

Curriculum Vitae

Personal Data

Title	Prof. Dr. rer. nat.
First name	Carsten
Name	Culmsee
Current position	W3 Professor
Current institution(s)/ site(s), country	Institute for Pharmacology and Clinical Pharmacy, Faculty of Pharmacy, Philipps-Universität Marburg (UMR), Germany
Identifiers/ORCID	0000-0002-5121-5015

Qualifications and Career

Stages	Periods and Details	
Degree programme	1989–1994	Pharmacy, UMR, Germany
Doctorate	1997	Dissertation, Pharmacology, “Neuroprotection through induction of NGF by the β_2 -mimetic clenbuterol”, UMR, Germany
Stages of academic/ professional career	2010–present	Professor of Clinical Pharmacy (W3), UMR, Germany
	2007–2010	Professor of Clinical Pharmacy (W2) and Chair of the Institute for Pharmacology and Clinical Pharmacy, UMR, Germany
	2003–2007	C2-Group Leader and Lecturer, Faculty of Pharmacy, University of München, Germany
	2004	Habilitation in Pharmacology and Toxicology, UMR, Germany
	2000–2003	C1-Research Associate, Faculty of Pharmacy, UMR, Germany
	1999–2000	DFG Postdoctoral fellow, Research Center on Aging, University of Kentucky, Lexington, USA
	1998	Postdoctoral scientist, Faculty of Pharmacy, UMR, Germany
	1995–1997	PhD student, Faculty of Pharmacy, UMR, Germany
	1994	Approbation Certificate, Pharmacist

Engagement in the Research System

- since 2018 Visiting Professor of Zhengzhou University, Zhengzhou, China
- since 2018 Founding Directorial Member and vice-director of the Center for Mind, Brain and Behavior – CMBB
- 2018–2021 Speaker of the Mitochondria-Network Initiative, Forschungscampus Mittelhessen – FCMH
- 2017–2018 Founding Directorial Member of the Marburg Center for Mind, Brain and Behavior - MCMBB
- since 2016 Director of the TransMIT Project Division for Mitochondrial Mechanisms of Neuronal Processes

- since 2015 Directorial Board Member of the Marburg University Research Academy - MARA
- since 2011 Vice Dean of the Faculty of Pharmacy, UMR, Germany
- 2007–2010 Chair of the Institute of Pharmacology and Clinical Pharmacy, Faculty of Pharmacy, UMR, Germany

Supervision of Researchers in Early Career Phases

- Long-standing and regular contributions to multidisciplinary training for national and international undergraduate, graduate and postgraduate students, offering lectures, practical courses and seminars on different topics from Pharmacology, Clinical Pharmacy to Molecular and Cellular Neurosciences. Since 2004, personal supervision of >30 PhD students and 3 habilitations.

Scientific Results

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

Category A (10 selected publications out of >150)

- Han W, ..., **Culmsee C**^{1,2,3,5}: Dying transplanted neural stem cells mediate survival bystander effects in the injured brain. *Cell Death Dis* 2023; 14(3):173. DOI: 10.1038/s41419-023-05698-z
- Ganjam GK, ..., **Culmsee C**^{1,2,3,4,5}: Mitochondrial damage by α -synuclein causes cell death in human dopaminergic neurons. *Cell Death Dis* 2019; 10(11):865. DOI: 10.1038/s41419-019-2091-2
- Michels S, **Wöhr M**, Schwarting RK, **Culmsee C**^{1,2,3,4,5}: Psychiatric risk gene *Cacna1c* determines mitochondrial resilience against oxidative stress in neurons. *Cell Death Dis* 2018; 9(6):645. DOI: 10.1038/s41419-018-0676-9
- Jelinek A, ..., **Culmsee C**^{1,2,3,4,5}: Mitochondrial rescue prevents glutathione peroxidase-dependent ferroptosis. *Free Radic Biol Med* 2018; 117:45-57. DOI: 10.1016/j.freeradbiomed.2018.01.019
- Kisko TM, ..., **Culmsee C**^{1,2,3,4,5}, Schwarting RKW, **Wöhr M**: *Cacna1c* haploinsufficiency leads to pro- social 50-kHz ultrasonic communication deficits in rats. *Dis Model Mech* 2018; 11(6):dmm034116. DOI: 10.1242/dmm.034116
- Neitemeier S, ..., **Culmsee C**^{1,2,3,4,5}: Bid links ferroptosis to mitochondrial death pathways. *Redox Biology* 2017; 12:558-570. DOI: 10.1016/j.redox.2017.03.007
- Richter M, ..., **Culmsee C**^{1,2,3,5}: Activation of SK2 channels preserves ER Ca^{2+} homeostasis and protects against ER stress-induced cell death. *Cell Death Differ* 2016; 23(5):814-827. DOI: 10.1038/cdd.2015.146
- Groh J, ..., **Culmsee C**^{1,2,3,4,5}: Inhibition of Drp1 provides neuroprotection in vitro and in vivo. *Cell Death Differ* 2012; 19(9):1446-1458. DOI: 10.1038/cdd.2012.18
- Dolga AM, ..., **Culmsee C**^{1,2,3,5}: Activation of KCNN3/SK3/K(Ca)_{v2.3} channels attenuates enhanced calcium influx and inflammatory cytokine production in activated microglia. *Glia* 2012; 60(12):2050-2064. DOI: 10.1002/glia.22419
- Tobaben S, ..., **Culmsee C**^{1,2,3,4,5}: Bid-mediated mitochondrial damage is a key mechanism in glutamate-induced oxidative stress and AIF-dependent cell death in immortalized HT-22 hippocampal neurons. *Cell Death Differ* 2011; 18(2):282-292. DOI: 10.1038/cdd.2010.92

Category B

Culmsee C^{1,2,4,5}, ..., Dannlowski U, Alferink J: Mitochondria, microglia, and the immune system-how are they linked in affective disorders? *Front Psychiatry* 2019;9:739. DOI:10.3389/fpsy.2018.00739

Kircher T, Wöhr M, Nenadić I, ..., Alferink J, Culmsee C^{1,2,3,4,5}, Garn H, Hahn T, ..., Jansen A, ..., Dannlowski U: Neurobiology of the major psychoses: a translational perspective on brain structure and function - the FOR 2107 consortium. *Eur Arch Psychiatry Clin Neurosci* 2019; 269(8):949-962. DOI: 10.1007/s00406-018-0943-x

Science communication (selected)

since 2021 Regional continuing education representative of the Landesapothekerkammer (LAK) Hessen for the area Marburg-Gießen, Germany

since 2014 Member of the Scientific Advisory Board for continuing education of the LAK Hessen, Germany

Academic Distinctions

2002 Phoenix Pharmacy Prize for Pharmacology

2000 Dissertation prize of the UMR

Other Information

n/a