

Curriculum Vitae

David J. Linden

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Personal

Born: November 3, 1961 in Los Angeles, California
Children: Jacob and Natalie Linden, born February 28, 1997

Education

1984 B.A., Neurobiology, University of California, Berkeley
1989 Ph.D., Neuroscience, Northwestern University

Positions

1990-92 Postdoctoral Fellow, Roche Institute of Molecular Biology
1992-97 Assistant Professor of Neuroscience, Johns Hopkins University
1997-2001 Associate Professor of Neuroscience, Johns Hopkins University
2001- Professor of Neuroscience, Johns Hopkins University
2004-2005 Visiting Fellow, Wolfson College, University of Cambridge

Research Interests

Cellular and molecular substrates of memory storage
Axon regeneration in the brain
In vivo imaging of neuronal, glial and vascular fine structure
Synaptic transmission and plasticity

Awards

1984-85 University Fellowship, Northwestern University
1987-89 Laboratory Graduate Fellowship, U.S. Air Force

1989	Graduate Research Award, Society for Neuroscience, Chicago Chapter
1993-95	Alfred P. Sloan Research Fellowship
1993-96	Klingenstein Fellowship in the Neurosciences
1994	Alzheimer's Association Travel Fellowship
1994-97	McKnight Scholar's Award
1995-97	National Alliance for Research on Schizophrenia and Depression, Young Investigator Award
1996	American Physiological Society Travel Fellowship
1998	Society for Neuroscience Young Investigator Award
2001-2011	MERIT Award, NIMH/NIH
2008	Silver Medal, Science Category, Independent Publisher's Book Awards for <i>The Accidental Mind</i>
2009	Elected Fellow of the American Association for the Advancement of Science
2012, 2019	Rockefeller Foundation, Bellagio Center Residency (awarded twice)
2015	Elected Fellow of the American Physiological Society
2016	Silver Award, Science & Cosmology Category, Nautilus Book Awards for <i>Touch: The Science of Hand, Heart and Mind</i>
2016	Eddie Award from Folio Magazine for magazine piece <i>The Power of Touch</i> by Martha Thomas and David Linden (originally in AARP Magazine)
2019	Alfred P. Sloan Foundation, Public Understanding of Science Book Award

Service to Organizations

1995-98	Society for Neuroscience, Publications Committee
1995-96	NINDS/NIH, Neurology B-1 Study Section
1996-	<u>Neuron</u> , Editorial Board
1997	NINDS/NIH, Board of Scientific Counselors, Ad Hoc Member
1998-2001	CSR/NIH, IFCN 7 Study Section
2000	CSR/NIH, MDCN 4 Study Section, Ad Hoc Member
2000-	<u>The Cerebellum</u> , Editorial Board
2003-2007	NIAAA/NIH, Board of Scientific Counselors
2005-2008	<u>Journal of Neurophysiology</u> , Associate Editor
2008-2014	<u>Journal of Neurophysiology</u> , Chief Editor
2008-	<u>Frontiers in Neural Circuits</u> , Associate Editor
2011-	<u>Neuroscience Bulletin</u> , Editorial Board

2015 CSR/NIH, NTRC Study Section, Ad Hoc Member
2018-2021 Brainfacts.org, Editorial Board

Service to Johns Hopkins University

1994- Department of Neuroscience, Graduate Admissions Committee
1995-2000 Department of Neuroscience, Graduate Admissions Committee, Chair
1999-2006 Department of Neuroscience, Graduate Program Steering Committee
2006-2012 Department of Neuroscience, Graduate Program Steering Committee, Chair
1999-2002 School of Medicine, Admissions Committee
2000-2006 Department of Neuroscience, Graduate Program Director
2000-2006 School of Medicine, M.A. / Ph.D. Program Committee
2012- Department of Neuroscience, Postdoctoral Training Committee, Chair

Books

1. Linden, D.J. (2007) *The Accidental Mind*. Belknap Press of the Harvard University Press. Cambridge, MA.

Translations: Spanish, Italian, German, Japanese, Korean, Turkish and Chinese (Simplified Characters), Romanian.

2. Linden, D.J. (2011) *The Compass of Pleasure*. Viking Press, New York, NY, USA and Oneworld Publications, Cambridge, United Kingdom.

Translations: Dutch, German, Spanish, Chinese (Simplified Characters), Chinese (Complex Characters), Korean, Russian, Brazilian Portuguese, Japanese, Italian, Thai, French, Romanian, Arabic.

3. Linden, D.J. (2015) *Touch: The Science of Hand, Heart and Mind*. Viking Press, New York, NY, USA and Penguin Press, London, United Kingdom.

Translations: Japanese, Chinese (Simplified Characters), Korean, Russian, Slovenian, Italian.

4. Linden, D.J. (2018) *Think Tank: Forty Neuroscientists Explore the Biological Roots of Human Experience* (Editor). Yale University Press. New Haven and London.

Translations: Japanese, Russian, Chinese (Simplified Characters), Turkish, Spanish.

Refereed Publications

1. Linden, D.J., and Martinez, J.L. (1986) Leu-enkephalin impairs memory of an appetitive maze response in mice. Behavioral Neuroscience **100**, 33-38.
2. Linden, D.J., Murakami, K., and Routtenberg, A. (1986) A newly discovered protein kinase C activator (oleic acid) enhances long-term potentiation in the intact hippocampus. Brain Research **379**, 358-363.
3. Akers, R.F., Lovinger, D.M., Colley, P.A., Linden, D.J., and Routtenberg, A. (1986) Translocation of protein kinase C activity may mediate hippocampal long-term potentiation. Science **231**, 587-589.
4. Routtenberg, A., Colley, P.A., Linden, D.J., Lovinger, D.M., Murakami, K., and Sheu, F.-S. (1986) Phorbol ester promotes growth of synaptic plasticity. Brain Research **378**, 374-378.
5. Linden, D.J., Sheu, F.-S., Murakami, K., and Routtenberg, A. (1987) Enhancement of long-term potentiation by cis-unsaturated fatty acid: relation to protein kinase C and phospholipase A₂. Journal of Neuroscience **7**, 3783-3792.
6. Linden, D.J., Wong, K.L., Sheu, F.-S., and Routtenberg, A. (1988) NMDA receptor blockade prevents the increase in protein kinase C substrate (protein F1) phosphorylation produced by long-term potentiation. Brain Research **458**, 142-146.
7. Barnes, C.A., Mizumori, S.J.Y., Lovinger, D.M., Sheu, F.-S, Murakami, K., Chan, S.Y., Linden, D.J., Nelson, R.B, and Routtenberg, A. (1988) Selective decline in protein F1 phosphorylation in hippocampus of senescent rats. Neurobiology of Aging **9**, 393-398.
8. Nelson, R.B., Linden, D.J., Hyman, C., Pfenninger, K.H., and Routtenberg, A. (1989) The two major phosphoproteins in growth cones are probably identical to two protein kinase

- C substrates correlated with persistence of long-term potentiation. Journal of Neuroscience **9**, 381-389.
9. Linden, D.J., and Routtenberg, A. (1989) The role of protein kinase C in long-term potentiation: A testable hypothesis. Brain Research Reviews **14**, 279-296.
 10. Linden, D.J., and Routtenberg, A. (1989) Cis-fatty acids, which activate protein kinase C, attenuate voltage-dependent Na⁺ and Ca²⁺ currents in mouse neuroblastoma cells. Journal of Physiology **419**, 95-119.
 11. Nelson, R.B., Linden, D.J., and Routtenberg, A. (1989) Phosphoproteins localized to presynaptic terminal linked to persistence of long-term potentiation (LTP): Quantitative analysis of two-dimensional gels. Brain Research **497**, 30-42.
 12. Linden, D.J., Dickinson, M.H., Smeyne, M., and Connor, J.A. (1991) A long-term depression of AMPA currents in cultured cerebellar Purkinje neurons. Neuron **7**, 81-89.
 13. Linden, D.J. and Connor, J.A. (1991) Participation of postsynaptic PKC in cerebellar long-term depression in culture. Science **254**, 1656-1659.
 14. Linden, D.J. and Connor, J.A. (1992) Long-term depression of glutamate currents in cultured cerebellar Purkinje neurons does not require nitric oxide signalling. The European Journal of Neuroscience **4**, 10-15.
 15. Linden, D.J., Smeyne, M., Sun, S.-C., and Connor, J.A. (1992) An electrophysiological correlate of protein kinase C isozyme distribution in cultured cerebellar neurons. Journal of Neuroscience **12**, 3601-3608.
 16. Linden, D.J., Smeyne, M., and Connor, J.A. (1993) Induction of cerebellar long-term depression in culture requires postsynaptic action of sodium ions. Neuron **11**, 1093-1100.
 17. Linden, D.J., Narasimhan, K., and Gurfel, D. (1993) Protoporphyrins modulate voltage-gated calcium current in AtT-20 cells. Journal of Neurophysiology **70**, 2673-2677.

18. Linden, D.J., Smeyne, M., and Connor, J.A. (1994) A metabotropic receptor agonist, *trans*-ACPD, produces dendritic calcium mobilization and an inward current in cultured cerebellar Purkinje neurons. Journal of Neurophysiology **71**, 1992-1998.
 19. Linden, D.J. (1994) Input-specific induction of cerebellar long-term depression does not require presynaptic alteration. Learning and Memory **1**, 121-128.
 20. Linden, D.J., Dawson, T.M., and Dawson, V.L. (1995) An evaluation of the nitric oxide/cGMP/cGMP-dependent protein kinase cascade in the induction of cerebellar long-term depression in culture. Journal of Neuroscience **15**, 5098-5105.
 21. Linden, D.J. (1995) Phospholipase A₂ controls the induction of short-term versus long-term depression in the cerebellar Purkinje neuron in culture. Neuron **15**, 1393-1401.
 22. Kaplin, A.I., Snyder, S.H., and Linden, D.J. (1996) NADH selective stimulation of inositol 1,4,5-trisphosphate receptors mediates hypoxic mobilization of calcium. Journal of Neuroscience **16**, 2002-2011.
 23. Linden, D.J. (1996) Cerebellar long-term depression as investigated in a cell culture preparation. Behavioral and Brain Sciences **19**, 339-346 and 482-487 [the latter is a response to commentaries].
- Reprinted in: *Motor Learning and Synaptic Plasticity in the Cerebellum*, P.J. Cordo, C.C. Bell and S. Harnad (Eds.), Cambridge University Press., 1997, pp. 1-8 and 146-151.
24. Narasimhan, K., and Linden, D.J. (1996) Defining a minimal computational unit for cerebellar long-term depression. Neuron **17**, 333-341.
 25. Linden, D.J. (1996) A protein synthesis-dependent late phase of cerebellar long-term depression. Neuron **17**, 483-490.
 26. Jeromin, A., Huganir, R., and Linden, D.J. (1996) Suppression of the glutamate receptor $\delta 2$ subunit produces a specific impairment in cerebellar long-term depression. Journal of Neurophysiology **76**, 3578-3583.

27. Linden, D.J. (1997) Long-term potentiation of glial synaptic currents in cerebellar culture. Neuron **18**, 983-994.
28. Zuo, J., De Jager, P.L., Takahashi, K., Jiang, W., Linden, D.J. and Heintz, N. (1997) Neurodegeneration in Lurcher mice results from a mutation in the $\delta 2$ receptor gene. Nature **388**, 769-772.
29. De Zeeuw, C.I.*, Hansel, C.*, Bian, F., Koekkoek, S.K.E., van Alphen, A.M., Linden, D.J. and Oberdick, J. (1998) Expression of a protein kinase C inhibitor in Purkinje cells blocks cerebellar long-term depression and adaptation of the vestibulo-ocular reflex. Neuron **20**, 495-508. * co-first authors.
30. Linden, D.J. (1998) Synaptically-evoked glutamate transport currents may be used to detect the expression of long-term potentiation in cerebellar culture. Journal of Neurophysiology **79**, 3151-3156.
31. Parent, A., Schrader, K., Munger, S.D., Reed, R.R., Linden, D.J. and Ronnett, G.V. (1998) Synaptic transmission and hippocampal long-term potentiation in an olfactory cyclic nucleotide-gated channel type 1 (OCNC1) null mouse. Journal of Neurophysiology **79**, 3295-3301.
32. Storm, D.R., Hansel, C., Hacker, B., Parent, A., and Linden, D.J. (1998) Impaired cerebellar long-term potentiation in type I adenylyl cyclase mutant mice. Neuron **20**, 1199-1210.
33. Aizenman, C., Manis, P.B. and Linden, D.J. (1998) Polarity of long-term synaptic gain change is related to postsynaptic spike firing at a cerebellar inhibitory synapse. Neuron **21**, 827-835.
34. Tu, J.C., Xiao, B., Yuan, J., Lanahan, A., Leoffert, K., Li, M., Linden, D.J. and Worley, P. (1998) Homer binds a novel proline-rich motif and links group 1 metabotropic receptors with IP3 receptors. Neuron **21**, 717-726.

35. Narasimhan, K., Pessah, I.N. and Linden D.J. (1998) Inositol-1,4,5-trisphosphate receptor-mediated Ca mobilization is not required for the induction of cerebellar long-term depression in reduced preparations. Journal of Neurophysiology **80**, 2963-2974.
36. Parent, A., Linden, D.J., Sisodia, S.S. and Borchelt, D.R. (1999) Synaptic transmission and hippocampal long-term potentiation in transgenic mice expressing FAD-linked presenilin 1. Neurobiology of Disease **5**, 56-62.
37. Ahn, S., Ginty, D.D. and Linden, D.J. (1999) A late phase of cerebellar long-term depression requires activation of CaMKIV and CREB. Neuron **23**, 559-568.
38. Aizenman, C. and Linden, D.J. (1999) Regulation of the rebound depolarization and spontaneous firing patterns of deep nuclear neurons in slices of rat cerebellum. Journal of Neurophysiology **82**, 1697-1709.
39. Linden, D.J. and Ahn, S. (1999) Activation of presynaptic cAMP-dependent protein kinase is required for induction of cerebellar long-term potentiation. Journal of Neuroscience **19**, 10221-10227.
40. Takahashi, K.A. and Linden, D.J. (2000) Cannabinoid receptor modulation of synapses received by cerebellar Purkinje cells. Journal of Neurophysiology **83**, 1167-1180.
41. Aizenman, C. and Linden, D.J. (2000). Rapid, synaptically-driven increases in the intrinsic excitability of cerebellar deep nuclear neurons. Nature Neuroscience **3**, 109-111.
42. Wang, Y.-T. and Linden, D.J. (2000). Expression of cerebellar long-term depression requires postsynaptic clathrin-mediated endocytosis. Neuron **25**, 635-647.
43. Mothet, J.-P., Parent, A., Wolosker, H., Brady, R.O., Linden, D.J., Ferris, C.D., Rogawski, M.A. and Snyder, S.H. (2000) D-serine is an endogenous ligand for the glycine site of the NMDA receptor. Proceedings of the National Academy of Sciences of the USA **97**, 4926-4931.
44. Hansel, C. and Linden, D.J. (2000). Long-term depression of the cerebellar climbing fiber-Purkinje neuron synapse. Neuron **26**, 473-482.

45. Ho, N., Weng, F., Blaeser, F., Hanissian, S., Muglia, L.M., Wozniak, D.F., Linden, D.J., Zhuo, M., Muglia, L.A. and Chatila, T. (2000). Impaired synaptic plasticity and CREB activation in CaMKIV/Gr-deficient mice. Journal of Neuroscience **20**, 6459-6472.
46. Xia, J., Chung, H.J., Wihler, C., Huganir, R.L. and Linden, D.J. (2000). Cerebellar long-term depression requires PKC-regulated interactions between GluR2/3 and PDZ domain-containing proteins. Neuron **28**, 499-510.
47. Linden, D.J. (2001). The expression of cerebellar LTD in culture is not associated with changes in AMPA receptor kinetics, agonist affinity or unitary conductance. Proceedings of the National Academy of Sciences of the USA **98**, 14066-14071.
48. Shen, Y., Hansel, C., and Linden, D.J. (2002). Glutamate release monitored during LTD at the cerebellar climbing fiber-Purkinje neuron synapse. Nature Neuroscience **5**, 725-726.
49. Eto, M., Bock, R., Brautigam, D., Linden, D.J. (2002). Cerebellar long-term synaptic depression requires activation of the myosin/moesin phosphatase inhibitor CPI-17. Neuron **36**, 1145-1158.
50. Coesmans, M., Sillevs Smitt, P., Linden, D.J., Shigemoto, R., Hirano, T., Yamakawa, Y., van Alphen, A.M., Luo, C., van der Geest, J.N., Kros, J.M., Gaillard, C.A., Frens, M.A. and De Zeeuw, C.I. (2003). Mechanisms underlying deficits in cerebellar motor coordination due to auto-antibodies against mGluR1. Annals of Neurology **53**, 325-336.
51. Weber, J.T., DeZeeuw, C.I., Linden, D.J. and Hansel, C. (2003). Long-term depression of climbing fiber-evoked calcium transients in Purkinje cell dendrites. Proceedings of the National Academy of Sciences of the USA **100**, 2878-2883.
52. Aizenman, C.D., Huang, E.J., and Linden, D.J. (2003). Morphological correlates of intrinsic electrical excitability in neurons of the deep cerebellar nuclei. Journal of Neurophysiology **89**, 1738-1747.

53. Chung, H.J., Steinberg, J., Huganir, R.L., Linden, D.J. (2003). Requirement of AMPA receptor GluR2 phosphorylation for cerebellar long-term depression. Science **300**, 1751-1755.
54. Lonart, G., Schoch, S., Käser, P., Larkin, C.J., Südhof, T. and Linden, D.J. (2003). Phosphorylation of RIM1 α by PKA triggers presynaptic long-term potentiation at cerebellar parallel fiber synapses. Cell **115**, 49-60.
55. Kim, S.J., Kim, Y.S., Yuan, J.P., Petralia, R.S., Worley, P.F. and Linden, D.J. (2003). The TRPC1 cation channel underlies excitatory postsynaptic currents activated by mGluR1. Nature **426**, 485-491.
56. Nishiyama, H. and Linden, D.J. (2004) Differential maturation of climbing fiber innervation in cerebellar vermis. Journal of Neuroscience **24**, 3926-3932.
57. Leitges, M., Kovac, J., Plomann, M., Linden, D.J. (2004) A unique PDZ-ligand in PKC α confers induction of cerebellar long-term synaptic depression. Neuron **44**, 585-594.
58. Zhang, W., Shin, J.H., and Linden, D.J. (2004) Persistent changes in the intrinsic excitability of rat deep cerebellar nuclear neurons induced by EPSP or IPSP bursts. Journal of Physiology **561**, 703-719.
59. Simsek-Duran, F., Linden, D.J. and Lonart, G. (2004). Adapter protein 14-3-3 is required for a presynaptic form of LTP in the cerebellum. Nature Neuroscience **7**, 1296-1298..
60. Steinberg, J.P., Huganir, R.L. and Linden, D.J. (2004). N-ethylmaleimide-sensitive factor is required for the synaptic incorporation and removal of AMPA receptors during cerebellar long-term depression. Proceedings of the National Academy of Sciences of the USA **101**, 18212-18216.
61. Shen, Y. and Linden, D.J. (2005). Long-term potentiation of neuronal glutamate transporters. Neuron **46**, 715-722.

62. Ramanan, N., Shen, Y., Sarsfield, S., Lemberger, T., Schütz, G., Linden, D.J. and Ginty, D.D. (2005) SRF mediates activity-induced gene expression and synaptic plasticity but not neuronal survival. Nature Neuroscience **8**, 758-767.
63. Shin, J.H. and Linden, D.J. (2005). An NMDA receptor / nitric oxide cascade is involved in cerebellar LTD but is not localized to the parallel fiber terminal. Journal of Neurophysiology **94**, 4281-4289.
64. Steinberg, J.P., Takamiya, K., Shen, Y., Xia, J., Rubio, M.E., Jin, W., Thomas, G.M., Linden, D.J. and Huganir, R.L. (2006). Targeted *in vivo* mutations of the AMPA receptor subunit GluR2 and its interacting protein PICK1 eliminate cerebellar long-term depression. Neuron **49**, 845-860.
65. Sdrulla, A. and Linden, D.J. (2006). Dynamic imaging of cerebellar Purkinje cells reveals a population of filopodia which cross-link dendrites during early postnatal development. The Cerebellum **5**, 105-115.
66. Zhang, W. and Linden, D.J. (2006). Long-term depression at the mossy fiber-deep cerebellar nucleus synapse. Journal of Neuroscience **26**, 6935-6944.
67. Shen, Y., Kishimoto, K., Linden, D.J. and Saperstein, A. (2007). cPLA2 α activity is required for the electrophysiological sequelae of neurotoxic NMDA treatment in hippocampal CA1 pyramidal neurons. Proceedings of the National Academy of Sciences of the USA **104**, 6078-6083.
68. Sdrulla, A.D. and Linden, D.J. (2007). A double dissociation between LTD and dendritic spine morphology in cerebellar Purkinje cells. Nature Neuroscience **10**, 546-548.
69. Jin, Y., Kim, S.J., Kim, J., Worley, P.F. and Linden, D.J. (2007). Long-term depression of mGluR1 signaling. Neuron **55**, 277-287.
70. Nishiyama, H. and Linden, D.J. (2007). Axonal motility and its modulation by activity are branch-type specific in the intact adult cerebellum. Neuron **56**, 472-487.

71. Shin, J.H., Kim Y.S. and Linden, D.J. (2008). Dendritic glutamate release produces autocrine activation of mGluR1 in cerebellar Purkinje cells. Proceedings of the National Academy of Sciences of the USA **105**, 746-750.
72. Cho, R.W., Park, J.M., Wolff, S.B.E., Xu, D., Hopf, C., Reddy, R., Petralia, R.S., Perrin, M.S., Linden, D.J. and Worley, P.F. (2008). mGluR1/5-dependent long-term depression requires the regulated ectodomain cleavage of neuronal pentraxin NPR by TACE. Neuron **57**, 858-871.
73. Kim, S.J., Kim, J., Shin, J.H., Worley, P.F. and Linden, D.J. (2008). Transient upregulation of postsynaptic IP3-gated Ca release underlies short-term potentiation of mGluR1 function in cerebellar Purkinje cells. Journal of Neuroscience **28**, 4350-4355.
74. Takamiya, K., Mao, L., Huganir, R.L. and Linden, D.J. (2008). The GRIP family of GluR2-binding proteins is required for LTD expression in cerebellar Purkinje cells. Journal of Neuroscience **28**, 5752-5755
75. Park, S., Park, J.M., Kim, S., Kim, J.-A., Shepherd, J.D., Smith-Hicks, C.L., Chowdhury, S., Kaufmann, W., Kuhl, D., Ryazanov, A.G., Huganir, R.L., Linden, D.J. and Worley, P.F. (2008). Elongation factor 2 and fragile X mental retardation protein control the dynamic translation of Arc/Arg3.1 essential for mGluR-LTD Neuron **59**, 70-83.
76. Shin, J.H., Kim, Y.S. and Linden, D.J. (2009). Depolarization induced slow current in cerebellar Purkinje cells does not require mGluR1. Neuroscience **162**, 688-695.
77. Kim, Y.S., Shin, J.H. and Linden, D.J. (2009). Dopamine signaling is required for depolarization induced slow current in cerebellar Purkinje cells. Journal of Neuroscience **29**, 8530-8538.
78. Zhang, W. and Linden, D.J. (2009). Neuromodulation at single presynaptic boutons of cerebellar parallel fibers is determined by bouton size and functional status. Journal of Neuroscience **29**, 15586-15594.

79. Smith-Hicks, C., Xiao, B., Deng, R., Ji, Y., Shepherd, J.D., Kuhl, D., Huganir, R.L., Ginty, D.D., Worley, P.F., Linden, D.J. (2010). SRF binding to SRE 6.9 in the Arc promoter is essential for the late phase of cerebellar LTD. Nature Neuroscience **13**, 1082-1089.
80. Chang, M.C., Park, J.M., Pelkey, K.A., Grabenstatter, H.L., Xu, D., Linden, D.J., Sutula, T.P., McBain, C.J. and Worley, P.F. (2010). Narp regulates homeostatic scaling of excitatory synapses on parvalbumin-expressing interneurons. Nature Neuroscience **13**, 1090-1097.
81. Hu, J.-H., Park, J.M., Park, S., Xiao, B., Dehoff, M.H., Kim, S., Schwarz, M., Huganir, R., Seeburg, P.H., Linden, D.J. and Worley, P.F. (2010) Homeostatic scaling requires group I mGluR activation mediated by Homer 1a. Neuron **68**, 1128-1142.
82. Schonewille, M., Gao, Z., Boele, H., Vinueza Veloz, M.F., , Amerika, W.E., Simek, A.A.M., De Jeu, M.T.G., Steinberg, J.P., Takamiya, K., Hoebeek, F.E., Linden, D.J., Huganir, R.H. and De Zeeuw, C.I. (2011). Re-evaluating the role of LTD in cerebellar motor learning. Neuron, **70**, 43-50.
83. Linden, D.J. (2012). A late phase of LTD in cultured cerebellar Purkinje cells requires persistent dynamin-mediated endocytosis. Journal of Neurophysiology **107**, 448-454.
84. Zhang, W. and Linden, D.J. (2012). Calcium influx measured at single presynaptic boutons of cerebellar granule cell ascending axons and parallel fibers. The Cerebellum **11**, 121-131.
85. He, L., Linden, D.J. and Saperstein, A. (2012) Astrocyte inositol triphosphate receptor type 2 and cytosolic phospholipase A2 alpha regulate arteriole responses in mouse neocortical brain slices. PLOS One **7**, e42194.
86. Kim, Y.S., Kang, E., Makino, Y., Park, S., Shin, J.H., Song, H., Launay, P. and Linden, D.J. (2013). Characterizing the conductance underlying depolarization-induced slow current (DISC) in cerebellar Purkinje cells. Journal of Neurophysiology **109**, 1174-1181.
87. Anggono, V., Koc-Schmitz, Y., Widagdo, J., Kormann, J., Quan, A., Chen, C.-M., Robinson, P.J., Choi, S.-Y., Linden, D.J., Plomann, M. and Huganir, R.L. (2013) PICK1 interacts with PACSIN to regulate AMPA receptor internalization and cerebellar long-term depression. Proceedings of the National Academy of Sciences of the USA **110**, 13976-13981.

88. Park, J.M., Hu, J.-H., Milshteyn, A., Zhang, P.-W., Moore, C.G., Park, S., Datko, M.C., Domingo, R.D., Reyes, C.M., Wang, X.J., Etzkorn, F.A., Xiao, B., Szumlinksi, K.K., Kern, D., Linden, D.J. and Worley, P.F. (2013). A prolyl-isomerase mediates dopamine-dependent plasticity and cocaine motor sensitization. Cell 154, 637-650.
89. Das, I., Park, J.M., Shin, J.H., Jeon, S.K., Lorenzi, H., Linden, D.J., Worley, P.F. and Reeves, R.H. (2013). Sonic agonist therapy corrects structural and cognitive deficits in a Down syndrome mouse model. Science Translational Medicine 5, p201ra120.
90. Thomas, G.M., Hayashi, T., Huganir, R.L. and Linden, D.J. (2013). DHHC8-dependent PICK1 palmitoylation is required for induction of cerebellar long-term synaptic depression. Journal of Neuroscience 33, 15401-15407.
91. Zhang, Y.*, Cudmore, R.H.*, Lin, D.T., Linden, D.J. and Huganir, R.H. (2015). Visualization of NMDA receptor-dependent AMPA receptor synaptic plasticity in vivo. Nature Neuroscience 18, 402-407.
92. Rylkova, D., Crank, A. and Linden, D.J. (2015). Chronic in vivo imaging of ponto-cerebellar mossy fibers reveals morphological stability during whisker sensory manipulation in the adult rat. eNeuro, ENEURO.0075-15.2015.
93. Jin, Y.*, Dougherty, S.E.*, Wood, K., Sun, L., Cudmore, R.H., Abdalla, A., Kannan, G., Pletnikov, M., Hashemi, P. and Linden, D.J. (2016). Regrowth of serotonin axons in the adult mouse brain following injury. Neuron 91, 784-762.
94. Cudmore, R.H., Dougherty, S.E. and Linden, D.J. (2016). Cerebral vascular structure in the motor cortex of adult mice is stable and is not altered by voluntary exercise. Journal of Cerebral Blood Flow and Metabolism, doi: 10.1177/0271678X16682508. [Epub ahead of print].
95. Kajstura, T.J., Dougherty, S.E. and Linden, D.J. (2017). Serotonin axons in the neocortex of the adult female mouse regrow after injury. Journal of Neuroscience Research 96, 512-526.

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For a list of selected articles written for non-scientists see:

<http://davidlinden.org/media/print/>

For a list of selected radio & podcast interviews see:

<http://davidlinden.org/media/audio.html>

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