

## Curriculum Vitae

**Name** Prof. Dr. med. Wolfgang Kelsch

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### Education

2019 Venia legendi for Psychiatry and Psychotherapy, Heidelberg University  
2018 Master of Business Administration, Mannheim University  
2016 Board Certification in Psychiatry and Psychotherapy  
2004 Dissertation (summa cum laude), Heidelberg University  
2003 Studies in Medicine, Heidelberg University, Paris 6, University College London

### Research Experience

Since 2019 **W2-Professor for Systems Neuroscience** and Group leader at MZPG and FTN, University Medical Center Mainz, Mainz University  
2011 – 2019 Group Leader, **Central Institute of Mental Health**, Heidelberg University  
2008 – 2010 Postdoctoral fellow, Dept. of Clinical Neurobiology, **German Cancer Research Center** and Heidelberg University  
2005 – 2008 Postdoctoral fellow, Dept. of Brain and Cognitive Science, **Massachusetts Institute of Technology, Cambridge, MA, USA**  
2004 – 2005 Fellow, **Max-Planck-Institute of Psychiatry**, Munich

### Funding

2020 – 2023 Boehringer Foundation Grant  
2019 – 2022 BMBF-NSF Grant 01GQ1708  
2015 – 2020 DFG SFB1134 TP C04  
2015 – 2020 DFG SPP1665 KE1661/2-2  
2013 – 2015 DFG SPP1665 KE1661/2-1  
2012 – 2015 DFG SFB636 TP B08  
2011 – 2017 DFP Emmy-Noether-Program KE1661/1-1

### Professional Activities and Memberships

2012 – 2020 Grant Reviewer: e.g. Deutsche Forschungsgemeinschaft, COST, BMBF  
2019 – 2021 Member of the ANR Molecular Neuroscience Panel, Paris  
2020 Symposium Organizer 'Boosting social salience through Oxytocin?', Joint Meeting AGNP and DGBP, Berlin  
2017 Symposium Organizer 'Computations - from sensations to decisions', Tagung der Neurowissenschaftlichen Gesellschaft, Göttingen  
2010 – 2020 Peer Review: e.g. Science, Nature Communication, Nature Methods, Nature Neuroscience Reviews, Neuron, PLoS Biology, Cell reports, J. Neuroendocrinology, Scientific reports  
2016 – 2019 Community outreach e.g. Jury der Deutschen Neurowissenschaften-Olympiade e.V. für Schüler, Teachers visiting University

2008 – 2020 Society memberships: Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde, AGNP, Society f. Neuroscience, Neurowissenschaftliche Gesellschaft, AChemS

### Honors and Recognitions

2015 – 2018 Travel fellowship A.-v.-H. Foundation and Chinese Academy of Science  
2014 – 2015 Chica and Heinz Schaller Fellowship  
2008 – 2010 Fellowship of the Medical Faculty Heidelberg  
2005 – 2008 Paul E. Newton Grant Fellowship  
2004 – 2005 Fellowship Max Planck Society  
1999 – 2003 Studienstiftung des Deutschen Volkes

### Selected Key Publications

Oettl LL\*, Scheller M\*, Filosa F\*, Wieland S, Haag F, Loeb C, Durstewitz D, Shusterman R, Russo E\*, **Kelsch W\*** (2020) Phasic dopamine reinforces distinct striatal stimulus encoding in the olfactory tubercle driving dopaminergic reward prediction. **Nature Communications** 11:3460 \* shared

Clemm von Hohenberg C, Weber-Fahr W, Leibold P, Ravi N, Braun U, Gass N, Becker R, Sack M, Cosa Linan A, Gerchen MF, Reinwald JR, Oettl LL, Meyer-Lindenberg A, Vollmayr B, **Kelsch W\***, Sartorius A\* (2018). Lateral habenula perturbation reduces default-mode network connectivity in a rat model of depression. **Transl. Psychiatry** 8, 68, \* shared

Oettl LL, Ravi R, Schneider M, Scheller M, Schneider P, Mitre M, Froemke RC, Chao MV, Young WS, Meyer-Lindenberg A, Grinevich V, Shusterman, **Kelsch W** (2016) Oxytocin enhances social recognition by modulating cortical control of early olfactory processing. **Neuron** 90:609-21. (Preview: Ron Stoop (2016) Sniffing and Oxytocin: Effects on Olfactory Memories. *Neuron* 90:431-3)

Wieland S, Schindler S, Huber C, Köhr G, Oswald MJ, **Kelsch W** (2015) Phasic Dopamine Modifies Sensory-Driven Output of Striatal Neurons through Synaptic Plasticity. **J Neurosci** 35:9946-56.

Wieland S, Dan D, Oswald M, Parlato R, Köhr G, **Kelsch W** (2014) Phasic Dopaminergic activity exert fast control of cholinergic interneuron firing by sequential NMDA, D2 and D1 receptor activation. **J Neurosci** 34:11549-59.

Lin CW, Sim S, Ainsworth A, Okada M, **Kelsch W**, and Lois C (2010). Genetically increased cell-intrinsic excitability enhances neuronal integration into adult brain circuits. **Neuron** 65, 32–39.

**Kelsch W**, Sim S, Lois C (2010) Watching Synaptogenesis in the Adult Brain. **Ann Rev Neurosci** 33:131-149.

**Kelsch W**, Lin CW, Lois C (2008) Sequential development of synapses in dendritic domains during adult neurogenesis. **PNAS** 105:16803-16808.

**Kelsch W**, Mosley CP, Lin CW, Lois C (2007) Distinct mammalian precursors are committed to generate neurons with defined dendritic projection patterns. **PLoS Biol** 5:1201-1212.

**Kelsch W**, Hormuzdi S, Straube E, Lewen A, Monyer H, Misgeld U (2001). Insulin-like growth factor 1 and a cytosolic tyrosine kinase activate chloride outward transport during maturation of hippocampal neurons. **J Neurosci** 21, 8339–8347.