Curriculum Vitae

Personal Data

Title	PD. Dr. med.
First name	Yang
Name	Liu
Current position	Wissenschaftliche Mitarbeiter (unbefristet)
Current institution(s)/site(s), country	Universität des Saarlandes, Institut für Neurologie
Identifiers/ORCID	https://orcid.org/0000-0002-7614-4233

Qualifications and Career

Stages	Periods and Details
Doctorate (med.)	07/1999, Supervisors (Prof. Jia-qi Pan and Prof. Yi-ning Huang), **The Peking Union Medical College & Chinese Academy of Medical Sciences**, Beijing, China. Subject: *Pathogenic role of fibrinogen and plasminogen activator inhibitor-1 (PAI-1) in ischemic stroke patients*.
Habilitation	06/2021, Faculty of Medicine, **Saarland University,** Homburg, Germany, with the title "*Microglial cells: role in neurodegeneration in Alzheimer's disease*".
Principal Investigator (Wissenschaftliche Mitarbeiter, unbefristet)	03/2005-present, Department of Neurology, **Saarland University**, Germany. Research directions: *1) Innate immunity and Alzheimer's disease, and 2) Innate immunity and multiple sclerosis*.
Postdoctoral fellow	03/2002-02/2005, Department of Neurology, **University of Göttingen,** Germany. Research direction: *Innate immunity and Alzheimer's disease.*
Postdoctoral fellow	08/2001-02/2002, Department of Neurology, **Mannheim Hospital, University of Heidelberg,** Germany. Research direction: *Innate immunity and Alzheimer's disease.*
Resident and attending physician	08/1999-07/2001, Department of Neurology, **The first affiliated hospital of Zhejiang University**, China. Research direction: *Intracranial cerebral artery stenosis and secondary prevention in ischemic stroke patients.*

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Engagement in the Research System

As a responsible person, I have received the following funds:

RESEARCH FUNDING:

Liu Y. Role of innate immune receptors in neuroinflammation in ALS-linked SOD1 transgenic mice. **Fritz Thyssen Stiftung** (Az. 10.07.2.150, 158.800 EURO, 01.07.2007-30.06.2009).

Liu Y and Fassbender K. Therapeutic and preventive impact of nutritional lipids on neuronal and cognitive performance in aging, Alzheimer's disease and vascular dementia. **The 7th Framework Programme of EU** (Grant Agreement No 211696, 419.519 EURO, 01.08.2008-30.04.2015).

Liu Y. Neuroprotective role of matrix metalloprotease 12 in ALS-linked SOD1 transgenic mice. **Fritz Thyssen Stiftung** (Az. 10.09.1.161, 157.700 EURO, 01.04.2009-31.03.2011).

Liu Y. Effect of glatiramer acetate on microglial effects in multiple sclerosis. **TEVA Pharma GmbH** (80.000 EURO, 01.01.2007-31.12.2009).

Liu Y. Therapeutic effects of Ginkgo biloba extract EGb 761® in Alzheimer's disease mouse model. **Dr. Willmar Schwabe GmbH & Co. KG** (187.000 EURO, 01.01.2011-31.12.2012; and 01.01.2015-31.12.2016).

Liu Y. Preventive effects of plant sterols in Alzheimer's disease. **Else Kröner-Fresenius-Stiftung** (Az. 2012_A247, 112.678 EURO, 01.02.2013-31.01.2015).

Liu Y. Pathogenic role of neuronal p38α-MAPK in Alzheimer's disease. **DFG** (LI1725/2-1, 297.975 EURO, 01.10.2015-31.05.2019).

Liu Y and Faßbender K**.** Interplay of amyloid and ischemia and their influence on blood-brain barrier, amyloid transportation systems and neurodegeneration in cerebral amyloid angiopathy (CAA). **JPND** (*"European research projects on neurodegenerative diseases: risk and protective factors, longitudinal cohort approaches and advanced experimental models"*) (01ED1617B, 169.383,59 EURO, 01.04.2016-31.03.2020).

Liu Y. Investigation of neuroprotective effects of Alemtuzumab treatment in multiple sclerosis. **Genzyme Corporation, Cambridge, USA** (GZ-2016-11588, 136.170 EURO, 01.04.2018-31.03.2020).

AWARDS:

Liu Y. Entzündungshemmende Mechanismen des oxidativen Stresses in der Pathophysiologie der experimentellen autoimmunen Enzephalomyelitis. **Forschungspreis 2007 der Freunde des Universitätsklinikums des Saarlandes**. Homburg, 13. Juni 2007 (5.000 EURO).

Liu Y. Pathophysiological role of innate immune receptors in AD. **Alzheimer Forschung Initiative e.V.** (# 08817; 67.608 EURO, 01.11.2008-30.10.2010).

Liu Y. Pathogenic role of microglial IKKβ in Alzheimer's disease model. **Alzheimer Forschung Initiative e.V.** (# 10808; 40.000 EURO, 01.11.2010-30.10.2011).

Liu Y. Pathogenic role of GPR109a in Alzheimer's disease: link gut bacteria to brain? **Alzheimer Forschung Initiative e.V.** (#18009; 120.000 EURO, 01.11.2018-31.10.2021).

Scientific Results

1) Schnöder L, Quan W, Yu Y, Tomic I, Luo Q, Hao W, Peng G, Li D, Fassbender K, **Liu Y** (*corresponding author*). Deficiency of IKKβ in neurons ameliorates Alzheimer's disease pathology in APP- and tau-transgenic mice. **FASEB J**. 2023;37:e22778. doi: 10.1096/fj.202201512R.
2) Luo Q, Schnöder L, Hao W, Litzenburger K, Decker Y, Tomic I, Menger MD, **Liu Y** (*corresponding author and co-senior authorship*), Fassbender K. p38α-MAPK-deficient myeloid cells ameliorate symptoms and pathology of APP-transgenic Alzheimer's disease mice. **Aging Cell**. 2022;21:e13679. doi: 10.1111/acel.13679.
3) Schnöder L, Tomic I, Schwindt L, Helm D, Rettel M, Schulz-Schaeffer W, Krause E, Rettig J, Fassbender K, **Liu Y** (*corresponding author*). P38α-MAPK phosphorylates Snapin and reduces Snapin-mediated BACE1 transportation in APP-transgenic mice. **FASEB J**. 2021;35:e21691. doi: 10.1096/fj.202100017R.
4) Quan W, Luo Q, Hao W, Tomic I, Furihata T, Schulz-Schäffer W, Menger MD, Fassbender K, **Liu Y** (*corresponding author*). Haploinsufficiency of microglial MyD88 ameliorates Alzheimer's pathology and vascular disorders in APP/PS1-transgenic mice. **Glia**. 2021; 69:1987-2005. doi: 10.1002/glia.24007.
5) Hao W, Luo Q, Menger MD, Fassbender K, **Liu Y** (*corresponding author*). Treatment with CD52 Antibody Protects Neurons in Experimental Autoimmune Encephalomyelitis Mice during the Recovering Phase. **Front Immunol**. 2021;12:792465. doi: 10.3389/fimmu.2021.792465.
6) Schnöder L, Gasparoni G, Nordström K, Schottek A, Tomic I, Braun A, Schäfer K, Menger MD, Walter J, Fassbender K, **Liu Y** (*corresponding author*). Deficiency of neuronal p38α-MAPK ameliorates symptoms and pathology of APP or Tau-transgenic Alzheimer's mouse models. **FASEB J**. 2020;34:9628-9649. doi: 10.1096/fj.201902731RR.
7) Quan W, Luo Q, Tang Q, Furihata T, Li D, Fassbender K, **Liu Y** (*corresponding author*). NLRP3 Is Involved in the Maintenance of Cerebral Pericytes. **Front Cell Neurosci**. 2020;14:276. doi: 10.3389/fncel.2020.00276.
8) Qin Y, **Liu Y** (*Co-first authorship and corresponding author*), Hao W, Decker Y, Tomic I, Menger MD, Liu C, Fassbender K. Stimulation of TLR4 Attenuates Alzheimer's Disease-Related Symptoms and Pathology in Tau-Transgenic Mice. **J Immunol**. 2016;197:3281-92. doi: 10.4049/jimmunol.1600873.
9) Schnöder L, Hao W, Qin Y, Liu S, Tomic I, Liu X, Fassbender K, **Liu Y** (*corresponding author*). Deficiency of neuronal p38α-MAPK attenuates amyloid pathology in Alzheimer's mouse and cell models through facilitating lysosomal degradation of BACE1. **J Biol Chem**. 2016;291:2067-79. doi: 10.1074/jbc.M115.695916.
10) **Liu Y** (*corresponding author*), Liu X, Hao W, Decker Y, Schomburg R, Fülöp L, Pasparakis M, Menger MD, Fassbender K. IKKβ Deficiency in Myeloid Cells Ameliorates Alzheimer's Disease-Related Symptoms and Pathology. **J Neurosci.** 2014;34:12982-99. doi: 10.1523/JNEUROSCI.1348-14.2014.