

Curriculum Vitae

Iris Wiegand, PhD

Max Planck UCL Centre for Computational Psychiatry and Ageing Research
& Visual Attention Lab, Brigham & Women's Hospital, Harvard Medical School

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Education

March 2013	Ph.D. in Systemic Neurosciences (summa cum laude, 1.0) <i>Graduate School of Systemic Neurosciences, LMU Munich</i>	Munich Germany
Dec. 2009	Diploma in Psychology (1.0) <i>Saarland University</i>	Saarbrücken Germany

Work Experiences

March 2017 - current	Post Doc (EU Marie Skłodowska-Curie Fellow) <i>Visual Attention Lab, Brigham & Women's Hospital, Harvard University</i>	Cambridge, United States
July 2016 – current	Post Doc <i>Max-Planck UCL Centre for Computational Psychiatry and Ageing Research, Max-Planck Institute for Human Development</i>	Berlin Germany
Mar. 2013 – June 2016	Post Doc <i>Center for Visual Cognition (CVC), University of Copenhagen</i>	Copenhagen Denmark
Jan. 2010 – Feb. 2013	Prae Doc <i>General and Experimental Psychology, LMU Munich</i>	Munich Germany
Nov. 2005– Dec. 2009	Student Research Assistant <i>Cognitive Neuropsychology Unit, Clinical Neuropsychology Unit, and Brain and Cognition Unit, Saarland University</i>	Saarbrücken Germany
Oct. 2008 – Feb. 2009	Intern <i>Schön Klinik Bad Aibling</i>	Bad Aibling Germany
Feb. – Apr. 2007	Intern <i>Max-Planck-Institute for Human Cognitive & Brain Sciences</i>	Leipzig Germany

Teaching and Supervision

2014 – 2016	Lectures: Neuropsychology (“Neuro-cognitive methods”, “Cognitive Aging”) <i>M.Sc. Psychology, University of Copenhagen</i>	Copenhagen Denmark
2013 – 2016	Lectures: Cognitive Psychology (“EEG methods”) <i>B.Sc. Psychology, University of Copenhagen</i>	Copenhagen Denmark
2010 – 2013	Tutorial: “Neuropsychological assessment” <i>M.Sc. Neuro-Cognitive Psychology, LMU Munich</i>	Munich, Germany

2011 – 2012	Lectures and supervision in various research seminars (e.g. “Aging and hierarchical processing”, “Attention in schizophrenia”, “Neglect”) <i>M.Sc. Neuro-Cognitive Psychology, LMU Munich</i>	Munich, Germany
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(Co-) Supervision

2017	Student Research Project “Hybrid Foraging Search in Aging” <i>B.Sc. Psychology, University of Frankfurt (at Harvard University)</i>	Cambridge, United States
2017	Student Research Project “Sequence Learning in Hybrid Search” <i>M.Sc. Neuro-Cognitive Psychology, LMU Munich (at Harvard University)</i>	Cambridge, United States
2015	Master Thesis “Hemispheric asymmetries in visual memory and aging” <i>M.Sc. Psychology, Humboldt University Berlin (at Max Planck Institute for Human Development)</i>	Berlin, Germany
2014/15	Master Thesis “Effects of tDCS on older adult’s visual attention capacity” <i>M.Sc. Psychology, University of Groningen (at Trinity College Dublin)</i>	Dublin, Ireland
2013/14	Student Research Project “Parametric Assessment of Attention” <i>M.Sc. Neuro-Cognitive Psychology, LMU Munich (at University of Copenhagen)</i>	Copenhagen, Denmark
2013	Student Research Project “EEG markers of reward effects on visual perception” <i>M.Sc. Medicine and Technology, Technical University of Denmark (at University of Copenhagen)</i>	Copenhagen, Denmark
2012	Master Thesis “Global and local processing in aging” <i>M.Sc. Neuro-Cognitive Psychology, LMU Munich</i>	Munich, Germany

Grants and Awards

2017 – 2020	Individual Global Fellowship (239.861 €), <i>EU Marie Sklodowska-Curie Actions (PI)</i>
2014 – 2016	MOBILEX Mobility Grant (2.4 mio DKK; 323.000 €), <i>Individual Postdoc Grant from the Danish Research Council (DFF) & EU Marie Sklodowska-Curie COFUND Actions (PI)</i>
2013	Dissertation Award “GNP-Förderpreis 2013“, <i>German Neuropsychological Society</i>
2012	Student Publication Award, <i>Graduate School of Systemic Neurosciences, LMU Munich</i>
2010 – 2012	Full PhD Scholarship (24 month, 14.600€), <i>Elite Network Bavaria</i>
2009	Student stipend for outstanding Diploma Thesis project (6 month, 2.400€), <i>Department of Psychology, Saarland University</i>

Other Activities

Organization	Winterschool “EEG Data Analyses in Cognitive Science”. Lecturers: Prof. O. Jensen (University of Nijmegen); Prof. B. Giesbrecht (UC Santa Barbara); Prof. M. De Vos (University of Oxford). 15th-19th December 2014, <i>University of Copenhagen</i> Workshop “Brain oscillations and cognitive processes”. Lecturer: Prof. W. Klimesch (University of Salzburg). 18th – 20th October 2011, <i>LMU Munich</i>
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Membership	Association for Psychological Science, Cognitive Neuroscience Society, European Society for
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Aging, European Society for Cognitive and Affective Neuroscience, Visions Science Society, GSN Alumni Network Society, Elite Network Bavaria

Representation Coordinator of the North America Chapter of the Marie-Curie Alumni Association

Ad-hoc Reviewer Acta Psychologia, Advances in Cognitive Psychology, Brain & Cognition, Cortex, Frontiers in Cognitive Psychology, Frontiers in Psychology, Investigative Ophthalmology & Visual Science, Journal of Experimental Psychology, Journal of the international Neuropsychological Society, Neurobiology of Aging, Neuropsychologia, PLOS One, Scandinavian Journal of Psychology

Editorial Board
Member Journal of Experimental Psychology: Human Perception and Performance (from 2018)

Other Qualifications

Data Analyses & MATLAB
Programming EEG data processing and analyses: EEGLab/ERPLab, Fieldtrip, Brain Vision Analyzer
Experiments: E-prime, Psychtoolbox

Language Skills German (native), English (fluent), Danish (basic), French (basic)

Publications

Journal articles

Wiegand, I., Naipiorkowski, N., Töllner, T., Müller, H.J., Petersen, A., Habekost, T & Finke, K. (in press). Event-related electroencephalographic lateralizations mark individual differences in spatial and non-spatial visual selection. *Journal of Cognitive Neurosciences*. Epub ahead of print.

Wiegand, I., Lauritzen, M.J., Osler, M., Mortensen, E.L., Rostrup, E., Rask, L., Richard, N., Horwitz, A., Benedek, K., Petersen, A., & Vangkilde, S. (2018). Behavioral and EEG correlates of visual short-term memory in older age vary with adult life-span cognitive development. *Neurobiology of Aging*. 62, 210-220.

Wiegand, I. Petersen, A., Bundesen, C., & Habekost, T. (2017). Phasic alerting increases visual attention in younger adults but not in older adults. *Visual Cognition*, 1-15.

Brosnan, M., Demaria, G., Petersen, A., Dockree, P., Robertson, I.H., & **Wiegand, I.** (2017). Plasticity of the Right-Lateralised Cognitive Reserve Network in Ageing. *Cerebral Cortex*. Epub ahead of print.

Brosnan, M., & **Wiegand, I.** (2017). The dorsolateral prefrontal cortex, a dynamic cortical area to enhance top-down attentional control. *Journal of Neuroscience*, 37(13), 3445-3446.

Wiegand, I. Petersen, A., Finke, K., Lansner, J., Bundesen, C., & Habekost, T. (2017). Behavior and brain measures of phasic alerting effects on visual attention. *Frontiers in Human Neuroscience*. doi: 10.3389/fnhum.2017.00176

Horwitz, A., Thomsen, M. D., **Wiegand, I.**, Horwitz, H., Klemp, M., Nikolic, M., Lauritzen, M. & Benedek, K. (2017). Visual steady state in relation to age and cognitive function. *PLoS one*, 12(2), e0171859.

Wiegand, I., Hennig-Fast, K., Kilian, B., Müller, H. J., Töllner, T., Möller, H. J., ... & Finke, K. (2016). EEG correlates of visual short-term memory as neuro-cognitive endophenotypes of ADHD. *Neuropsychologia*, 85, 91-99.

Wiegand, I., Finke, K., Töllner, T., Starman, K., Müller, H. J., & Conci, M. (2015). Age-related decline in global form suppression. *Biological Psychology*, 112, 116-124.

Cross-Villasana, F., Finke, K., **Wiegand, I.**, Kilian, B., Henning-Fast, K., Müller, H.J. & Töllner, T. (2015). Visual and motor delays in visual search in adult attention-deficit-hyperactivity disorder. *Biological Psychiatry*, 78, 107-115.

Wiegand, I., Töllner, T., Dyrholm, M., Müller, H. J., Bundesen, C., & Finke, K. (2014). Neural correlates of age-related decline and compensation in visual speed and short-term storage capacity. *Neurobiology of Aging*, 35, 2161-2173.

Wiegand, I., Töllner, T., Habekost, T., Dyrholm, M., Müller, H. J., & Finke, K. (2014). Distinct neural markers of TVA-based visual processing speed and short-term storage capacity parameters. *Cerebral Cortex*. DOI: 10.1093/cercor/bht071.

Wiegand, I., Finke, K., Müller, H. J., & Töllner, T. (2013). Event-related potentials dissociate perceptual from response-related age effects in visual search. *Neurobiology of Aging*, 34, 973-985.

Wiegand, I., Bader, R., & Mecklinger, A. (2010). Multiple ways to the prior occurrence of an event: An electrophysiological dissociation of experimental and conceptually driven familiarity. *Brain Research*, 1360, 106-118.

Wiegand, I., & Keller, I. (2009). EEG-Korrelate der Aufmerksamkeit bei Gesunden und Patienten mit Hirnschädigung. *Zeitschrift für Neuropsychologie*, 20, 4.

Dissertation

Wiegand, I. (2013). Components of Aging: Neurophysiological markers of age-related changes in visual attention. Dissertation, LMU Munich: Graduate School of Systemic Neurosciences.

Conference Contributions

Wiegand, I. & Wolfe, J. (2017, August). Hybrid Visual and Memory Search in Aging (Poster). European Conference on Visual Perception (ECCV) 2017, Berlin, Germany.

Wiegand, I. & Sander, M.C. (2017, August). Cue-evoked alpha phase dynamics influence subsequent stimulus-processing in younger and older adults (Poster). International Conference on Cognitive Neuroscience (ICON), 2017, Amsterdam, Netherlands.

Wiegand, I. Petersen, A., Bundesen, C. & Habekost, T. (2017, May). Adult age differences in phasic alerting effects on components of attention (Poster). Vision Science Society Meeting (VSS) 2017, St. Pete, Florida, USA.

Napiorkowski, N., Töllner, T., Müller, H.J., **Wiegand, I.**, Petersen, A. & Finke, K. (2016, Nov). Electrophysiological markers of attentional selectivity. (Poster). Society for Neuroscience Meeting (SFN) 2016, San Francisco, California, USA.

Wiegand, I. (2016, July). Not dedifferentiation, but distinction in aging: reserve and decline in visual working memory and processing speed. (Talk) In: Zimmer, H. (Chair): When remembering is a challenge: visual working memory and aging. International Conference on Memory (ICOM), Budapest, Hungary.

Wiegand, I., Petersen, A., Finke, K., Lansner, & Habekost, T. (2016, May). Auditory alerting enhances visual attentional processing: Evidence from computational modeling and event-related lateralizations (Poster). Vision Science Society Meeting (VSS) 2016, St. Pete, Florida, USA.

Wiegand, I., Petersen, A., & Habekost, T. (2016, April). Event-related lateralizations index individual differences in spatial bias and top-down control of selective attention (Poster, accepted). Cognitive Neuroscience Society Meeting (CNS) 2016, New York, New York, USA.

Demaria, G., Brosnan, M., Petersen, A., Dockree, P., Robertson, I.H., & **Wiegand, I. (2016, April).** Investigating the Effects of Brain Stimulation on Visual Attention in Older Adults (Poster, accepted). Cognitive Neuroscience Society Meeting 2016, New York, New York, USA.

Wiegand, I., Hennig-Fast, K., Kilian, B., Müller, H.J., Töllner, T., & Finke, K. (2015, May). EEG markers of reduced vSTM storage capacity in adult ADHD (Poster). Vision Science Society Meeting (VSS) 2015, St. Pete, Florida, USA.

Cooreman, B., **Wiegand, I.**, Petersen, A., Vangkilde, S., & Bundesen, C. (2015, May). Cue-it? We say: Block-it! (Poster). Vision Science Society Meeting (VSS) 2015, St. Pete, Florida, USA.

- Wiegand, I.**, Nielsen, C.S., Petersen, A., & Bundesen, C. (2014, June). The value of paying attention: Behavioral modeling and EEG data (Talk). International TVA network meeting 2014, Copenhagen, Denmark.
- Wiegand, I.**, Nielsen, C.S., Petersen, A., & Bundesen, C. (2014, May). Brain signatures of reward-dependent bias in visual attention (Poster). Vision Science Society Meeting (VSS) 2014, St. Pete, Florida, USA.
- Wiegand, I.**, Töllner, T., Finke, K., Müller, H.J., & Conci, M. (2014, May). Event-related potentials reveal increased distraction by salient global objects (Poster). 2nd International Conference of the European Society for Cognitive and Affective Neuroscience (ESCAN), Dortmund, Germany.
- Wiegand, I.**, Töllner, T., Müller, H. J., Bundesen, C. & Finke, K. (March 2014). Event-related potential indices of inter-individual and age differences in visual attention capacity. Poster auf der 'Closing Conference of the ZIF Research Group Competition and Control of Mind and Brain'. Zentrum für Interdisziplinäre Forschung, Bielefeld University.
- Wiegand, I.** (August 2013). Neural markers of individual and age differences in TVA attention capacity parameters (Poster). European Conference on Visual Perception (ECPV) 2013, Bremen, Germany.
- Wiegand, I.**, Töllner, T., Müller, H. J., & Finke, K (2013, March). Neural markers of age-related reserve and decline in visual processing speed and visual short-term memory capacity (Talk). In I. Scharlau & K. Finke (Chair). The Theory of Visual Attention in behavioral and clinical research. Symposium at the 55. Tagung experimentell arbeitender Psychologen (TEAP), Vienna, Austria. http://teap.de/docs/teap2013_abstracts.pdf
- Wiegand, I.**, Töllner, T., Müller, H. J., & Finke, K (2012, July). ERPs dissociate TVA parameters of visual perceptual processing speed and vSTM capacity (Poster). Visual Search and Selective Attention Symposium (VSSA), Holzhausen, Germany.
- Wiegand, I.**, Töllner, T., Müller, H. J., & Finke, K (2012, June). Event-related potentials differentiate TVA parameters of general capacity (Talk). International TVA network meeting, Copenhagen, Denmark.
- Wiegand, I.**, Finke, K. Müller, H. J., & Töllner, T., (2012, April). Adult age differences in visual search from perception to response (Talk). In: K. Finke & I. Wiegand (Chair). Adult age differences in visual cognition. Symposium conducted at the 54. TEAP, Mannheim, Germany.
- Wiegand, I.**, Töllner, T., Müller, H. J., & Finke, K. (2011, September). Event-related potentials differentiate perceptual and short-term memory related TVA parameters (Poster). International Conference on Cognitive Neuroscience 2011 (ICON), Palma, Mallorca, Spain.
- Wiegand, I.**, Finke, K. Müller, H. J., & Töllner, T., (2011, March). Altersbedingte Verlangsamung in Visueller Suche: Eine neuro-chronometrische Analyse (Poster). 53. Tagung experimentell arbeitender Psychologen (TEAP), Halle, Germany.
- Wiegand, I.**, & Keller, I. (2011, February). EEG-Correlates of attention in brain-injured patients and healthy controls (Poster). 15th Annual Meeting of the Biofeedback Foundation of Europe (BFE), Munich, Germany.