

List of Publications – Dr. rer. nat. Wolfgang Wagner

Primary research (peer reviewed)

Perez-Alvarez A, Yin S, Schulze C, Hammer JA, **Wagner W**, Oertner TG (2020) Endoplasmic reticulum visits highly active spines and prevents runaway potentiation of synapses. **Nat Commun** 11:5083. DOI: 10.1038/s41467-020-18889-5

Roesler MK, Lombino FL, Freitag S, Schweizer M, Hermans-Borgmeyer I, Schwarz JR, Kneussel M, **Wagner W**¹ (2019) Myosin XVI Regulates Actin Cytoskeleton Dynamics in Dendritic Spines of Purkinje Cells and Affects Presynaptic Organization. **Front Cell Neurosci** 13:330. DOI: [10.3389/fncel.2019.00330](https://doi.org/10.3389/fncel.2019.00330)
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Konietzny A, González-Gallego J, Bär J, Perez-Alvarez A, Drakew A, Demmers JAA, Dekkers DHW, Hammer JA 3rd, Frotscher M, Oertner TG, **Wagner W**, Kneussel M, Mikhaylova M (2019) Myosin V regulates synaptopodin clustering and localization in dendrites of hippocampal neurons. **J Cell Sci** 132. DOI: [10.1242/jcs.230177](https://doi.org/10.1242/jcs.230177)

Wagner W^{1,2}, Lippmann K¹, Heisler FF, Gromova KV, Lombino FL, Roesler MK, Pechmann Y, Hornig S, Schweizer M, Polo S, Schwarz JR, Eilers J, Kneussel M² (2019) Myosin VI Drives Clathrin-Mediated AMPA Receptor Endocytosis to Facilitate Cerebellar Long-Term Depression. **Cell Rep** 28:11-20.e9. DOI: [10.1016/j.celrep.2019.06.005](https://doi.org/10.1016/j.celrep.2019.06.005)
¹equal contribution, ²corresponding author

Alexander CJ¹, **Wagner W**¹, Copeland NG, Jenkins NA, Hammer JA 3rd (2018) Creation of a myosin Va-TAP-tagged mouse and identification of potential myosin Va-interacting proteins in the cerebellum. **Cytoskeleton (Hoboken)** 75:395-409. DOI: [10.1002/cm.21474](https://doi.org/10.1002/cm.21474)
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Shimobayashi E, **Wagner W**, Kapfhammer JP (2016) Carbonic Anhydrase 8 Expression in Purkinje Cells Is Controlled by PKC γ Activity and Regulates Purkinje Cell Dendritic Growth. **Mol Neurobiol** 53:5149-60. DOI: [10.1007/s12035-015-9444-3](https://doi.org/10.1007/s12035-015-9444-3)

Wagner W, Brenowitz SD, Hammer JA 3rd (2011) Myosin-Va transports the endoplasmic reticulum into the dendritic spines of Purkinje neurons. **Nat Cell Biol** 13:40-48. DOI: [10.1038/ncb2132](https://doi.org/10.1038/ncb2132)

Wagner W, McCroskery S, Hammer JA 3rd (2011) An efficient method for the long-term and specific expression of exogenous cDNAs in cultured Purkinje neurons. **J Neurosci Methods** 200:95-105. DOI: [10.1016/j.jneumeth.2011.06.006](https://doi.org/10.1016/j.jneumeth.2011.06.006)

Wagner W, Fodor E, Ginsburg A, Hammer JA 3rd (2006) The binding of DYNLL2 to myosin Va requires alternatively spliced exon B and stabilizes a portion of the myosin's coiled-coil domain. **Biochemistry** 45:11564-11577. DOI: [10.1021/bi061142u](https://doi.org/10.1021/bi061142u)

Wagner W, Bielli P, Wacha S, Ragnini-Wilson A (2002) Mlc1p promotes septum closure during cytokinesis via the IQ motifs of the vesicle motor Myo2p. **EMBO J** 21:6397-6408. DOI: [10.1093/emboj/cdf650](https://doi.org/10.1093/emboj/cdf650)

Miaczynska M, **Wagner W**, Bauer BE, Schweyen RJ, Ragnini A. (2001) Ypt protein prenylation depends on the interplay among levels of Rab escort protein and geranylgeranyl diphosphate in yeast cells. **Yeast** 18:697-709. DOI: [10.1002/yea.719](https://doi.org/10.1002/yea.719)

Bialek-Wyrzykowska U, Bauer BE, **Wagner W**, Kohlwein SD, Schweyen RJ, Ragnini A. (2000) Low levels of Ypt protein prenylation cause vesicle polarization defects and thermosensitive growth that can be suppressed by genes involved in cell wall maintenance. *Mol Microbiol* 35:1295-1311. [DOI: 10.1046/j.1365-2958.2000.01782.x](https://doi.org/10.1046/j.1365-2958.2000.01782.x)

Reviews (peer reviewed)

Kneussel M², **Wagner W**² (2013) Myosin motors at neuronal synapses: drivers of membrane transport and actin dynamics. *Nat Rev Neurosci* 14:233-247. [DOI: 10.1038/nrn3445](https://doi.org/10.1038/nrn3445)
²corresponding authors

Hammer JA 3rd, **Wagner W** (2013) Functions of class V myosins in neurons. *J Biol Chem* 288:28428-28434. [DOI: 10.1074/jbc.R113.514497](https://doi.org/10.1074/jbc.R113.514497)

Commentaries

Wagner W, Hammer JA 3rd (2011) A new delta-COP on the block--linking pigmentation defects with neurodegeneration. *Pigment Cell Melanoma Res* 24:14-16. [DOI: 10.1111/j.1755-148X.2010.00818.x](https://doi.org/10.1111/j.1755-148X.2010.00818.x)

Wagner W, Hammer JA 3rd (2003) Myosin V and the endoplasmic reticulum: the connection grows. *J Cell Biol* 163:1193-1196. [DOI: 10.1083/jcb.200311077](https://doi.org/10.1083/jcb.200311077)