

## Curriculum Vitae

### Personal Data

Title	Prof. Dr. med.
First name	Luisa
Name	Klotz
Current position	W3 Professor
Current institution(s)/ site(s), country	Department of Neurology with Institute of Translational Neurology, Faculty of Medicine, UKM, Universität Münster (UMS), Germany
Identifiers/ORCID	0000-0001-5439-9633

### Qualifications and Career

Stages	Periods and Details
Degree programme	1994–2001 Medicine, Universitätsklinikum Bonn (UKB), Bonn, Germany
Doctorate	2002 Dissertation, Developmental Pathology, “Morphological and proliferation kinetic changes of hepatocytes downstream of ovarian and thyroid grafts”, UKB Bonn, Germany
Stages of academic/ professional career	<p>2021–present Professor for Neuroimmunology (W3) and senior physician, Dept. of Neurology, UKM, UMS, Germany</p> <p>2021–present Head of the clinical trial center, Dept. of Neurology, UKM, UMS, Germany</p> <p>2019 Offer for a W3-professorship „Neuroimmunology“, Friedrich-Alexander-University Erlangen Nürnberg (FAU), declined</p> <p>2016–2021 W3 Professor (endowed professorship, tenured) and senior physician, Dept. of Neurology, UKM, UMS, Germany</p> <p>2013–present Head of the clinical trial unit “Neuroimmunology and IITs”, UKM, UMS, Germany</p> <p>2011–present Independent group leader (immune modulation: basic science and translation), Dept. of Neurology, UKM, UMS, Germany</p> <p>2010 Habilitation in Neurology “Immunomodulatory effects of the nuclear receptor PPAR<math>\gamma</math>”, Institute of Molecular Medicine and Experimental Immunology, UKB Bonn, Germany</p>

Stages of academic/ professional career	2008–2010	Group leader, research fellow, Institute of Molecular Medicine and Experimental Immunology, UKB Bonn, Germany
	2006–2007	Junior group leader (BONFOR programme), UKB Bonn, Germany
	2004–2005	BONFOR research fellow, Institute of Molecular Medicine and Experimental Immunology, UKB Bonn, Germany
	2001–2010	Clinical resident, Department of Neurology, UKB Bonn, Germany

### Engagement in the Research System

- since 2022 Speaker of the University Research and Treatment Center (UFBZ), Neuroinflammation – understanding and modulating the role of inflammation and repair in neurologic and psychiatric disease manifestations (pilot phase 2019-2022, consolidation phase 2023-2024), UKM, Münster
- 2022 Member of the governing board of the recently approved DFG-funded Clinician Scientist Program “Careers”
- 2021 Appointment to the Council of the (ECTRIMS) European Committee for Treatment and Research in Multiple Sclerosis
- 2021 Appointment to the scientific panel of the European Academy of Neurology (EAN) Scientific Panels Multiple Sclerosis
- 2021 Appointment as deputy chairperson of the board of the medical advisory board of the DMSG-Bundesverband e.V.
- since 2020 Member of the DGN Board of Trustees for the Science Award of the DGN
- since 2020 Vice Dean for Science and Research and Deputy Dean of the Medical Faculty of Münster
- 2019–2020 Member of the Commission for Structure and Development of the Medical Faculty Münster
- since 2019 Member of the DGN Commission “Clinical Studies”
- since 2019 Member of the DGN Commission “Neuroimmunology”
- 2018–2021 Member of the Research Advisory Board of the IZKF Münster (Interdisciplinary Center for Clinical Research)
- 2017–2020 Chair of the IMF Commission (Innovative Medical Research), a junior researcher development tool of the medical school

### Supervision of Researchers in Early Career Phases

- Long-standing and regular contributions to training for students and physicians, offering lectures and seminars on topics from Neurology. In the last 5 years, personal supervision of 12 PhD and MD students, 10 running personal supervisions of PhD and MD students.

## Scientific Results

Contributions:<sup>1</sup>Conceptualization/Methodology, <sup>2</sup>Analysis, <sup>3</sup>Investigation, <sup>4</sup>Funding Acquisition, <sup>5</sup>Writing

### Category A (10 selected publications out of 150)

**Klotz L**<sup>1,3,5</sup>, Antel J, Kuhlmann T: Inflammation in multiple sclerosis: Consequences for remyelination and disease progression. *Nat Rev Neurol* 2023; 19:305-320. DOI: 10.1038/s41582-023-00801-6

Janoschka C, ..., **Klotz L**<sup>1,2,3,4,5</sup>: Enhanced pathogenicity of Th17 cells due to natalizumab treatment- implications for MS disease rebound. *Proc Natl Acad Sci* 2023; 120(1):e2209944120. DOI: 10.1073/pnas.2209944120

Ostkamp P, ... **Klotz L**, Schwab N: A single-cell analysis framework allows for characterization of CSF leukocytes and their tissue of origin in multiple sclerosis. *Sci Transl Med* 2022; 30;14(673):eadc9778. DOI: 10.1126/scitranslmed.adc9778

Liebmann M, **Klotz L**<sup>1,3,4,5</sup>: Dimethyl fumarate treatment restrains the antioxidative capacity of T cells to control autoimmunity. *Brain* 2021; 144(10):3126-3141. DOI: 10.1093/brain/awab307

Fleck AK, **Klotz L**<sup>1,2,3,4,5</sup>: Dietary CLA links reduced intestinal inflammation to amelioration of CNS-autoimmunity. *Brain* 2021; 144(4):1152-1166. DOI: 10.1093/brain/awab040

Gerdes LA, **Klotz L**<sup>1,2,3,4,5</sup>: Immune signatures of prodromal multiple sclerosis in monozygotic twins. *Proc Natl Acad Sci* 2020; 117:21546-21556. DOI: 10.1176/appi.ajp.2019.19020202

Starost L, ..., Martino G\*, **Klotz L**<sup>\*1,3,5</sup>, Kuhlmann T\*: Extrinsic immune cell-derived, but not intrinsic oligodendroglial factors contribute to oligodendroglial differentiation block in multiple sclerosis. *Acta Neuropathol* 2020; 40:715-736. DOI: 10.1007/s00401-020-02217-8

**Klotz L**<sup>\*1,2,3,4,5</sup>, Eschborn M\*, Lindner M\*, ..., Wiendl H: Teriflunomide treatment for multiple sclerosis modulates T cell mitochondrial respiration with affinity-dependent effects. *Sci Transl Med* 2019; 11(490):eaao5563. DOI: 10.1126/scitranslmed.aao5563

Liebmann M, ..., **Klotz L**<sup>1,2,3,4,5</sup>: Nur77 serves as a molecular brake of the metabolic switch during T cell activation to restrict autoimmunity. *Proc Natl Acad Sci* 2018; 115(34):E8017-E8026. DOI: 10.1073/pnas.1721049115

Hucke S, ..., **Klotz L**<sup>1,2,3,4,5</sup>: The farnesoid-X-receptor in myeloid cells controls CNS autoimmunity in an IL-10-dependent fashion. *Acta Neuropathol* 2016; 132(2):413-31. DOI: 10.1007/s00401-016-1593-6

### Category B

2019 Member of the application team of the approved new research building "Body and Brain Institute Münster" (§91b GG)

## Academic Distinctions

2019 Science Research Award, German Society of Neurology (former Heinrich Pette Prize)

2012 Sobek Young Scientist Award for Multiple Sclerosis, Germany

2012 1st Oppenheim Prize for Multiple Sclerosis (together with Dr. rer. nat. Stephanie Hucke), Germany

2005 Awardee of the BONFOR Symposium, Germany

## Other Information

n/a