Curriculum Vitae

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

Contact

Primary Affiliation
Dept. of Psychiatry and Psychotherapy, University Medical Center Mainz
Untere Zahlbacher Strasse 8, 55131 Mainz, Germany
+49(0)6131/17-3950, wokelsch@uni-mainz.de

Secondary Affiliation
Central Institute of Mental Health
Square J5, 68159 Mannheim, Germany
+49(0)621/1703-6208, wolfgang.kelsch@zi-mannheim.de

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, Sorbonne Paris, University College London

Research Experience

2019 –	**W2-Professor for Systems Neuroscience** and Group leader at MZPG and FTN, University Medical Center Mainz, Mainz University
2011 –	Group Leader, **Central Institute of Mental Health**, Heidelberg University
2008 – 2010	Postdoctoral fellow, Dept. of Clinical Neurobiology, **German Cancer Research Cente**r 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

2023 – 2025	BMBF 3R NoSeMaze2
2022 – 2025	Leibniz Society SAW Learning Resilience
2021 – 2023	BMBF 3R NoSeMaze1
2020 – 2023	Boehringer Foundation Complex Systems Grant
2018 – 2023	BMBF-NSF CRCNS Grant 01GQ1708
2015 – 2020	DFG SFB1134 TP C04
2013 – 2022	DFG SPP1665 KE1661/2-1 … 2-2
2012 – 2015	DFG SFB636 TP B08
2011 – 2017	DFP Emmy-Noether-Program KE1661/1-1 ... 1-3

Professional Activities and Memberships

2023 –	Board of Directors Leibniz Society Science Campus NanoBrain
2012 –	Grant Reviewer: e.g. DFG, COST, BMBF, ISF, HFSP
2020 –	NSF CRCNS Panel, Washington
2019 – 2021	ANR Molecular Neuroscience Panel, Paris
2017 –	Symposium Chair, eg. AGNP, DGBP, NWG, AChemS
2010 –	ad hoc Reviewer, e.g. Science, Nature, Neuron, PLoS Biology, J Neurosci
2008 –	Membership DGPPN, DGBS, AGNP, SoBP, SfN, NWG, 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

Winkelmeier L, Filosa C, Hartig R, Scheller M, Sack M, Reinwald JR, Becker R, Wolf D, Gerchen MF, Sartorius A, Meyer-Lindenberg A, Weber-Fahr W, Clemm von Hohenberg C*, Russo E*, **Kelsch W*** (2022) Striatal hub of dynamic and stabilized prediction coding in forebrain networks for olfactory reinforcement learning. **Nature Communications** 13:3305. * shared

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, Lebhardt 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.