

Christian Rosenmund

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Curriculum vitae

Since 2016	Full professor (W3), Institute of Neurophysiology, Charité, Berlin
Since 2014	Co-coordinator, Collaborative Research Grant 'Towards a better understanding and diagnosis of congenital disease', Berlin Institute of Health (BIH)
2012 – 2015	Spokesperson, NeuroCure – Cluster of Excellence, Berlin
Since 2009	Member, board of directors, NeuroCure – Cluster of Excellence, Berlin
Since 2009	Spokesperson, Collaborative Research Center (SFB) 665 'Developmental disturbances in the nervous system', German Research Foundation (DFG)
2009 – 2016	Full professor (W3), Neurobiology, NeuroCure – Cluster of Excellence, Charité, Berlin
2009 – 2010	Professor, Department of Molecular and Human Genetics and Department of Neuroscience, Baylor College of Medicine, Houston, US
2005 – 2008	Director, Mouse Synaptic Plasticity Core Facility, Mental Retardation Research Center, Baylor College of Medicine, Houston, US
2003 – 2008	Associate professor, Department of Molecular and Human Genetics and Department of Neuroscience, Baylor College of Medicine, Houston, US
1999 – 2003	Lecturer in Physiology, Georg-August-Universität Göttingen
1998 – 2003	Principal investigator and Heisenberg Professorship, German Research Foundation (DFG), Department of Membrane Biophysics, Max Planck Institute for Biophysical Chemistry, Göttingen
1995 – 1997	Helmholtz Fellow, workgroup Cellular Neurobiology, Max Planck Institute for Biophysical Chemistry, Göttingen
1993 – 1995	Howard Hughes Fellow, Molecular Neurobiology Laboratories, The Salk Institute, US
1989 – 1993	PhD in Physiology, Oregon Health and Science University, Portland, US
1984 – 1989	Studies in Pharmacy, Goethe-Universität Frankfurt am Main

Research fields

Our group is active in the field of cellular and molecular neurobiology with the following major areas:

- Molecular physiology of the synapse
- Modulation and development of synaptic transmission, plasticity, and neuronal networks
- 'Synaptopathy' in neurological-psychiatric disorders such as epilepsy, Alzheimer's disease, mental retardation, and autism

Activities in the scientific community, honors, awards

Since 2016	Member, board of directors, Einstein Center for Neurosciences Berlin
Since 2015	Member, board of trustees of the Schram Foundation, Essen
Since 2015	Member, scientific advisory board, Departement Biomedizin Basel, CH
2014 – 2015	Lillie Awards for Collaborative Research (with Erik M. Jorgensen), US
Since 2012	Reviewing Editor eLIFE
2010 – 2015	European Research Council (ERC), Advanced Grant
2007 – 2010	Long-Term Fellowship, Human Frontier Science Program (HFSP)
2005 – 2009	Member, Synapses, Cytoskeleton, and Trafficking Study Section, National Institutes of Health (NIH), US

Selected publications

- Paraskevopoulou, F., P. Parvizi, G. Senger, N. Tuncbag, C. Rosenmund, and F. Yildirim. 2021. 'Impaired inhibitory GABAergic synaptic transmission and transcription studied in single neurons by Patch-seq in Huntington's disease', *Proc Natl Acad Sci U S A*, 118.
- Chang, S., T. Trimbuch, and C. Rosenmund. 2017. 'Synaptotagmin-1 drives synchronous Ca²⁺-triggered fusion by C2B-domain-mediated synaptic-vesicle-membrane attachment', *Nat Neurosci*.
- Sampathkumar, C., Y. J. Wu, M. Vadhvani, T. Trimbuch, B. Eickholt, and C. Rosenmund. 2016. 'Loss of MeCP2 disrupts cell autonomous and autocrine BDNF signaling in mouse glutamatergic neurons', *Elife*, 5.
- Rost, B. R., F. Schneider, M. K. Grauel, C. Wozny, C. G. Bentz, A. Blessing, T. Rosenmund, T. J. Jentsch, D. Schmitz, P. Hegemann, and C. Rosenmund. 2015. 'Optogenetic acidification of synaptic vesicles and lysosomes', *Nat Neurosci*, 18: 1845-52.
- Watanabe, S., T. Trimbuch, M. Camacho-Perez, B. R. Rost, B. Brokowski, B. Sohl-Kielczynski, A. Felies, M. W. Davis, C. Rosenmund, and E. M. Jorgensen. 2014. 'Clathrin regenerates synaptic vesicles from endosomes', *Nature*, 515: 228-33.
- Watanabe, S., B. R. Rost, M. Camacho-Perez, M. W. Davis, B. Sohl-Kielczynski, C. Rosenmund, and E. M. Jorgensen. 2013. 'Ultrafast endocytosis at mouse hippocampal synapses', *Nature*, 504: 242-7.
- Weston, M. C., R. B. Nehring, S. M. Wojcik, and C. Rosenmund. 2011. 'Interplay between VGLUT isoforms and endophilin A1 regulates neurotransmitter release and short-term plasticity', *Neuron*, 69: 1147-59.
- Chao, H. T., H. Chen, R. C. Samaco, M. Xue, M. Chahrour, J. Yoo, J. L. Neul, S. Gong, H. C. Lu, N. Heintz, M. Ekker, J. L. Rubenstein, J. L. Noebels, C. Rosenmund, and H. Y. Zoghbi. 2010. 'Dysfunction in GABA signalling mediates autism-like stereotypies and Rett syndrome phenotypes', *Nature*, 468: 263-9.
- Xue, M., Y. Q. Lin, H. Pan, K. Reim, H. Deng, H. J. Bellen, and C. Rosenmund. 2009. 'Tilting the balance between facilitatory and inhibitory functions of mammalian and Drosophila Complexins orchestrates synaptic vesicle exocytosis', *Neuron*, 64: 367-80.
- Chao, H. T., H. Y. Zoghbi, and C. Rosenmund. 2007. 'MeCP2 controls excitatory synaptic strength by regulating glutamatergic synapse number', *Neuron*, 56: 58-65.