

PERSONAL INFORMATION **Heinz Wiendl**

WORK EXPERIENCE

- March 2018- Present **Professor and Chair**
Department of Neurology with Institute of Translational Neurology, University of Muenster (Germany)
- May 2013-March 2018 **Professor and Chair**
Department of Neurology, University of Muenster (Germany)
- May 2010-April 2013 **Professor and Chair**
Department of Inflammatory Diseases of the Nervous System and Neurooncology, University of Muenster (Germany)
- 2005- 2010 **Professor of Neurology**
Head of Clinical Research Group for Multiple Sclerosis and Neuroimmunology, Department of Neurology, University of Wuerzburg (Germany)
- 2004- Present **Head of a junior research group for neuroimmunology**
Interdisciplinary Centre for Clinical Research in Tuebingen, Germany (Germany)
- 2000- 2004 **Clinical and research fellow**
Hertie Institute for Brain Research, Department of Neurology, University of Tuebingen (Germany)

EDUCATION AND TRAINING

- 1989- 1996 **Medicine, Universities of Erlangen (Germany), Basel (Switzerland), Duke (USA)**
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- 1996- 1997 **Residency program at the Department of Neurology, University of Erlangen-Nuremberg**
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- 1997- **Approbation**
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- 2000- 2004 **Residency program at the Department of Neurology, University of Tuebingen**
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- 2004- **Habilitation treatise: Immune regulatory role of the muscle: Implications for the immune pathogenesis of inflammatory myopathies (University of Tuebingen)**
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- 1996- **conferring of a doctorate (MD) (University of Erlangen-Nuremberg)**
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Expertise

Areas of clinical Expertise:

Neuroinflammation and neuroimmunology
Neurooncology
Immune therapy

Areas of scientific Expertise:

Neuroinflammation and neuroimmunology
Immune regulation in Multiple Sclerosis and autoimmune nervous system disorders
Inflammatory mechanisms of neurodegeneration
Immune mediated mechanisms of neurodegeneration
Immune cell trafficking into the CNS
Biomarkers and biosignatures (related to MS and immune therapy and its adverse effects)

Publications

Publications - examples from the last years

Rauber S, Heming M, Repple J, Ruland T, Kuelby R, Schulte-Mecklenbeck A, Gross CC, Arolt V, Baune B, Hahn T, Dannowski U, Meuth SG, Melzer N, Wiendl H, Meyer Zu Horste G. (2021) Cerebrospinal fluid flow cytometry distinguishes psychosis spectrum disorders from differential diagnoses. *Mol Psychiatry* 26(12):7661-7670.

Gross CC*, Schulte-Mecklenbeck A*, Madireddy L, Pawlitzki M, Strippel C, Rauber S, Kramer J, Rolfes L, Ruck T, Beuker C, Schmidt-Pogoda A, Lohmann L, Schneider-Hohendorf T, Hahn T, Schwab N, Minnerup J, Melzer N*, Klotz L, Meuth SG*, Meyer Zu Horste G, Baranzini SE, Wiendl H. (2021) Classification of neurological diseases using multi-dimensional CSF analysis. *Brain* 144(9):2625-2634.

Ostkamp P, Salmen A, Pignolet B, Gorlich D, Andlauer TFM, Schulte-Mecklenbeck A, Gonzalez-Escamilla G, Bucciarelli F, Gennero I, Breuer J, Antony G, Schneider-Hohendorf T, Mykicky N, Bayas A, Then Bergh F, Bittner S, Hartung HP, Friese MA, Linker RA, Luessi F, Lehmann-Horn K, Muhlau M, Paul F, Stangel M, Tackenberg B, Tumani H, Warnke C, Weber F, Wildemann B, Zettl UK, Ziemann U, Muller-Myhsok B, Kumpfel T, Klotz L, Meuth SG, Zipp F, Hemmer B, Hohlfeld R, Brassat D, Gold R, Gross CC, Lukas C, Groppa S, Loser K, Wiendl H*, Schwab N*; German Competence Network Multiple Sclerosis (KKNMS) and the BIONAT Network. (2021) Sunlight exposure exerts immunomodulatory effects to reduce multiple sclerosis severity. *Proc Natl Acad Sci U S A* 118(1):e2018457118.

Heming M, Li X, Rauber S, Mausberg AK, Borsch AL, Hartlehnert M, Singhal A, Lu IN, Fleischer M, Szepanowski F, Witzke O, Brenner T, Dittmer U, Yosef N, Kleinschnitz C, Wiendl H, Stettner M, Meyer Zu Horste G. (2021) Neurological Manifestations of COVID-19 Feature T Cell Exhaustion and Dedifferentiated Monocytes in Cerebrospinal Fluid. *Immunity* 54(1):164-175.e6.

Gerdes LA, Janoschka C, Eveslage M, Mannig B, Wirth T, Schulte-Mecklenbeck A, Lauks S, Glau L, Gross CC, Tolosa E, Flierl-Hecht A, Ertl-Wagner B, Barkhof F, Meuth SG, Kumpfel T, Wiendl H*, Hohlfeld R*, Klotz L*. (2020) Immune signatures of prodromal multiple sclerosis in monozygotic twins. *Proc Natl Acad Sci U S A* 117(35):21546-21556.

Schafflick D, Xu CA, Hartlehnert M, Cole M, Schulte-Mecklenbeck A, Lautwein T, Wolbert J, Heming M, Meuth SG, Kuhlmann T, Gross CC, Wiendl H, Yosef N, Meyer Zu Horste G (2020) Integrated single cell analysis of blood and cerebrospinal fluid leukocytes in multiple sclerosis. *Nat Commun* 11(1):247.

Klotz L*, Eschborn M*, Lindner M*, Liebmann M, Herold M, Janoschka C, Torres Garrido B, Schulte-Mecklenbeck A, Gross CC, Breuer J, Hundehege P, Posevitz V, Pignolet B, Nebel G, Glander S, Freise N, Austermann J, Wirth T, Campbell GR, Schneider-Hohendorf T, Eveslage M, Brassat D, Schwab N, Loser K, Roth J, Busch KB, Stoll M, Mahad DJ, Meuth SG, Turner T, Bar-Or A, Wiendl H. (2019) Teriflunomide treatment for multiple sclerosis modulates T cell mitochondrial respiration with affinity-dependent effects. *Sci Transl Med.* 11(490). pii: eaao5563.

Kappos L, Wiendl H, Selmaj K, Arnold DL, Havrdova E, Boyko A, Kaufman M, Rose J, Greenberg S, Sweetser M, Riestler K, O'Neill G, Elkins J. (2015) Daclizumab HYP versus Interferon Beta-1a in Relapsing Multiple Sclerosis. *N Engl J Med* 373(15):1418-28.

Schneider-Hohendorf T, Rossaint J, Mohan H, Boning D, Breuer J, Kuhlmann T, Gross CC, Flanagan K, Sorokin L, Vestweber D, Zarbock A, Schwab N, Wiendl H. (2014) VLA-4 blockade

promotes differential routes into human CNS involving PSGL-1 rolling of T cells and MCAM-adhesion of T(H)17 cells. J Exp Med.211:1833-46.

Schwab N, Schneider-Hohendorf T, Posevitz V, Breuer J, Gobel K, Windhagen S, Brochet B, Vermersch P, Lebrun-Frenay C, Posevitz-Fejfar A, Capra R, Imberti L, Straeten V, Haas J, Wildemann B, Havla J, Kumpfel T, Meinel I, Niessen K, Goelz S, Kleinschnitz C, Warnke C, Buck D, Gold R, Kieseier BC, Meuth SG, Foley J, Chan A, Brassat D, Wiendl H. (2013) L-selectin is a possible biomarker for individual PML risk in natalizumab-treated MS patients. Neurology 81:865-871.

*equal contribution / equal senior authorship plus correspondence

Since 1998: 500 peer reviewed publications

(<http://www.ncbi.nlm.nih.gov/pubmed/?term=Wiendl+H>) e.g., Nature Medicine, Nature Communications, Nature Neuroscience, Cell, Science Translational Medicine, Journal of Experimental Medicine, Blood, Annals of Neurology, BRAIN, Neurology, Immunity

3 books (editor), several book chapters

H index = 70, approx. 1,500 citations/year

Projects Treosulfan in patients with secondary progressive MS: study coordinator, principal investigator
1) Treosulfan pilot study, 2001-2004: study coordinator, study protocol Generation
2) Treosulfan phase II study (EudraCT-Nr. 2006-002856-14), 2007-2008: principal investigator Germany, study protocol generation
MAGNIFY (EudraCT-Nr.2017-002631-42): principal investigator (01/2018-ongoing)
AFFINITY (EudraCT-Nr. 2020-000894-26): principal investigator (01/2017-12/2018)
CASTING (EudraCT-Nr. 2015-005597-38): principal investigator (01/2016-05/2017)
LEM COURSE (EudraCT-Nr. 2016-000464-42): principal investigator (2016-2020)
ALAIN (EudraCT-Nr. 2014-000709-10): principle investigator (02/2015-ongoing)
EXPAND (EudraCT-Nr. 2012-003056-36): principal investigator (2013-ongoing)
ToFingo (EudraCT-Nr. 2011-001442-15): principal investigator (2011-2012)
GSK239512 in RRMS (EudraCT-Nr. 2012-003627-38) principal investigator (2013)
DECIDE (EudraCT-Nr. 2006-001161-42): principal investigator (2011-2012)
TeriDynamic (EudraCT-Nr. 2012-005324-16): principal investigator (02/2013-09/2014)
Ravulizumab in MG (EudraCT-Nr. 2018-003243-39): principal investigator (2020-ongoing)
Rozanolixizumab in MG (EudraCT-Nr. 2019-000968-18): principal investigator (2020-ongoing)
Rozanolixizumab in MG (EudraCT-Nr. 2019-000969-21): principal investigator (2020-ongoing)
RECLAIIIM (EudraCT-Nr. 2018-003171-35): principal investigator (2020-ongoing)
In total 40 phase I-IV trials, including IITs, as principal investigator; member of several steering committees (e.g., IL17 program, IL2R blockade program, DHODH inhibition program, IMU-838 program, BTK-Inhibitor program, S1P receptor modulator program)

Memberships Member of editorial boards
Journal of Neurochemistry, Journal of Neuroinflammation, Neurotherapeutics,

Memberships

Commission „Perspectives of patient care in neurology" of the German Society for Neurology (DGN); Academy of Education and Training, Medical Association for "Westfalen-Lippe"; Executive Board Felgenhauer Foundation for young Neuroscientists; Executive Board and Chair Foundation for Neuromedicine, Muenster; Steering committee of the cluster of excellence "Cells in Motion" (CiM), Muenster (funded by the German Research Foundation (DFG)); Interdisciplinary Centre for Clinical Research (IZKF) Muenster; Executive Board of the German society for Neurologists (BDN); Drug Commission of the German Medical Association; Executive Board of the German society for Multiple Sclerosis (DMSG); Scientific Advisory Committee for the International Conferences on HLA-G; Scientific Advisory Committee of the German Society for Muscular Diseases (DGM); medical council of the German Society for Multiple Sclerosis (DMSG); Multiple Sclerosis Therapy Consensus Group (MSTCG)

Other Relevant Information Awards
2015: Sobek senior award for MS research of the German Society for Multiple Sclerosis (DMSG)

2009: Heinrich Pette award of the German Society for Neurology (DGN)
2004: Sobek award for MS research (young scientists' award) of the DMSG
2003: Felix-Jerusalem award of the German Society for Muscular Diseases (DGM)

Special recognitions

07/2020-Spokesperson UFBZ Munster (University Research and Treatment Center for Neuroinflammation):
2019: Spokesperson of the Body and Brain Institute funded by the German Ministry of Education and Research
2019: Fellowship of the European Academy of Neurology (EAN)
2019: Fellowship of the American Academy of Neurology (AAN)
2019-: Spokesperson, National German Competence Network of Multiple sclerosis
2018: Member of theECTRIMS guideline for treatment committee (Montalban, MSJ, 2018)
2018: Member of the Editorial Board Journal of Neurochemistry (Handling Editor)
2018-2020: Editorial Board Neurological Research and Practice
10/2017-: Member of theECTRIMS Council
2017-: Honorary Professorship of the Sydney Medical School
2016-: Member of the International Society of Neurosciences' (ISNI) International Advisory Board
2016-: Member of the Expert's Committee on Neurosciences of the German Research Foundation (DFG)
2016-: Member of the ISNI
2016-2019: Representative of the Academia in the Board of directors of the University Hospital Muenster (UKM)
2016-: Spokesperson of the DFG funded transregional co-operative research centre (TR-CRC) "Multiple Sclerosis" (evaluated 03/2016 and 12/2020)
2016-: Expert Committee for cellular neurosciences at the DFG
2015-: Member of the commission „Perspectives in neurology" of the DGN
2013-: Editorial board member Neurotherapeutics
2014-: Member: Academy of Education and Training, Medical Association for "Westfalen-Lippe"
2013-: Executive Board Member, Felgenhauer Foundation for young Neuroscientists
2013-: Executive Board Member and Chair Foundation for Neuromedicine, Muenster
2013-: Editorial board member PLoS ONE
2013-2016: Dean for Research and Young Scientists of the medical faculty Muenster
2012-2016: Co-Spokesperson TR-CRC 128 "Multiple Sclerosis" (Rhine-Main, Muenster, Munich) (funded by the DFG)
2012-: Principal investigator and member of the steering committee member of the cluster of excellence "Cells in Motion" (CiM), Muenster (funded by the DFG)
2012-: Spokesperson for neuromedicine in Munster
2012-2014: Board member of the Interdisciplinary Centre for Clinical Research (IZKF) Muenster
2011-: Executive Board member of the German society for Neurologists (BDN)
2009-2013, 2020-: Spokesperson, National German Competence Network of Multiple sclerosis (BMBF-funded)
2010-: Member: Drug Commission of the German Medical Association
2008, 2014, 2018: Coordinator: Therapeutic guidelines of the German Society for Neurology: myositis, myasthenia gravis
2008: Member of reviewers committee "Autoimmune Centers of Excellence" for the National Institutes of Health (NIH)
2007, 2011: Executive Board member of the DMSG
2007-: Editorial Board member of the Journal of Neuroinflammation
2006-: Editorial Board International of the Journal of Clinical Practice
2004-: Scientific Advisory Committee for the International Conferences on HLA-G
2003- : Scientific Advisory Committee of the DGM
2002-: Member of the medical council of the DMSG

2001, 2012, 2014: Member of the Multiple Sclerosis Therapy Consensus Group (MSTCG)