

Volker Haucke

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Molecular Pharmacology and Cell Biology
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Curriculum vitae

Since 2012	Director, FMP, Berlin
Since 2012	Full professor, Molecular Pharmacology, FMP, Berlin
2011 – 2012	Spokesperson, Collaborative Research Center (SFB) 958 ‘Scaffolding of membranes – molecular mechanisms and cellular functions’, German Research Foundation (DFG)
2008 – 2010	Spokesperson, Collaborative Research Center (SFB) 449 ‘Structure and function of membrane integral receptors’, German Research Foundation (DFG) 2005 – 2011 Full professor (W3) and chair, Department of Biochemistry, Freie Universität Berlin
2003 – 2005	Professor (C3), Membrane Biochemistry, Freie Universität Berlin
2000 – 2003	Research group leader, Center for Biochemistry and Molecular Cell Biology, Georg-August-Universität Göttingen
1997 – 1999	Postdoctoral fellow, Yale University School of Medicine, New Haven; and Howard Hughes Medical Institute, Chevy Chase, US
1994 – 1997	PhD, Department of Biochemistry, Biozentrum, Universität Basel, CH
1989 – 1994	Studies in Biochemistry, Freie Universität Berlin and Universität Basel, CH

Research fields

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

- Cellular and molecular mechanisms of synaptic vesicle recycling and presynaptic protein homeostasis
- Regulation of endocytosis and endosomal membrane traffic by phosphoinositides
- Super-resolution and optical imaging of neuronal function and activity

Activities in the scientific community, honors, awards

Since 2017	Member, Berlin-Brandenburg Academy of Sciences and Humanities (BBAW)
Since 2017	Member, Leopoldina – German National Academy of Sciences
2017	Avanti Award, American Society for Biochemistry and Molecular Biology
2017	Reinhart-Koselleck-Award, German Research Foundation (DFG)
Since 2016	Scientific advisory board of open access platform ‘Matters’
Since 2014	Member, European Molecular Biology Organization (EMBO)
Since 2011	Member, editorial board, EMBO Reports
2008 – 2016	Member, Study Section, Biochemistry, German Research Foundation DFG
Since 2007	Member, editorial board, The Journal of Biological Chemistry
Since 2004	Member, editorial board, Biology of the Cell
2003	YIP Award, European Molecular Biology Organization (EMBO)
1998	Long-Term Fellowship, Human Frontier Science Program (HFSP)
1997	Long-Term Fellowship and Short-Term Fellowship, European Molecular Biology Organization (EMBO)
1994 – 1997	PhD Fellowship, Boehringer Ingelheim Fonds
1990 – 1994	Studienstiftung des deutschen Volkes, German Academic Scholarship Foundation

Selected publications

- Marat AL, Wallroth A, Lo WT, Muller R, Norata GD, Falasca M, Schultz C, Haucke V. mTORC1 activity repression by late endosomal phosphatidylinositol 3,4-bisphosphate. *Science* 2017; 356:968-972
- Soykan T, Kaempfer N, Sakaba T, Vollweider D, Goerdeler F, Puchkov D, Kononenko NL, Haucke V. Synaptic Vesicle Endocytosis Occurs on Multiple Timescales and Is Mediated by Formin-Dependent Actin Assembly. *Neuron* 2017; 93:854-866
- Ketel K, Krauss M, Nicot AS, Puchkov D, Wieffer M, Muller R, Subramanian D, Schultz C, Laporte J, Haucke V. A phosphoinositide conversion mechanism for exit from endosomes. *Nature* 2016; 529:408-412
- Koo SJ, Kochlamazashvili G, Rost B, Puchkov D, Gimber N, Lehmann M, Tadeus G, Schmoranzer J, Rosenmund C, Haucke V*, Maritzen T*. Vesicular Synaptobrevin/VAMP2 Levels Guarded by AP180 Control Efficient Neurotransmission. *Neuron* 2015; 88:330-344 | *corresponding authors
- Kononenko NL, Puchkov D, Classen GA, Walter AM, Pechstein A, Sawade L, Kaempfer N, Trimbuch T, Lorenz D, Rosenmund C, Maritzen T, Haucke V. Clathrin/AP-2 mediate synaptic vesicle reformation from endosome-like vacuoles but are not essential for membrane retrieval at central synapses. *Neuron* 2014; 82:981-988
- Daumke O, Roux A, Haucke V. BAR domain scaffolds in dynamin-mediated membrane fission. *Cell* 2014; 156:882-892
- Posor Y, Eichhorn-Gruenig M, Puchkov D, Schoneberg J, Ullrich A, Lampe A, Muller R, Zarbakhsh S, Gulluni F, Hirsch E, Krauss M, Schultz C, Schmoranzer J, Noe F, Haucke V. Spatiotemporal control of endocytosis by phosphatidylinositol-3,4-bisphosphate. *Nature* 2013; 499:233-237
- von Kleist L, Stahlschmidt W, Bulut H, Gromova K, Puchkov D, Robertson MJ, MacGregor KA, Tomilin N, Pechstein A, Chau N, Chircop M, Sakoff J, von Kries JP, Saenger W, Krausslich HG, Shupliakov O, Robinson PJ, McCluskey A, Haucke V. Role of the clathrin terminal domain in regulating coated pit dynamics revealed by small molecule inhibition. *Cell* 2011; 146:471-484
- Haucke V, Neher E, Sigrist SJ. Protein scaffolds in the coupling of synaptic exocytosis and endocytosis. *Nat Rev Neurosci* 2011; 12:127-138
- Faelber K, Posor Y, Gao S, Held M, Roske Y, Schulze D, Haucke V, Noe F, Daumke O. Crystal structure of nucleotide-free dynamin. *Nature* 2011; 477:556-560