BIOGRAPHICAL SKETCH

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NAME: Johannes Levin, MD

eRA COMMONS USER NAME (credential, e.g., agency login): Jolevin

POSITION TITLE: Professor for Clinical Neurodegeneration at LMU Munich; Deputy lead of clinical research at German Center for Neurodegenerative Diseases (DZNE), site Munich; Chief Medical Officer of MODAG GmbH

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
Ludwig-Maximilians-Universität München (Germany) University of Granada (Spain) Harvard University, Cambridge, MA (USA)	MD	05/2006	Medicine
Center of Neuropathology, LMU Munich	Dr. med. (*summa cum laude*)	12/2007	Neuroscience
LMU Munich, Department of Neurology, Residency in Neurology; Medical Board of Bavaria	Board certified neurologist	03/2015	Neurology
Department of Neurology, LMU Munich	Habilitation	12/2014	Neuroscience

A. Personal Statement

Johannes Levin holds a full professorship (W2) for clinical neurodegeneration in the Department of Neurology at Ludwig-Maximilians-Universität München. He is a neurologist by training and has over 20 years of experience in the field of neurodegenerative diseases. His primary research focus is on the molecular pathogenesis of neurodegenerative diseases, with a particular emphasis on protein aggregation and the development of therapies aiming at disease modification, including the compound anle138b. He is the principal investigator in international cohort studies such as the Dominantly Inherited Alzheimer's Network (DIAN) and the Genetic Frontotemporal dementia Initiative (GENFI). His work has contributed to the definition of natural history, environmental factors, symptomatic treatment and disease modification of neurodegenerative diseases.
He has a proven track record in coordinating academic research studies, including one of the largest recent interventional trials in Multiple System Atrophy involving 92 patients at 12 centers in Germany. In addition, he has gathered substantial experience in drug development in an industry setting through his part-time position as chief medical officer of MODAG GmbH. In this position, he was responsible for launching and successfully completing three phase 1 studies in the past 3 years.
The current application builds on their prior work on the role of inflammation in Alzheimer's disease within the ACTIGLIA study and on animal experiments within the SyNergy network (SyNergy: Munich Cluster of Systems Neurology – Part of Germany's Excellence Strategy). He is committed to contributing his full effort, expertise, leadership, training, and motivation to successfully complete the proposed research project.

B. Positions, Scientific Appointments, and Honors

Positions (chronological order)

Since 2015	Board Certified neurologist and Lecturer ("Privatdozent"), Department of Neurology, Ludwig-Maximilians-Universität München
Since 2015	DZNE site Munich, site PI for DIAN and DESCRIBE-FTD
Since 2015	Steering committee: Dominantly inherited Alzheimer Network (DIAN)
Since 2015	Steering committee, data access committee, therapeutics core committee: Genetic Frontotemporal Dementia Initiative (GenFI)
Since 2015	World young leaders dementia – initiated by JPND and the British government.
2016 - 2018	World Dementia Council: Integrated development team

2018 - 2023	Scientific advisor (wissenschaftlicher Beirat), German PSP Society
Since 2018	DZNE site Munich, deputy of the clinical trials unit
Since 2021	LMU Munich, full professor (W2) for clinical neurodegeneration

Honors (chronological order)

2005	Scholarship of the Harvard Munich Educational Alliance
2011	Award of the Novartis foundation for therapeutical research
2012	Award of the Felgenhauer foundation for the promotion of young neuroscientists
2013	Finalist: Galenus-von-Pergamon Prize
2015	Invited participant: European Young Leaders Event to Address Dementia; organized by JPND and the British Government
2018	MSA research award by the Mähler-Linke foundation
2020	Rolf-Becker-award of LMU Munich
2023	Helga Steinle-award of Alzheimer Research Initiative (Germany)
Poster awards	7. German Parkinson Congress (2011); DGKN-Congress „Medtronic high 10 award“ (2012); Symposium “100 years of Lewy bodies” (2012); 8. German Parkinson Congress (2013); 9. German Parkinson Congress (2015)
Memberships:	German Parkinson’s Disease Society, German Neurological Society, International Movement Disorder Society (MDS), German Kompetenznetz Parkinson

C. Contributions to Science

Pubmed listed publications: >250 (https://www.ncbi.nlm.nih.gov/myncbi/1tUNpivSngoQw/bibliography/public/); Google Scholar: H-index: 50; >10000 citations; https://scholar.google.de/citations?user=Vg2kjwIAAAAJ&hl=de).

Selected Publications:

1. **Levin J**. et al., Safety, tolerability and pharmacokinetics of the oligomer modulator anle138b with exposure levels sufficient for therapeutic efficacy in a murine Parkinson model: a randomised, double-blind, placebo-controlled phase 1a trial. *EBioMedicine*. 2022;80:104021.
2. Barthélemy NR, …, **Levin J**, …, McDade E. A soluble phosphorylated tau signature links tau, amyloid and the evolution of stages of dominantly inherited Alzheimer's disease. *Nat Med*. 2020 Mar;26(3):398-407. PMID: 32161412
3. **Levin J**. et al., Safety and efficacy of epigallocatechin gallate in multiple system atrophy (PROMESA): a randomised, double-blind, placebo-controlled trial. *Lancet Neurol.* 2019 Aug;18(8):724-735. PMID: 31278067
4. Vöglein J, …, **Levin J**. Clinical, pathophysiological, genetic features of motor symptoms in autosomal dominant AD. *Brain*. 2019 May 1;142(5):1429-1440. PMID: 30897203
5. Preische O, …, **Levin J**, …, Jucker M, Dominantly Inherited Alzheimer Network. Serum neurofilament dynamics predicts neurodegeneration and clinical progression in presymptomatic Alzheimer’s Disease. *Nature Medicine.* 25:277-283. PMID: 30897203
6. Höglinger GU, ..., **Levin J**, …, Litvan I; Movement Disorder Society-endorsed PSP Study Group. Clinical diagnosis of progressive supranuclear palsy: The movement disorder society criteria. *Mov Disord.* 2017 Jun;32(6):853-864. PMID: 28467028
7. **Levin J**, et al., The Differential Diagnosis and Treatment of Atypical Parkinsonism. *Dtsch Arztebl Int.* 2016 Feb 5;113(5):61-9. PMID: 26900156
8. Segovia F, …, **Levin J**. Distinguishing Parkinson's disease from atypical parkinsonian syndromes using PET data and a computer system based on support vector machines and Bayesian networks. *Front Comput Neurosci.* 2015 Nov 5;9:137. PMID: 26594165
9. **Levin J**, et al., The oligomer modulator anle138b inhibits disease progression in a Parkinson mouse model even with treatment started after disease onset. *Acta Neuropathol.* 2014 May;127(5):779-80. PMID: 24615514
10. Wagner J*, Ryazanov S*, Leonov A*, **Levin J***, …, Giese A. Anle138b: a novel oligomer modulator for disease-modifying therapy of neurodegenerative diseases such as prion and Parkinson's disease. *Acta Neuropathol.* 2013 Jun;125(6):795-813. PMID: 23604588

D. Additional Information: Research Support and/or Scholastic Performance

2008 Intramural research funding Ludwig-Maximilians-Universität München: „Development of antiaggregative compounds in a Parkinson mouse model“. Projekt Nr. 611/598

2010 German Parkinson Society: „The effect of trivalent metal ions in the pathogenesis of Parkinson's disease“

2012 - 2018 Joint funding of international ParkinsonFonds Germany, German Parkinson association, German foundation for neurology, Dr. med. Arthur Arnstein foundation and Bischof Dr Karl Golser foundation for the project: “PROMESA: Progression rate of MSA under EGCG supplementation for aggregate prevention” (http://www.clinicaltrials.gov/ct2/results?term=PROMESA)

2013 - 2018 Munich Cluster for Systems Neurology “Synergy”: “Transmission of human synucleinopathy to an animal model – implications for pathophysiology, strain specificity and therapeutic approaches”

2014 - 2022 Verum foundation: "Establishment of a cohort of patients with Down Syndrome (Trisomy 21) for imaging and biomarker studies"

2015 - 2024 Helmhotz Society (German Center for neurodegenerative diseases): DIAN: The Dominantly Inherited Alzheimer Network is an international prospective biomarker study focused on dominantly inherited Alzheimer’s disease.

2018 - 2019 Jerome LeJeune Foundation: “Project Horizon21 Europe - Clinical and trial outcome measures for dementia in individuals with Down syndrome”

2018 - 2019 Hirnliga e.V. (Manfred-Strohscheer-Stiftung): “Activity of Cerebral Networks, Amyloid and Microglia in Alzheimer’s Disease (ActiGliA)”

2018 - 2019 Centres of Excellence in Neurodegeneration (COEN - JPND): “Neuropathological and Amyloid peptides differences between Down syndrome and familial Alzheimer’s disease with duplications and missense mutations in APP gene”

2019 - 2024 Helmhotz Society (German Center for neurodegenerative diseases): DESCRIBE-PSP.

2020 - 2023 Michael J. Fox Foundation for Parkinson's Research: THERAPEUTIC PIPELINE PROGRAM: Anle138b Clinical Phase 1 Studies: Food Effect, Safety and Tolerability as well as Pharmacokinetics in Parkinson´s Disease.

2020 - 2025 BMBF: “Clinical Mass Spectrometry Center Munich”

2020 - 2024 Anton und Petra Ehrmann Stiftung: Development and use of a molecular assay for Parkinson´s disease

2015 - 2024 German Research Society (DFG) SyNergy – the "Munich Cluster for Systems Neurology" Phenome hub.

2021 - 2026 German Research Society (DFG) SyNergy – the "Munich Cluster for Systems Neurology" professorship for Clinical Neurodegeneration.

2022 - 2024 Michael J. Fox Foundation for Parkinson's Research: Longitudinal [^{18}F]DED PET imaging to determine regional and temporal trajectories of reactive astrocytosis in Parkinson’s Disease.

2021 - 2023 CurePSP: Venture Grant

2022 - 2024 CurePSP: Venture Grant

2023 - 2024 Center of Advanced Studies, LMU Munich – Research Group