

## Curriculum Vitae

**Name** Manuela Neumann  
**Date of Birth** 15.01.1969  
**Nationality** German

**Current position** Assistant professor for Experimental Neuropathology  
Institute of Neuropathology  
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### Academic Education

1988-1992 Medical School, University of Munich  
1992-1995 Medical School, University of Goettingen  
1995-1997 Resident (“Arzt im Pratikum”), Institute of Neuropathology, University of Goettingen  
1997 Approbation (“license to practice medicine”)  
Jan. 1998 M.D. thesis (*magna cum laude*) ” Genetic analysis of the prion protein gene and its role in familial and transmissible prion diseases”.

### Postdoctoral / Clinical Training

1997 Research Fellow, Institute of Clinical Biochemistry and Pathobiochemisyttry, University of Wuerzburg, Germany  
1997-1999 Postdoctoral Fellow, Institute of Neuropathology, University of Goettingen, Germany  
1999-2000 Resident in Psychiatry, Department of Psychiatry, University of Munich, Germany  
2001-2003 Resident in Pathology, Hospital Bogenhausen, University teaching hospital of University of Munich, Germany

- 2004-2005 Postdoctoral Fellow, Institute of Neuropathology, University of Munich, Germany
- 2005-2006 Visiting Research Investigator, Center for Neurodegenerative Disease Research (Directors: Dr. Lee/Dr. Trojanowski), Hospital of University of Pennsylvania, Philadelphia, USA

### **Advanced Professional Degrees**

- 2004 License to practice as Neuropathologist
- 2006 Habilitation on “Molecular Neuropathology of Synucleinopathies and Tauopathies”.
- 2006-2008 Senior Scientist and Group leader, Center for Neuropathology and Prion Research, University of Munich, Germany
- Since Oct 2008 Assistant Professor for Experimental Neuropathology and senior physician (“Oberarzt”), Institute of Neuropathology, University of Zurich, Switzerland

### **Stipends and Awards**

- 2005-2006 Stipend from the BMBF (Visiting Scientist)
- 2008 Research Award of the German Hirnliga e.V.

### **Member of Editorial Boards**

- 2009-present Acta Neuropathologica

### **Professional Memberships**

Member of the German Society of Neuropathology and Neuroanatomy

### **Research focus:**

Our major goal is to understand the pathological mechanisms leading to neurodegeneration and cell death in neurodegenerative diseases, with special focus on frontotemporal dementias (FTD) and amyotrophic lateral sclerosis (ALS). Accumulation of misfolded proteins in characteristic brain lesions or inclusions is a highly characteristic feature in neurodegenerative diseases. This is also true for FTD and ALS. In 2006, we identified the RNA-binding protein TDP-43 as pathological protein in the majority of FTD and most ALS cases. Very recently we were able to demonstrate that a second RNA-binding protein named FUS/TLS plays another important role in the pathogenesis of a subset of FTD and ALS, thereby

providing strong evidence that alterations in RNA processing might be a key event in the pathogenesis of these conditions. We are now trying to understand the basic biology of TDP-43 and FUS/TLS in the brain and the pathomechanisms leading to inclusion body formation and neurodegeneration in FTD and ALS. This includes neuropathological and biochemical studies on human postmortem brain tissues as well as the generation and characterization of cell culture and transgenic mouse models.