

Benjamin Judkewitz

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Curriculum vitae

Since 2014	Professor of Neurobiology, NeuroCure – Cluster of Excellence, Berlin; Head of Bioimaging and Neurophotonics Lab
2010 – 2014	Sir Henry Wellcome postdoctoral fellow, California Institute of Technology, Departments of Bioengineering and Electrical Engineering, Pasadena, US
2006 – 2010	PhD in Physiology and Neuroscience, University College London, UK
2005	Master's (Diplom) thesis, Max Planck Institute for Medical Research, Heidelberg
2000 – 2005	Studies in Biology, Universität Heidelberg and University of California, Berkeley, US

Research fields

Our group is active in the field of:

- Whole-brain microscopy
- Animal communication
- Bioimaging and Neurophotonics
- Tool development
- Neuroethology

Activities in the scientific community, honors, awards

2016	Starting Grant, European Research Council (ERC)
2016	Krupp Foundation Award
2015	FEI Technology Award, German Neuroscience Society (NWG)
2010 – 2014	Sir Henry Wellcome Postdoctoral Fellowship, Wellcome Trust, UK
2008	Young Investigator Award in Neuroimaging Techniques, University College London, UK
2006 – 2010	PhD Fellowship, Boehringer Ingelheim Fonds
2006 – 2010	PhD scholarship, Medical Research Council, UK
2003 – 2004	Scholarship, German Academic Exchange Service (DAAD)
2003 – 2004	University of California exchange student scholarship, US
2000 – 2005	Scholarship, Studienstiftung des deutschen Volkes (German Academic Scholarship Foundation)
1993	1 st prize in the German Federal Competition Mathematics

Selected publications

- Hoffmann M, Judkewitz B. Diffractive oblique plane microscopy. *Optica* 2019; 6: 1166-1170
- Schulze L*, Henninger J*, Kadobianskyi M, Chaigne T, Faustino AI, Hakiy N, Albadri S, Schuelke M, Maler L, Del Bene F, Judkewitz B. Transparent *Danio rerio* as a genetically tractable vertebrate brain model. *Nat Methods* 2018; 15: 977-983 | *equal contribution
- Papadopoulos IN, Jouhannau JS, Poulet JF, Judkewitz B, (2016) Scattering compensation by focus scanning holographic aberration probing (F-SHARP), *Nat Photon* 2017;11:116-123
- Judkewitz B, Horstmeyer R, Vellekoop IM, Papadopoulos IN, Yang CH. Translation correlations in anisotropically scattering media. *Nat Phys* 2015; 11:684-689
- Judkewitz B, Wang YM, Horstmeyer R, Mathy A, Yang CH. Speckle-scale focusing in the diffusive regime with time reversal of variance-encoded light (TROVE). *Nat Photon* 2013; 7:300-305
- Wiechert MT, Judkewitz B, Riecke H, Friedrich RW. Mechanisms of pattern decorrelation by recurrent neuronal circuits. *Nat Neurosci* 2010; 13:1003-U1132
- Judkewitz B, Rizzi M, Kitamura K, Hausser M. Targeted single-cell electroporation of mammalian neurons in vivo. *Nat Protoc* 2009; 4:862-869
- Kitamura K*, Judkewitz B*, Kano M, Denk W, Hausser M. Targeted patch-clamp recordings and single-cell electroporation of unlabeled neurons in vivo. *Nat Methods* 2008; 5:61-67 | *equal contribution
- Porter J, Craven B, Khan RM, Chang SJ, Kang I, Judkewitz B, Volpe J, Settles G, Sobel N. Mechanisms of scent-tracking in humans. *Nat Neurosci* 2007; 10:263-263
- Judkewitz B, Roth A, Hausser M. Dendritic enlightenment: Using patterned two-photon uncaging to reveal the secrets of the brain's smallest dendrites. *Neuron* 2006; 50:180-183