

Kathrin Giehl, PhD
Curriculum Vitae



HIGHER EDUCATION

06/2015-06/2020

Doctoral Program (PhD) – Magna cum laude

Program: Health Sciences

Institute: University of Cologne, Cologne, Germany

Thesis: Antagonizing Cognitive Impairment in Parkinson's Disease:
Neural & Behavioural Effects of Home-based Working Memory
Training

09/2012 – 08/2014

Master of Science (M.Sc.) – with distinction

Program: Cognitive Neuropsychology

Institute: Free University Amsterdam, Amsterdam, The
Netherlands

Thesis: Individuals differ in cognitive and physical effort
discounting; achieved grade: 9/10

10/2010 - 08/2013

Bachelor of Science (B.Sc.)

Program: Biological Sciences

Institute: Johann Wolfgang Goethe University, Frankfurt am Main,
Germany

Thesis: Ontogeny of blood and serum parameters in the domestic
fowl Gallus gallus domesticus, achieved grade: 1.0

08/1999 - 03/2008

Secondary School

Private Gymnasium Marienstatt, Germany

Graduation: Abitur (A-levels)

PROFESSIONAL EXPERIENCE

- Since 06/2019 **Scientific research manager**
Institute: Institute of Neuroscience and Medicine (INM-2),
Research Center Jülich, Jülich, Germany
Tasks: Planning, organization and management of research
projects, project administration, data management, organization of
scientific conferences
- Since 06/2015 **Member of scientific staff**
Institute: Multimodal Neuroimaging Group, Department of Nuclear
Medicine, University Hospital Cologne, Cologne, Germany
Tasks: Conceptual design and management of research projects,
participant recruitment and project administration, data collection,
analysis of behavioral and imaging data, manuscript preparation
and data presentation
- 10/2014 – 05/2015 **Research assistant**
Institute: Cognitive Neurology Lab, Department of Experimental
Psychology, University of Oxford, Oxford, United Kingdom
Tasks: Management of research projects, participant recruitment,
data collection, data analysis
- 02/2014- 09/2014 **Research internship**
Institute: Cognitive Neurology Lab, Department of Experimental
Psychology, University of Oxford, Oxford, United Kingdom
Tasks: Execution and analysis of master thesis project, manuscript
preparation and data presentation
- 11/2011- 08/2012 **Nurse assistant**
Agaplesion Schwanthaler Carrée, Frankfurt am Main, Germany
Tasks: Taking care of elderly and helping with their daily routine

TEACHING EXPERIENCE

- Spring 2015 **Academic Tutor** at the University of Oxford, Oxford, United
Kingdom
Tasks: Supervision of Experimental Psychology B.Sc. students
- Autumn 2010 **Academic Tutor** at the Johann Wolfgang Goethe University,
Frankfurt am Main, Germany
Tasks: Supervision of student group during practical B.Sc. course

HONORS & STIPENDS

04/2018	IPaK Travel grant awarded by the Medical Faculty of the University of Cologne to attend the International Congress of Parkinson's Disease and Movement Disorders, Hong Kong
05/2016	IPaK Travel grant awarded by the Medical Faculty of the University of Cologne to attend the 22 nd annual meeting of the Organization of Human Brain Mapping in Geneva, Switzerland
09/2015	Travel grant awarded by the University of Oxford to attend the Autumn School of Cognitive Neuroscience 2015 in Oxford, United Kingdom
08/2014	Nomination for the Best Thesis Price 2014 awarded by the Free University of Amsterdam, Amsterdam, The Netherlands
02/2014	6-month stipend from the Free University of Amsterdam sponsored by ERASMUS for a research stay abroad at the University of Oxford, Oxford, United Kingdom
03/2008	Certificate of the federal state Rhineland-Palatine for extraordinary social commitment

PROFESSIONAL SOCIETIES & MEMBERSHIPS

Since 2017	Member of German Parkinson Society (DPG)
Since 2015	Associate member of St. John's College, Oxford

PUBLICATIONS

Giehl K, Ophey A, Hammes J, Rehberg S, Lichtenstein T, Reker P, Eggers C, Kalbe E & van Eimeren T. Working memory training increases neural efficiency in Parkinson's disease: a randomized-controlled trial, Brain Communications, 2020.

Ophey A, **Giehl K**, Rehberg S, Eggers C, Reker P, van Eimeren T & Kalbe E. Effects of working memory training in patients with Parkinson's disease without cognitive impairment: A randomized controlled trial. Parkinsonism & related disorders. 2020 Feb 11.

Giehl K, Ophey A, Reker P, Rehberg S, Hammes J, Barbe MT, Zokaei N, Eggers C, Husain M, Kalbe E, van Eimeren T. Effects of Home-Based Working Memory Training on Visuo-Spatial Working Memory in Parkinson's Disease: A Randomized Controlled Trial. Journal of Central Nervous System Disease. 2020 Jan; 12:1179573519899469.

Hammes J, Theis H, **Giehl K**, Hoenig MC, Greuel A, Tittgemeyer M, Timmermann L, Fink GR, Drzezga A, Eggers C, van Eimeren T. Dopamine metabolism of the nucleus accumbens and fronto-striatal connectivity modulate impulse control. *Brain*. 2019 Mar 1;142(3):733-43.

Giehl K, Tahmasian M, Eickhoff SB, van Eimeren T. Imaging executive functions in Parkinson's disease: An activation likelihood estimation meta-analysis. *Parkinsonism & related disorders*. 2019 Feb 20.

Baumann A, Nebel A, Granert O, **Giehl K**, Wolff S, Schmidt W, Baasch C, Schmidt G, Witt K, Deuschl G, Hartwigsen G. Neural Correlates of Hypokinetic Dysarthria and Mechanisms of Effective Voice Treatment in Parkinson Disease. *Neurorehabilitation and neural repair*. 2018 Dec;32(12):1055-66.

Chong TT, Apps MA, **Giehl K**, Hall S, Clifton CH, Husain M. Computational modelling reveals distinct patterns of cognitive and physical motivation in elite athletes. *Scientific reports*. 2018 Aug 8;8(1):11888.

Tahmasian M, Eickhoff SB, **Giehl K**, Schwartz F, Herz DM, Drzezga A, van Eimeren T, Laird AR, Fox PT, Khazaie H, Zarei M. Resting-state functional reorganization in Parkinson's disease: an activation likelihood estimation meta-analysis. *Cortex*. 2017 Jul 1;92:119-38.

Zokaei N, **Giehl K**, Sillence A, Neville MJ, Karpe F, Nobre AC, Husain M. Sex and APOE: A memory advantage in male APOE ϵ 4 carriers in midlife. *cortex*. 2017 Mar 1;88:98-105.

Chong TT, Apps M, **Giehl K**, Sillence A, Grima LL, Husain M. Neurocomputational mechanisms underlying subjective valuation of effort costs. *PLoS biology*. 2017 Feb 24;15(2):e1002598.

Hammes J, Bischof GN, **Giehl K**, Faber J, Drzezga A, Klockgether T, van Eimeren T. Elevated in vivo [18 F]-AV-1451 uptake in a patient with progressive supranuclear palsy. *Movement Disorders*. 2017 Jan;32(1):170-1.

Rolinski M, Zokaei N, Baig F, **Giehl K**, Quinnell T, Zaiwalla Z, Mackay CE, Husain M, Hu MT. Visual short-term memory deficits in REM sleep behaviour disorder mirror those in Parkinson's disease. *Brain*. 2015 Nov 18;139(1):47-53.

CONFERENCE ABSTRACTS FOR ORAL COMMUNICATION (2018)

Giehl K, Opey A, Hammes J, Rehberg S, Reker P, Eggers C, Lichtenstein T, Maintz D, Kalbe E, van Eimeren T (March 2019). Training of working memory in Parkinson's disease: neural correlates of pure storage and manipulation. 11th German Congress for Parkinson and Movement Disorders, Düsseldorf, Germany.

Giehl K. & Opey A. (April 2018). Digital working memory training: cognitive and neural effects. 23rd Conference on Psychology and Parkinson's Disease, Cologne, Germany.

Giehl K, Reetz K, Dogan I, Werner C, Schulz JB, Hammes J, Drzezga A, van Eimeren T (March 2018). Increased age-associated striatal uptake of tau-binding PET tracer [18 F]-AV-1451 in Huntington's disease 7th European Conference on Clinical Neuroimaging, Brussels, Belgium.

CONFERENCE ABSTRACTS FOR POSTERS (2018-2016)

Giehl K, Ophay A, Hammes J, Rehberg S, Reker P, Eggers C, Lichtenstein T, Maintz D, Kalbe E, van Eimeren T (March 2019). Training of working memory in Parkinson's disease: neural correlates of pure storage and manipulation. 14th International Conference on Alzheimer's & Parkinson's diseases, Lisbon, Portugal.

Giehl K, Ophay A, Hammes J, Rehberg S, Eggers C, Lichtenstein T, Maintz D, Kalbe E, van Eimeren T (October 2018). Working memory maintenance and manipulation in Parkinson's disease: an fMRI study. 22nd International Congress of Parkinson's Disease and Movement Disorders, Hong Kong [Abstract published in Movement Disorders. 2018 Oct 1; Vol. 33, pp. S565-S566].

Giehl K, Reetz K, Dogan I, Werner C, Schulz JB, Hammes J, Drzezga A, van Eimeren T (May 2017). Tau pathology in Huntington's disease: A brief in vivo PET-imaging report. 10th German Congress for Parkinson and Movement Disorders, Baden-Baden, Germany [Abstract published in Basal Ganglia. 2017 May 31; 8:13].

Giehl K, Reetz K, Dogan I, Werner C, Schulz JB, Drzezga A, van Eimeren T (June, 2016). Tau pathology in Huntington's disease: a brief in vivo PET-imaging report. 20th International Congress of Parkinson's Disease and Movement Disorders, Berlin, Germany [Abstract published in Movement Disorders. 2016 Jun 1;31: S359-60].

Giehl K, Hammes J, Bischof G, Drzezga A, van Eimeren, T (2016, June). Subcortical Tau Imaging in Neurodegeneration – Advantages of Multimodal Spatial Normalization. 22nd Annual Meeting of the Organization for Human Brain Mapping, Geneva, Switzerland.