedicine (*Dipl. Mol. Biomed.*)
2004-2008 Diploma Studies in Molekulare Biomedicine, Rheinische Friedrich-Wilhelms-University of Bonn

Scientific graduation

2008-2013 PhD student at the Institute of Neuropathology, University of Freiburg, Prof. Dr. Marco Prinz, „Myeloide Zellen im Zentralen Nervensystem - Charakterisierung der Embryonalentwicklung von Mikroglia sowie die Analyse verschiedener myeloider Zellpopulationen im Morbus Alzheimer“.
Academic degree: *Doctor rerum naturalium*

Employment

Since 11/2017 Juniorprofessor for Neuroimmunology, Institute of Neuropathology, University of Freiburg
07/2015-10/2017 Research Associate at the MRC Centre for Molecular Bacteriology and Infection, Imperial College London, Dr. Marc S. Dionne
11/2013-06/2015 Research Associate at the Centre for Molecular and Cellular Biology of Inflammation, King's College London, Prof. Dr. Frederic Geissmann
03/2013- 10/2013 Research Associate at the Institute of Neuropathology, University Freiburg, Prof. Dr. Marco Prinz

Other activities, awards and honours

06/2014-06/2016 Postdoctoral Fellowship of the German Research Foundation (DFG)
2014 Award of the Society „Gesellschaft zur Förderung der Immunologie in Freiburg und zum Andenken an Georges Köhler e. V.“
2013 Herbert-Fischer-Award of the German Society of Immunology (Dgfi)

Ten most important publications

Péan, C.B., Schiebler, M., Tan, S.W.S., Sharrock, J.A., **Kierdorf, K.**, Brown, K.P., Maserumule, M.C., Menezes, S., Pilátová, M., Bronda, K., et al. (2017). Regulation of phagocyte triglyceride by a STAT-ATG2 pathway controls mycobacterial infection. *Nat. Commun.* 8, 14642.

Goldmann, T., Wieghofer, P., Jordão, M.J.C., Prutek, F., Hagemeyer, N., Frenzel, K., Amann, L., Staszewski, O., **Kierdorf, K.**, Krueger, M., et al. (2016). Origin, fate and dynamics of macrophages at central nervous system interfaces. *Nat. Immunol.* 17, 797–805.

Goldmann, T., Zeller, N., Raasch, J., **Kierdorf, K.**, Frenzel, K., Ketscher, L., Basters, A., Staszewski, O., Brendecke, S.M., Spiess, A., et al. (2015). USP18 lack in microglia causes destructive interferonopathy of the mouse brain. *EMBO J.* 34, 1612–1629.

Woodcock, K.J., **Kierdorf, K.**, Pouchelon, C.A., Vivancos, V., Dionne, M.S., and Geissmann, F. (2015). Macrophage-derived upd3 cytokine causes impaired glucose homeostasis and reduced lifespan in *Drosophila* fed a lipid-rich diet. *Immunity* 42, 133–144.

Goldmann, T., Wieghofer, P., Müller, P.F., Wolf, Y., Varol, D., Yona, S., Brendecke, S.M., **Kierdorf, K.**, Staszewski, O., Datta, M., et al. (2013). A new type of microglia gene targeting shows TAK1 to be pivotal in CNS autoimmune inflammation. *Nat. Neurosci.* 16, 1618–1626.

Hagemeyer, N.*, **Kierdorf, K.***, Frenzel, K.*, Xue, J., Ringelhan, M., Abdullah, Z., Godin, I., Wieghofer, P., Costa Jordão, M.J., Ulas, T., et al. (2016). Transcriptome-based profiling of yolk sac-derived macrophages reveals a role for *Irf8* in macrophage maturation. *EMBO J.* 35, 1730–1744.

*equally contributed

Kierdorf, K., Katzmarski, N., Haas, C.A., and Prinz, M. (2013b). Bone marrow cell recruitment to the brain in the absence of irradiation or parabiosis bias. *PloS One* 8, e58544

Kierdorf, K., Erny, D., Goldmann, T., Sander, V., Schulz, C., Perdiguero, E.G., Wieghofer, P., Heinrich, A., Riemke, P., Hölscher, C., et al. (2013a). Microglia emerge from erythromyeloid precursors via *Pu.1*- and *Irf8*-dependent pathways. *Nat. Neurosci.* 16, 273–280.

Schulz, C., Perdiguero, E.G., Chorro, L., Szabo-Rogers, H., Cagnard, N., **Kierdorf, K.**, Prinz, M., Wu, B., Jacobsen, S.E.W., Pollard, J.W., et al. (2012). A Lineage of Myeloid Cells Independent of *Myb* and Hematopoietic Stem Cells. *Science* 336, 86–90.

Mildner, A.*, Schlevogt, B.*, **Kierdorf, K.***, Böttcher, C., Erny, D., Kummer, M.P., Quinn, M., Brück, W., Bechmann, I., Heneka, M.T., et al. (2011). Distinct and Non-Redundant Roles of Microglia and Myeloid Subsets in Mouse Models of Alzheimer's Disease. *J. Neurosci.* 31, 11159–11171.

*equally contributed