

Pigeon studies

- Rattenborg NC, Voirin B, **Vyssotski AL**, Kays RW, Spoelstra K, Kuemmeth F, Heidrich W, Wikelski M. Sleeping outside the box: electroencephalographic measures of sleep in sloths inhabiting a rainforest. *Biol Lett*, 2008; 4: 402-5.
- Costantini D, Lipp HP**. Short restraint time does not influence markers of serum oxidative stress in homing pigeons (*Columba livia*). *J Anim Physiol Anim Nutr (Berl)*, 2009.
- Dell'Aricea G, Costantini D, Dell'Omo G, Lipp HP**. Waiting time before release increases the motivation to home in homing pigeons (*Columba livia*). *J Exp Biol*, 2009; 212: 3361-4.
- Dell'Aricea G, Dell'Omo G, Lipp H-P**. The influence of experience in orientation: GPS tracking of homing pigeons released over the sea after directional training. *J Exp Biol*, 2009; 212: 178-83.
- Lipp HP**. Towards the neurobiology of large-scale spatial cognition (Commentary on Gagliardo et al.). *Eur J Neurosci*, 2009; 29: 2388.
- Vyssotski AL, Dell'Omo G, Dell'Aricea G, Abramchuk AN, Serkov AN, Latanov AV, Loizzo A, Wolfer DP, Lipp H-P**. EEG in flying pigeons responds to familiar visual landmarks. *Curr. Biol.*, 2009; 19: 1-8.
- Etholm L, **Arabadzisz D, Lipp HP, Heggelund P**. Seizure logging: A new approach to synchronized cable-free EEG and video recordings of seizure activity in mice. *J Neurosci Methods*, 2010; 192: 254-60.
- Gatome CW, Mwangi DK, Lipp HP, Amrein I**. Hippocampal neurogenesis and cortical cellular plasticity in Wahlberg's epauletted fruit bat: a qualitative and quantitative study. *Brain Behav Evol*, 2010; 76: 116-27.
- Gatome CW, Slomianka L, Lipp HP, Amrein I**. Number estimates of neuronal phenotypes in layer II of the medial entorhinal cortex of rat and mouse. *Neuroscience*, 2010; 170: 156-65.
- Gatome CW, Slomianka L, Mwangi DK, Lipp HP, Amrein I**. The entorhinal cortex of the Megachiroptera: a comparative study of Wahlberg's epauletted fruit bat and the straw-coloured fruit bat. *Brain Struct Funct*, 2010; 214: 375-93.

Adult neurogenesis

- Amrein I, Lipp HP**. Adult hippocampal neurogenesis of mammals: evolution and life history. *Biol Lett*, 2009; 5: 141-4.
- Hauser T, Klaus F, Lipp HP, Amrein I**. No effect of running and laboratory housing on adult hippocampal neurogenesis in wild caught long-tailed wood mouse. *BMC Neurosci*, 2009; 10: 43.
- Klaus F, Hauser T, Slomianka L, Lipp HP, Amrein I**. A reward increases running-wheel performance without changing cell proliferation, neuronal differentiation or cell death in the dentate gyrus of C57BL/6 mice. *Behav Brain Res*, 2009; 204: 175-81.
- Amrein I, Slomianka L**. A morphologically distinct granule cell type in the dentate gyrus of the red fox correlates with adult hippocampal neurogenesis. *Brain Res*, 2010; 1328: 12-24.
- Ben Abdallah NM, Slomianka L, Vyssotski AL, Lipp HP**. Early age-related changes in adult hippocampal neurogenesis in C57 mice. *Neurobiol Aging*, 2010; 31: 151-61.
- Amrein I, Isler K, Lipp HP**. Comparing adult hippocampal neurogenesis in mammalian species and orders: influence of chronological age and life history stage. *Eur J Neurosci*, 2011; 34: 978-87.
- Klaus F, Amrein I**. Running in laboratory and wild rodents: Differences in context sensitivity and plasticity of hippocampal neurogenesis. *Behav Brain Res*, 2011.
- Klaus F, Hauser T, Lindholm AK, Cameron HA, Slomianka L, Lipp HP, Amrein I**. Different regulation of adult hippocampal neurogenesis in Western house mice (*Mus musculus domesticus*) and C57BL/6 mice. *Behav Brain Res*, 2011.

Mouse studies

- Kilic E, Kilic U, Bacigaluppi M, Guo Z, Abdallah NB, Wolfer DP, Reiter RJ, Hermann DM, Bassetti CL. Delayed melatonin administration promotes neuronal survival, neurogenesis and motor recovery, and attenuates hyperactivity and anxiety after mild focal cerebral ischemia in mice. *J Pineal Res*, 2008; 45: 142-8.
- Bianchi V, Farisello P, Baldelli P, Meskenaitė V, Milanese M, Vecellio M, Muhlemann S, Lipp HP, Bonanno G, Benfenati F, Toniolo D, D'Adamo P. Cognitive impairment in Gdi1-deficient mice is associated with altered synaptic vesicle pools and short-term synaptic plasticity, and can be corrected by appropriate learning training. *Hum Mol Genet*, 2009; 18: 105-17.
- Branchi I, D'Andrea I, Cirulli F, Lipp HP, Alleva E. Shaping brain development: Mouse communal nesting blunts adult neuroendocrine and behavioral response to social stress and modifies chronic antidepressant treatment outcome. *Psychoneuroendocrinology*, 2009.

Jaholkowski P, Kiryk A, Jedynak P, Ben Abdallah NM, Knapska E, Kowalczyk A, Piechal A, Blecharz-Klin K, Figiel I, Liudyno V, Widy-Tyszkiewicz E, Wilczynski GM, Lipp HP, Kaczmarek L, Filipkowski RK. New hippocampal neurons are not obligatory for memory formation; cyclin D2 knockout mice with no adult brain neurogenesis show learning. *Learn Mem*, 2009; 16: 439-51.

Janus C, Welzl H. Mouse models of neurodegenerative diseases: criteria and general methodology. *Methods Mol Biol*, 2010; 602: 323-45.

Krackow S, Vannoni E, Codita A, Mohammed AH, Cirulli F, Branchi I, Alleve E, Reichelt A, Willuweit A, Voikar V, Colacicco G, Wolfer DP, Buschmann JU, Safi K, Lipp HP. Consistent behavioral phenotype differences between inbred mouse strains in the IntelliCage. *Genes Brain Behav*, 2010; 9: 722-31.

Voikar V, Colacicco G, Gruber O, Vannoni E, Lipp HP, Wolfer DP. Conditioned response suppression in the IntelliCage: assessment of mouse strain differences and effects of hippocampal and striatal lesions on acquisition and retention of memory. *Behav Brain Res*, 2010; 213: 304-12.

Ben Abdallah NM, Fuss J, Trusel M, Galsworthy MJ, Bobsin K, Colacicco G, Deacon RM, Riva MA, Kellendonk C, Sprengel R, Lipp HP, Gass P. The puzzle box as a simple and efficient behavioral test for exploring impairments of general cognition and executive functions in mouse models of schizophrenia. *Exp Neurol*, 2011; 227: 42-52.

Endo T, Maekawa F, Voikar V, Haijima A, Uemura Y, Zhang Y, Miyazaki W, Suyama S, Shimazaki K, Wolfer DP, Yada T, Tohyama C, Lipp HP, Kakeyama M. Automated test of behavioral flexibility in mice using a behavioral sequencing task in IntelliCage. *Behav Brain Res*, 2011; 221: 172-81.

Kiryk A, Mochol G, Filipkowski RK, Wawrzyniak M, Liudyno V, Knapska E, Gorkiewicz T, Balcerzyk M, Łeski S, Van Leuven F, Lipp HP, Wójcik DK, Kaczmarek L. Cognitive abilities of Alzheimer's disease transgenic mice are modulated by social context and circadian rhythm. *Curr. Alzheimer Res.*, 2011; in press.

Ramakers G, Wolfer DP, Rosenberger G, Kuchenbecker K, Kreienkamp HJ, Prange-Kiel J, Rune G, Richter K, Langnaese K, Masneuf S, Boesl M, Fischer KD, Krugers H, Lipp HP, Kutsche K. Dysregulation of Rho GTPases in the alphaPix/Arhgef6 mouse model of X-linked intellectual disability is paralleled by impaired structural and synaptic plasticity and cognitive deficits. *Human Molecular Genetics*, 2011; in press.

PhD Theses

Dell'Arciccia G. Behavioural factors influencing orientation and navigation in homing pigeons (*Columba livia*). Institute of Anatomy. University of Zurich: Zurich, 2009: 102.

Ben Abdallah NM. Modulation of adult hippocampal neurogenesis in mice by aging, radiation, and knockout of the cell cycle regulatory gene cyclin D2 Institute of Anatomy. University of Zurich: Zurich, 2009: 161.

Gatome CW. Morphological correlates of spatial navigation, orientation and memory in fruit bats. Institute of Anatomy. University of Zurich: Zurich, 2010: 146.

Master and MD Theses

Strauch S. Immunhistochemische und histologische Untersuchungen zur Erforschung der neurobiologischen Grundlagen des Heimkehrverhaltens von Brieftauben. Institute of Anatomy. University of Zürich: Zürich, 2008: 45.

Tschudi A. GPS tracking of pigeons carrying magnets or nostril plugs. Institute of Anatomy. University of Zürich: Zürich, 2011

Hauser T. Die Beziehung zwischen Zellproliferation, Neurogenese und physischer Aktivität in der Langschwanz-Waldmaus (*Apodemus sylvaticus*). Institute of Anatomy. University of Zürich: Zürich, 2008: 1-54.

Khalaji S. Effect of 4-Methylbenzylidene Camphor (4-MBC) and 3-Benzylidene Camphor (3-BC) on Adult Neurogenesis of the Rat. Institute of Anatomy. University of Zürich: Zürich, 2008: 33.

Klaus F. Der Effekt von belohntem Laufen auf die Laufleistung und die Neurogenese von C57BL/6 Mäusen. Institute of Anatomy. University of Zürich: Zürich, 2008: 1-59.

Zinn P. Factor analysis of behavioral performance of B6/129 F2 hybrid mice in open field, radial maze, water maze and automated test system IntelliCage. Institute of Anatomy. University of Zürich: Zürich, 2008: 42.

Nötzli S. The p66Shc knockout mouse: effects of the p66Shc gene knockout on short- & long-term survival, learning abilities and adult hippocampal neurogenesis. Institute of Anatomy. University of Zurich: Zurich, 2009: 52.

Becker A. Adulte Neurogenese im Hippocampus von Graumullen (*Cryptomys hottentotus pretoriae*). Institute of Anatomy. University of Zürich: Zürich, 2011: 33.

Cavegn N. Adult hippocampal neurogenesis in three South African rodent species. Institute of Anatomy. University of Zürich: Zürich, 2011: 54.

Complete publication list H.-P. Lipp October 2 2011

Peer-reviewed publications

1. □□ Scheffrahn, W., Lipp, H.-P. & Mahler, M. 1975 Serumproteine und Erythrozytenenzyme bei *Callithrix jacchus* (Platyrrhina). *Archiv für Genetik*, **47**, 96-104.
2. □□ Lipp, H.-P. 1978 Aggression and flight behaviour of the marmoset monkey *Callithrix jacchus*: an ethogram for brain stimulation studies. *Brain, Behavior and Evolution*, **15**, 241-259.
3. □□ Lipp, H.-P. & Hunsperger, R.W. 1978 Threat, attack and flight elicited by electrical stimulation of the of the ventromedial hypothalamus of the marmoset monkey *Callithrix jacchus*. *Brain, Behavior and Evolution*, **15**, 260-293.
4. □□ Lipp, H.-P. 1979 Differential hypothalamic self-stimulation behaviour in Roman high-avoidance and low-avoidance rats. *Brain Research Bulletin*, **4**, 553-559.
5. □□ Lipp, H.-P. 1980 A stereotaxic X-ray map of the hypothalamus of the marmoset monkey *Callithrix jacchus*. *Experimental Brain Research*, **38**, 189-196.
6. □□ Lipp, H.-P. 1980 Brieftauben in der Armee - ein Anachronismus? *Krieg im Aether*, **19/3**, 1-24.
7. □□ Lipp, H.-P. & Schwegler, H. 1980 Improved transport of horseradish peroxidase after injection with a non-ionic detergent (Nonidet P-40) into mouse cortex and observations on the relationship between spread at the injection site and amount of transported label. *Neuroscience Letters*, **20**, 49-54.
8. □□ Schwegler, H. & Lipp, H.-P. 1981 Is there a correlation between hippocampal mossy fiber distribution and two-way avoidance performance in mice and rats? *Neuroscience Letters*, **23**, 25-30.
9. □□ Schwegler, H., Van der Loos, H., Buselmaier, W. & Lipp, H.-P. 1981 Individual hippocampal mossy fiber distribution in mice correlates with two-way avoidance performance. *Science*, **214(4522)**, 817-819.
10. □ Lipp, H.-P. 1983 Nocturnal homing in pigeons. *Comparative Biochemistry and Physiology (A)*, **76A**, 743-749.
11. □ Schwegler, H. & Lipp, H.-P. 1983 Hereditary covariations of neuronal circuitry and behavior: correlations between the proportions of hippocampal synaptic fields in the regio inferior and two-way avoidance in mice and rats. *Behavioural Brain Research*, **7**, 1-39.
12. □ Jouandet, M.L., Garey, L.J. & Lipp, H.-P. 1984 Distribution of the cells of origin of the corpus callosum and anterior commissure in the marmoset monkey. *Anatomy and Embryology*, **169**, 45-59.
13. □ Lipp, H.-P., Collins, R.L. & Nauta, W.J.H. 1984 Structural asymmetries in brains of mice selected for strong lateralization. *Brain Research*, **310**, 393-396.
14. □ Lipp, H.-P., Schwegler, H. & Driscoll, P. 1984 Postnatal modification of hippocampal circuitry alters avoidance learning in adult rats. *Science*, **225**, 80-82.
15. □ Lipp, H.-P. & Anders, D. 1985 A simple decoder for linking photocell arrays to a microcomputer. *Behavior Research Methods, Instrumentation & Computers*, **17**, 116-118.

16. □ Keller, F., Lipp, H.-P. & Waser, P.G. 1986 The organization of intrinsic hippocampal connections in explants of rat hippocampus studied by topical application of HRP crystals. *Brain Research*, **380**, 191-195.
17. □ Crusio, W.E., Schwegler, H. & Lipp, H.-P. 1987 Radial-maze performance and structural variation of the hippocampus in mice: a correlation with mossy fibre distribution. *Brain Research*, **425**, 182-185.
18. □ Lieblich, I., Driscoll, P. & Lipp, H.-P. 1987 Genetic relation between the readiness to self-stimulate lateral hypothalamus, two-way avoidance learning and the proportions of hippocampal synaptic fields in regio inferior. *Behavior Genetics*, **17**, 427-438.
19. □ Lipp, H.-P., Schwegler, H., Heimrich, B., Cerbone, A. & Sadile, A.G. 1987 Strain-specific correlations between hippocampal structural traits and habituation in a spatial novelty situation. *Behavioural Brain Research*, **24**, 111-123.
20. □ Lipp, H.-P., Schwegler, H., Heimrich, B. & Driscoll, P. 1988 Infrapyramidal mossy fibers and two-way avoidance learning: developmental modification of hippocampal circuitry and adult behavior of rats and mice. *Journal of Neuroscience*, **8**, 1905-1921.
21. □ Schwegler, H., Crusio, W.E., Lipp, H.-P. & Heimrich, B. 1988 Water-maze learning in the mouse correlates with variation in hippocampal morphology. *Behavior Genetics*, **18**, 153-166.
22. □ Schwegler, H., Lipp, H.-P. & Crusio, W.E. 1988 NZB mouse: hippocampal mossy fiber patterns and behavioral profiles of young and older animals. *Drug Dev.Res.*, **15**, 297-306.
23. □ Kurtz, A., Schurek, H.-J., Jelkmann, W., Muff, R., Lipp, H.-P., Heckmann, U., Eckardt, K.-U., Scholz, H., Fischer, J.A. & Bauer, C. 1989 Renal mesangium is a target for calcitonin gene-related peptide. *Kidney International*, **36**, 222-227.
24. □ Lipp, H.-P. 1989 Non-mental aspects of encephalisation: the forebrain as a playground of mammalian evolution. *Human Evolution*, **4**, 45-53.
25. □ Gruber, D., Waanders, R., Collins, R.L., Wolfer, D.P. & Lipp, H.-P. 1991 Weak or missing paw preference in a mouse strain (I/LnJ) with congenital absence of the corpus callosum. *Behavioural Brain Research*, **45**, 9-16.
26. □ Lipp, H.-P. & Van der Loos, H. 1991 A computer-controlled Y-maze for testing vibrissotactile discrimination learning in mice. *Behavioural Brain Research*, **45**, 135-145.
27. □ Schöpke, R., Wolfer, D.P., Lipp, H.-P. & Leisinger-Trigona, M.-C. 1991 Swimming navigation and structural variations of the infrapyramidal mossy fibers in the hippocampus of the mouse. *Hippocampus*, **1**, 315-328.
28. □ Schwegler, H., Crusio, W.E., Lipp, H.-P., Brust, I. & Mueller, G.G. 1991 Early postnatal hyperthyroidism alters hippocampal circuitry and improves radial maze learning in adult mice. *Journal of Neuroscience*, **11**, 2102-2106.
29. □ Büeler, H., Fischer, M., Lang, Y., Blüthmann, H., Lipp, H.-P., DeArmond, S.J., Prusiner, S.B., Aguet, M. & Weissmann, C. 1992 The neuronal cell surface protein PrP is not essential for normal development and behavior of the mouse. *Nature*, **356**, 577-582.
30. □ Lipp, H.-P., Wolfer, D.P., Qin, W.X., Klee, C.B. & Heizmann, C.W. 1992 CPB-18, a Ca²⁺-binding protein in rat brain: tissue distribution and localization *Journal of Neurochemistry*, **60**, 1639-1649.
31. □ Wolfer, D.P. & Lipp, H.-P. 1992 A computer program for detailed off-line analysis of Morris water maze behavior. *Journal of Neuroscience Methods*, **41**, 65-74.

32. □ Dell'Omo, G., Wolfer, D., Alleva, E. & Lipp, H.-P. 1993 Impaired acquisition of swimming navigation in adult mice exposed prenatally to oxazepam. *Psychopharmacology (Berlin)*, **111**, 33-38.
33. □ Baenziger, O., Jaggi, J.L., Müller, A.C., Morales, C.G., Lipp, H.-P., Lipp, A.E., Duc, G. & Bucher, H.-U. 1994 Cerebral blood flow in preterm infants affected by sex, mechanical ventilation, and intrauterine growth. *Pediatric Neurology*, **11**, 319-324.
34. □ Bernasconi-Guastalla, S., Wolfer, D.P. & Lipp, H.-P. 1994 Hippocampal mossy fibers and swimming navigation in mice: correlations with size and left-right asymmetries. *Hippocampus*, **4**, 53-64.
35. □ Leitinger, B., Poletaeva, I.I., Wolfer, D.P. & Lipp, H.-P. 1994 Swimming navigation, open-field activity and extrapolation behavior of two inbred mouse strains with Robertsonian translocation of chromosomes 8 and 17. *Behavior Genetics*, **24**, 273-284.
36. □ Montag, D., Giese, K.P., Bartsch, U., Martini, R., Lang, Y., Blüthmann, H., Karthigasan, J., Kirschner, D.A., Wintergerst, E.S., Nave, K.-A., Zielasek, J., Toyka, K.V., Lipp, H.-P. & Schachner, M. 1994 Mice deficient for the myelin-associated glycoprotein show subtle abnormalities in myelin. *Neuron*, **13**, 229-246.
37. □ Müller, U., Cristina, N., Li, Z.-W., Wolfer, D.P., Lipp, H.-P., Rülcke, T., Brandner, S., Aguzzi, A. & Weissmann, C. 1994 Behavioral and anatomical deficits in mice homozygous for a modified β -amyloid precursor protein (β APP) gene. *Cell*, **79**, 755-765.
38. □ Sluyter, F., Jamot, L., Van Oortmerssen, G.A. & Crusio, W.E. 1994 Hippocampal mossy fiber distributions in mice selected for aggression. *Brain Research*, **646**, 145-148.
39. □ Wolfer, D.P., Henahan-Beatty, A., Stoeckli, E.T., Sonderegger, P. & Lipp, H.-P. 1994 Distribution of TAG-1/axonin-1 in fibre tracts and migratory streams of the developing mouse nervous system. *Journal of Comparative Neurology*, **345**, 1-32.
40. □ Dell'Omo, G., Wolfer, D.P., Alleva, E. & Lipp, H.-P. 1995 Developmental exposure to ozone induces subtle changes in swimming navigation of adult mice. *Toxicology Letters*, **81 (2-3)**, 91-99.
41. □ Fiore, M., Dell'Omo, G., Alleva, E. & Lipp, H.-P. 1995 A comparison of behavioural effects of prenatally administered oxazepam in mice exposed to open-fields in the laboratory and the real world. *Psychopharmacology*, **122**, 72-77.
42. □ Lipp, H.-P. 1995 Genetic variability, individuality and the evolution of the mammalian brain. *Behavioural Processes*, **35**, 19-33.
43. □ Wolfer, D.P. & Lipp, H.-P. 1995 Evidence for physiological sprouting of hippocampal mossy fiber collaterals in the guinea pig during puberty and adulthood. *Hippocampus*, **5**, 329-340.
44. □ Hausheer-Zarmakupi, Z., Wolfer, D.P., Leisinger-Trigona, M.-C. & Lipp, H.-P. 1996 Selective breeding for extremes in open-field activity of mice entails a differentiation of hippocampal mossy fibers. *Behavior Genetics*, **26**, 167-176.
45. □ Huang, Y.-Y., Bach, M.E., Lipp, H.-P., Zhuo, M., Wolfer, D.P., Hawkins, R.D., Schoonjans, L., Kandel, E.R., Godfraind, J.-M., Mulligan, R.C., Collen, D. & Carmeliet, P. 1996 Mice lacking the gene encoding tissue-type plasminogen activator show a selective interference with late phase LTP in both Schaffer collateral and mossy fiber pathways. *Proceedings of the National Academy of Sciences of the United States of America*, **93**, 8699-8704.

46. □ Lipp, H.-P., Collins, R.L., Hausheer-Zarmakupi, Z., Leisinger-Trigona, M.-C., Crusio, W.E., Nosten-Bertrand, M., Signore, P., Schwegler, H. & Wolfer, D.P. 1996 Paw lateralization and intra/infrapyramidal mossy fibers in the hippocampus of the mouse *Behavior Genetics*, **26**, 167-176.
47. □ Müller, U., Cristina, N., Li, Z.W., Wolfer, D.P., Lipp, H.-P., Rüllicke, T., Brandner, S., Aguzzi, A. & Weissman, C. 1996 Mice homozygous for a modified beta-amyloid precursor protein (beta APP) gene show impaired behavior and high incidence of agenesis of the corpus callosum. *Annals of the New York Academy of Sciences*, **777**, 65-73.
48. □ Brambilla, R., Gnesutta, N., Minichiello, N., White, G., Roylance, A., Herron, C., Ramsey, M., Wolfer, D.P., Cestari, V., Rossi-Arnaud, C., Grant, S.G.N., Chapman, P.F., Lipp, H.-P., Sturani, E. & Klein, R. 1997 A role for the RAS signaling pathway in synaptic transmission and long-term memory. *Nature*, **390**, 281-286.
49. □ Monaghan, A.P., Bock, D., Gass, P., Schwäger, A., Wolfer, D.P., Lipp, H.-P. & Schütz, G. 1997 Aggressive behaviour and defective limbic system in mice lacking the *tailless* gene. *Nature*, **315**, 515-517.
50. □ Schurmans, S., Schiffman, S.N., Gurden, H., Lemaire, H., Lipp, H.-P., Schwam, V., Pochet, R., Imperato, A., Vanderhaeghen, J.-J., Böhme, G.A. & Parmentier, M. 1997 Impaired LTP induction in the dentate gyrus of calretinin-deficient mice. *Proceedings of the National Academy of Sciences of the United States of America*, **94**, 10415-10420.
51. □ Wolfer, D.P., Stagliar-Bozicevic, M., Müller, U. & Lipp, H.-P. 1997 Assessing the effects of the 129Sv genetic background on swimming navigation learning in transgenic mutants: a study using mice with a modified b-amyloid precursor gene. *Brain Research*, **771**, 1-13.
52. □ Dell'Omo, G., Shore, R.F. & Lipp, H.-P. 1998 An automated system based on microchips for monitoring individual activity of wild small mammals. *Journal of Experimental Zoology*, **280**, 97-99.
53. □ Gass, P., Wolfer, D.P., Balschun, D., Rudolph, D., Frey, U., Lipp, H.-P. & Schütz, G. 1998 Deficits in memory tasks of mice with CREB mutations depend on gene dosage. *Learning & Memory*, **5**, 274-288.
54. □ Lipp, H.-P., Stagliar-Bozicevic, M., Fischer, M. & Wolfer, D.P. 1998 A two-year longitudinal study of swimming navigation in mice devoid of the prion protein: no evidence for neurological anomalies or learning impairments. *Behavioural Brain Research*, **95**, 47-54.
55. □ Magara, F., Welker, E., Wolfer, D.P., Drescher-Lindh, I. & Lipp, H.-P. 1998 Increased asymmetries in 2-deoxyglucose uptake in the brain of freely moving congenitally acallosal mice *Neuroscience*, **87**, 243-254.
56. □ Tremml, P., Lipp, H.-P., Müller, U., Ricceri, L. & Wolfer, D.P. 1998 Neurobehavioral development, adult openfield exploration and swimming navigation learning in mice with a modified β -amyloid precursor protein gene. *Behavioural Brain Research*, **95**, 65-76.
57. □ Wolfer, D.P., Giger, R., Stagliar-Bozicevic, M., Sonderegger, P. & Lipp, H.-P. 1998 Expression of the axon growth-related neural adhesion molecule TAG-1/axonin-1 in the adult mouse brain. *Anatomy and Embryology*, **197**, 177-185.
58. □ Wolfer, D.P., Mohajeri, H.M., Lipp, H.-P. & Schachner, M. 1998 Increased behavioral flexibility and reduced retention in the Morris watermaze in transgenic mice ectopically expressing the neural cell adhesion molecule L1 in astrocytes. *European Journal of Neuroscience*, **10**, 708-717.

59. □ Balschun, D., Wolfer, D.P., Bertocchini, F., Barone, V., Conti, A., Zuschratter, W., Missiaen, L., Lipp, H.-P. & Sorrentino, V. 1999 Deletion of the ryanodine receptor type 3 (RyR3) impairs forms of synaptic plasticity and spatial learning. *EMBO J.*, **18**, 5264-5273.
60. □ Magara, F., Müller, U., Lipp, H.-P., Weissmann, C., Stagliar, M. & Wolfer, D.P. 1999 Genetic background changes the pattern of forebrain commissure defects in transgenic mice underexpressing the b-amyloid-precursor protein. *Proceedings of the National Academy of Sciences of the United States of America*, **96**, 4656-4661.
61. □ Minichiello, L., Korte, M., Wolfer, D.P., Kühn, R., Unsicker, K., Cestari, V., Rossi-Arnaud, C., Lipp, H.-P., Bonhoeffer, T. & Klein, R. 1999 Essential role for TrkB receptors in hippocampus-mediated learning. *Neuron*, **24**, 401-414.
62. □ Phinney, A.L., Calhoun, M.E., Wolfer, D.P., Lipp, H.-P., Zheng, H. & Jucker, M. 1999 Aged APP-null mice exhibit a learning impairment, which is not mediated by hippocampal neuron or synaptic bouton number. *Neuroscience*, **90**, 1207-1216.
63. □ Ulrich, C., Prior, H., Duka, T., Leshinskaya, I., Valenti, P., Güntürkün, O. & Lipp, H.-P. 1999 Left-hemispheric superiority for visuospatial orientation in homing pigeons. *Behavioural Brain Research*, **104**, 169-178.
64. □ Chrast, R., Scott, H.S., Madani, R., Huber, L., Wolfer, D.P., Prinz, M., Aguzzi, A., Lipp, H.-P. & Antonarakis, S.E. 2000 Mice trisomic for a bacterial artificial chromosome with the single-minded gene 2 gene (*Sim2*) show phenotypes similar to those present in the partial trisomy 16 mouse models of Down syndrome. *Human Molecular Genetics*, **9**, 1853-1864.
65. □ Dell'Omo, G., Ricceri, L., Wolfer, D.P., Poletaeva, I.I. & Lipp, H.-P. 2000 Temporal and spatial adaptation to food restriction in mice under naturalistic conditions. *Behavioural Brain Research*, **115**, 1-8.
66. □ Gass, P., Kretz, O., Wolfer, D.P., Berger, S., Tronche, F., Reichardt, H.M., Kellendonk, C., Lipp, H.-P., Schmid, W. & Schütz, G. 2000 Genetic disruption of mineralocorticoid receptor leads to impaired neurogenesis and granule cell degeneration in the hippocampus of adult mice. *EMBO Reports*, **1**, 447-451.
67. □ Heber, S., Herms, J., Gajic, V., Hainfellner, J., Aguzzi, A., Rülcke, T., Kretschmar, H., von Koch, C., Sisodia, S., Tremml, P., Lipp, H.-P., Wolfer, D.P. & Müller, U. 2000 Mice with combined gene knock-outs reveal essential and partially redundant functions of amyloid precursor protein family members. *Journal of Neuroscience*, **20**, 7951-7963.
68. □ Magara, F., Ricceri, L., Wolfer, D.P. & Lipp, H.-P. 2000 The acallosal mouse strain I/LnJ: a putative model of ADHD? *Neuroscience & Biobehavioral Reviews*, **24**, 45-50.
69. □ Pleskacheva, M.G., Wolfer, D.P., Kupriyanova, I.F., Nikolenko, D.L., Scheffrahn, H., Dell'Omo, G. & Lipp, H.-P. 2000 Hippocampal mossy fibers and swimming navigation learning in two vole species occupying different habitats. *Hippocampus*, **10**, 17-30.
70. □ Steiner, I., Bürgi, C., Werffeli, S., Dell'Omo, G., Valenti, P., Tröster, G., Wolfer, D.P. & Lipp, H.-P. 2000 A GPS logger and software for analysis of homing in pigeons and small mammals. *Physiology & Behavior*, **71**, 589-596.
71. □ Stork, O., Welzl, H., Wolfer, D.P., Schuster, T., Mantei, N., Stork, S., Hoyer, D., Lipp, H.-P., Obata, K. & Schachner, M. 2000 Recovery of emotional behaviour in neural cell adhesion molecule (NCAM) null mutant mice through transgenic expression of NCAM 180. *European Journal of Neuroscience*, **12**, 3291-3306.

72. □ Grünwald, I.C., Korte, M., Wolfer, D.P., Wilkinson, G.A., Unsicker, K., Lipp, H.-P., Bonhoeffer, T. & Klein, R. 2001 Kinase-independent requirement of EphB2 receptors in hippocampal synaptic plasticity. *Neuron*, **32**, 1027-1040.
73. □ Lipp, H.-P., Pleskacheva, M.G., Gossweiler, H., Ricceri, L., Perepiolkina, O.P., Garin, N.N., Voronkov, D.N., Kuptsov, P.A., Smirnova, A.A. & Dell'Omo, G. 2001 A large outdoor radial maze for comparative studies in birds and mammals. *Neuroscience & Biobehavioral Reviews*, **25**, 83-99.
74. □ Otto, C., Kovalchuk, Y., Wolfer, D.P.P., Gass, P., Martin, M., Zuschratter, W., Grone, H.J., Kellendonk, C., Tronche, F., Maldonado, R., Lipp, H.-P., Konnerth, A. & Schutz, G. 2001 Impairment of mossy fiber long-term potentiation and associative learning in pituitary adenylate cyclase activating polypeptide type I receptor-deficient mice. *Journal of Neuroscience*, **21**, 5520-5527.
75. □ Otto, C., Martin, M., Wolfer, D.P.P., Lipp, H.-P., Maldonado, R. & Schütz, G. 2001 Altered emotional behavior in PACAP-type-I-receptor-deficient mice. *Molecular Brain Research*, **92**, 78-84.
76. □ Poletaeva, I.I., Pleskacheva, M.G., Markina, N.W., Perepiolkina, O.W., Scheffrahn, H., Wolfer, D.P.P. & Lipp, H.-P. 2001 [Environmental habitat-related pressure: behavioral alterations and morphological changes in the brain of the house mouse] Russian. *Ecologia*, **3**, 231-236.
77. □ Sauder, C., Wolfer, D.P., Lipp, H.-P., Staeheli, P. & Hausmann, J. 2001 Subtle learning deficits in mice with persistent Borna disease virus infection of the CNS associated with elevated chemokine expression. *Behavioural Brain Research*, **120**, 189-201.
78. □ Valenti, P., Cozzio, A., Nishida, N., Wolfer, D.P., Sakaguchi, S. & Lipp, H.-P. 2001 Similar target, different effects: late-onset ataxia and spatial learning in Prion protein deficient mouse lines. *Neurogenetics*, **3**, 173-184.
79. □ Wolfer, D.P.P., Madani, R., Valenti, P. & Lipp, H.-P. 2001 Extended analysis of path data from mutant mice using the public domain software Wintrack. *Physiol Behav*, **73**, 745-753.
80. □ Biro, D., Guilford, T., Dell'Omo, G. & Lipp, H.-P. 2002 How the viewing of familiar landscapes prior to release allows pigeons to home faster: evidence from GPS tracking. *The Journal of Experimental Biology*, **205**, 3833-3844.
81. □ Colacicco, G., Welzl, H., Lipp, H.-P. & Würbel, H. 2002 Attentional set-shifting in mice: modification of a rat paradigm, and evidence for strain-dependent variation. *Behav Brain Res*, **132**, 95-102.
82. □ D'Adamo, P., Welzl, H., Papadimitriou, S., Di Barletta, M.R., Tiveron, C., Tatangelo, L., Pozzi, L., Chapman, P.F., Knevet, S.G., Ramsay, M.F., Valtorta, F., Leoni, C., Menegon, A., Wolfer, D.P., Lipp, H.-P. & Toniolo, D. 2002 Deletion of the mental retardation gene *Gdi1* impairs associative memory and alters social behavior in mice. *Human Molecular Genetics*, **11**, 2567-2580.
83. □ Dell'Omo, G., Vannoni, E., Vyssotski, A.L., Di Bari, M.A., Nonno, R., Agrimi, U. & Lipp, H.-P. 2002 Automated home cage monitoring of mice infected with BSE and scrapie differentiates early behavioural changes according to prion strain. *European Journal of Neuroscience*, **16**, 735-742.

84. □ Lil'p, I.G., Pleskacheva, M.G., Poletaeva, I.I., Bizikoeva, F.Z., Ivanov, V.I. & Lipp, H.-P. 2002 [Structural abnormalities of hippocampus in 101/HY mice]. *Ontogenez*, **33**, 206-212.
85. □ Lipp, H.-P. & Wolfer, D.P. 2002 Big brains for bad genes: non-mental correlates of encephalization. *Evolutionary Anthropology*, **11**, 126-131.
86. □ Mazzucchelli, C., Vantaggiato, C., Ciamei, A., Fasano, S., Pakhotin, P., Krezel, W., Welzl, H., Wolfer, D.P., Pages, G., Valverde, O., Marowsky, A., Porrizzo, A., Orban, P.C., Maldonado, R., Ehrenguber, M.U., Cestari, V., Lipp, H.P., Chapman, P.F., Pouyssegur, J. & Brambilla, R. 2002 Knockout of ERK1 MAP kinase enhances synaptic plasticity in the striatum and facilitates striatal-mediated learning and memory. *Neuron*, **34**, 807-820.
87. □ Pleskacheva, M.G., Zorina, Z.A., Nikolenko, D.L., Wolfer, D.P., Kostina, Z.A. & Lipp, H.-P. 2002 Behavioral impairments in Morris water maze in rats selectively bred for audiogenic seizure susceptibility (Krushinsky-Molodkina strain). *Zh Vyssh Nerv Deiat Im I P Pavlova*, **52**, 356-365.
88. □ Tremml, P., Lipp, H.-P., Muller, U. & Wolfer, D.P. 2002 Enriched early experiences of mice underexpressing the beta-amyloid precursor protein restore spatial learning capabilities but not normal openfield behavior of adult animals. *Genes Brain Behav*, **1**, 230-241.
89. □ Vyssotski, A.L., Dell'Omo, G., Poletaeva, I.I., Vyssotski, D.L., Minichiello, L., Klein, R., Wolfer, D.P. & Lipp, H.-P. 2002 Long-term monitoring of hippocampus-dependent behavior in naturalistic settings: mutant mice lacking the neurotrophin receptor TrkB in the forebrain show spatial learning but impaired behavioral flexibility. *Hippocampus*, **12**, 27-38.
90. □ Weimerskirch, H., Bonnadonna, F., Bailleul, F., Mabile, G., Dell'Omo, G. & Lipp, H.-P. 2002 GPS tracking of foraging albatrosses. *Science*, **295**, 1259.
91. □ Balschun, D., Wolfer, D.P., Gass, P., Mantamadiotis, T., Welzl, H., Schütz, G., Frey, J.U. & Lipp, H.-P. 2003 Does cAMP response element-binding protein (CREB) have a pivotal role in hippocampal synaptic plasticity and hippocampus-dependent memory? *J Neurosci*, **23**, 6304-6314.
92. □ Dell'Omo, G., Pleskacheva, M.G., Wolfer, D.P., Lipp, H.-P. & Shore, R.F. 2003 Comparative effects of exposure to an organophosphate pesticide on locomotor activity of laboratory mice and five species of wild rodents. *Bull Environ Contam Toxicol*, **70**, 138-145.
93. □ Lang, U.E., Lang, F., Richter, K., Vallon, V., Lipp, H.P., Schnermann, J. & Wolfer, D.P. 2003 Emotional instability but intact spatial cognition in adenosine receptor 1 knock out mice. *Behav Brain Res*, **145**, 179-188.
94. □ Mohajeri, M.H., Saini, K., Li, H., Crameri, A., Lipp, H.-P., Wolfer, D.P. & Nitsch, R.M. 2003 Intact spatial memory in mice with seizure-induced partial loss of hippocampal pyramidal neurons. *Neurobiol Dis*, **12**, 174-181.
95. □ Pleskacheva, M.G., Kuptsov, P.A., Smirnova, A.A., Bagotskaia, M.S. & Lipp, H.P. 2003 [Conditioning of gray crows (*Corvus cornix* L.) in a "giant" eight-arm radial maze]. *Zh Vyssh Nerv Deiat Im I P Pavlova*, **53**, 808-811.
96. □ Zorner, B., Wolfer, D.P., Brandis, D., Kretz, O., Zacher, C., Madani, R., Grunwald, I., Lipp, H.P., Klein, R., Henn, F.A. & Gass, P. 2003 Forebrain-specific trkB-receptor

- knockout mice: behaviorally more hyperactive than "depressive". *Biol Psychiatry*, **54**, 972-982.
97. □ Amrein, I., Slomianka, L. & Lipp, H.P. 2004 Granule cell number, cell death and cell proliferation in the dentate gyrus of wild-living rodents. *Eur J Neurosci*, **20**, 3342-3350.
 98. □ Amrein, I., Slomianka, L., Poletaeva, II, Bologova, N.V. & Lipp, H.P. 2004 Marked species and age-dependent differences in cell proliferation and neurogenesis in the hippocampus of wild-living rodents. *Hippocampus*, **14**, 1000-1010.
 99. □ D'Adamo, P., Bacchelli, E., Blasi, F., Lipp, H.P., Toniolo, D. & Maestrini, E. 2004 DNA variants in the human RAB3A gene are not associated with autism. *Genes Brain Behav*, **3**, 123-124.
 100. □ D'Adamo, P., Wolfer, D.P., Kopp, C., Tobler, I., Toniolo, D. & Lipp, H.P. 2004 Mice deficient for the synaptic vesicle protein Rab3a show impaired spatial reversal learning and increased explorative activity but none of the behavioral changes shown by mice deficient for the Rab3a regulator Gdi1. *Eur J Neurosci*, **19**, 1895-1905.
 101. □ Korbo, L., Amrein, I., Lipp, H.P., Wolfer, D., Regeur, L., Oster, S. & Pakkenberg, B. 2004 No evidence for loss of hippocampal neurons in non-Alzheimer dementia patients. *Acta Neurol Scand*, **109**, 132-139.
 102. □ Lewejohann, L., Skryabin, B.V., Sachser, N., Prehn, C., Heiduschka, P., Thanos, S., Jordan, U., Dell'Omo, G., Vyssotski, A.L., Pleskacheva, M.G., Lipp, H.P., Tiedge, H., Brosius, J. & Prior, H. 2004 Role of a neuronal small non-messenger RNA: behavioural alterations in BC1 RNA-deleted mice. *Behav Brain Res*, **154**, 273-289.
 103. □ Lipp, H.P., Vyssotski, A.L., Wolfer, D.P., Renaudineau, S., Savini, M., Troster, G. & Dell'Omo, G. 2004 Pigeon homing along highways and exits. *Curr Biol*, **14**, 1239-1249.
 104. □ Mohajeri, M.H., Madani, R., Saini, K., Lipp, H.P., Nitsch, R.M. & Wolfer, D.P. 2004 The impact of genetic background on neurodegeneration and behavior in seized mice. *Genes Brain Behav*, **3**, 228-239.
 105. □ Raivich, G., Bohatschek, M., Da Costa, C., Iwata, O., Galiano, M., Hristova, M., Nateri, A.S., Makwana, M., Riera-Sans, L., Wolfer, D.P., Lipp, H.P., Aguzzi, A., Wagner, E.F. & Behrens, A. 2004 The AP-1 transcription factor c-Jun is required for efficient axonal regeneration. *Neuron*, **43**, 57-67.
 106. □ Umbricht, D., Vyssotky, D., Latanov, A., Nitsch, R., Brambilla, R., D'Adamo, P. & Lipp, H.P. 2004 Midlatency auditory event-related potentials in mice: comparison to midlatency auditory ERPs in humans. *Brain Res*, **1019**, 189-200.
 107. □ Wolfer, D.P., Litvin, O., Morf, S., Nitsch, R.M., Lipp, H.P. & Wurbel, H. 2004 Laboratory animal welfare: cage enrichment and mouse behaviour. *Nature*, **432**, 821-822.
 108. □ Bonadonna, F., Bajzak, C., Benhamou, S., Igloi, K., Jouventin, P., Lipp, H.P. & Dell'omo, G. 2005 Orientation in the wandering albatross: interfering with magnetic perception does not affect orientation performance. *Proc R Soc Lond B Biol Sci*, **272**, 489-495.
 109. □ Dong, Z., Wolfer, D.P., Lipp, H.P. & Bueler, H. 2005 Hsp70 gene transfer by adeno-associated virus inhibits MPTP-induced nigrostriatal degeneration in the mouse model of Parkinson disease. *Mol Ther*, **11**, 80-88.
 110. □ Galsworthy, M.J., Amrein, I., Kuptsov, P.A., Poletaeva, II, Zinn, P., Rau, A., Vyssotski, A. & Lipp, H.P. 2005 A comparison of wild-caught wood mice and bank voles in the Intellicage: assessing exploration, daily activity patterns and place learning paradigms. *Behav Brain Res*, **157**, 211-217.

111. □ Kuptsov, P., Pleskacheva, M.G., Voronkov, D.N., Lipp, H.-P. & Anokhin, K.V. 2005 Features of the c-Fos Gene expression along the hippocampal rostro-caudal axis in common voles after rapid spatial learning [Russian]. *Zh Vyssh Nerv Deiat*, **55**.
112. □ Lang, U.E., Wolfer, D.P., Grahammer, F., Strutz-Seebohm, N., Seebohm, G., Lipp, H.-P., McCormick, J.A., Hellweg, R., Dawson, K., Wang, J., Pearce, D. & Lang, F. 2005 Reduced locomotion in the serum and glucocorticoid inducible kinase-3 knockout mouse. *Behav Brain Res*, **167**, 75-86.
113. □ Lipp, H.-P. (2005) High-throughput and automated behavioural screening of normal and
114. □ genetically modified mice *Future Drug Discovery 2005*. Touch Briefings, London.
115. □ Umbricht, D., Vyssotki, D., Latanov, A., Nitsch, R. & Lipp, H.P. 2005 Deviance-related electrophysiological activity in mice: is there mismatch negativity in mice? *Clin Neurophysiol*, **116**, 353-363.
116. □ Berger, S., Wolfer, D.P., Selbach, O., Alter, H., Erdmann, G., Reichardt, H.M., Chepkova, A.N., Welzl, H., Haas, H.L., Lipp, H.-P. & Schütz, G. 2006 Loss of the limbic mineralocorticoid receptor impairs behavioral plasticity. *Proc Natl Acad Sci U S A*, **103**, 195-200.
117. □ Bickel, S., Lipp, H.P. & Umbricht, D. 2006 Impaired attentional modulation of auditory evoked potentials in N-methyl-d-aspartate NR1 hypomorphic mice. *Genes Brain Behav*.
118. □ Dell'Araccia, G., Lipp, H.-P. & Dell'Omo, G. 2006 Spostamenti dei piccioni romani: uno studio preliminare con il GPS. *Alula*, **XII**, 97-102.
119. □ Knapska, E., Walasek, G., Nikolaev, E., Neuhäusser-Wespy, F., Lipp, H.-P., Kaczmarek, L. & Werka, T. 2006 Differential involvement of the central amygdala in appetitive versus aversive learning. *Learn Mem*, **13**, 192-200.
120. □ Madani, R., Poirier, R., Wolfer, D.P., Welzl, H., Groscurth, P., Lipp, H.P., Lu, B., Mouedden, M.E., Mercken, M., Nitsch, R.M. & Mohajeri, M.H. 2006 Lack of neprilysin suffices to generate murine amyloid-like deposits in the brain and behavioral deficit in vivo. *J Neurosci Res*, 1871-1878.
121. □ Nonno, R., Di Bari, M.A., Cardone, F., Vaccari, G., Fazzi, P., Dell, Omo, G., Cartoni, C., Ingrosso, L., Boyle, A., Galeno, R., Sbriccoli, M., Lipp, H.-P., Bruce, M., Pocchiari, M. & Agrimi, U. 2006 Efficient transmission and characterization of Creutzfeldt-Jakob disease strains in bank voles. *PLoS Pathogens*, **2**, e12.
122. □ Plath, N., Ohana, O., Dammermann, B., Errington, M.L., Schmitz, D., Gross, C., Mao, X., Engelsberg, A., Mahlke, C., Welzl, H., Kobalz, U., Stawrakakis, A., Fernandez, E., Waltereit, R., Bick-Sander, A., Therstappen, E., Cooke, S.F., Blanquet, V., Wurst, W., Salmen, B., Bosl, M.R., Lipp, H.P., Grant, S.G., Bliss, T.V., Wolfer, D.P. & Kuhl, D. 2006 Arc/Arg3.1 is essential for the consolidation of synaptic plasticity and memories. *Neuron*, **52**, 437-444.
123. □ Safi, K., Neuhäusser-Wespy, F., Welzl, H. & Lipp, H.-P. 2006 Mouse anxiety models and an example of an experimental set-up using unconditioned avoidance in an automated system - Intellicage. *Cogn. Brain Behav.* , **10**, 475-488.
124. □ Vyssotski, A.L., Serkov, A.N., Itskov, P.M., Dell'Omo, G., Latanov, A.V., Wolfer, D.P. & Lipp, H.-P. 2006 Miniature neurologgers for flying pigeons: multichannel EEG, action and field potentials in combination with GPS recording. *J Neurophysiol*, **95**, 1263-1273.

125. □ Waltereit, R., Welzl, H., Dichgans, J., Lipp, H.P., Schmidt, W.J. & Weller, M. 2006 Enhanced episodic-like memory and kindling epilepsy in a rat model of tuberous sclerosis. *J Neurochem*, **96**, 407-413.
126. □ Züger, M., Urani, A., Chourbaji, S., Zacher, C., Lipp, H.-P., Albrecht, U., Spanagel, R., Wolfer, D.P. & Gass, P. 2006 mPer1 and mPer2 mutant mice show regular spatial and contextual learning in standardized tests for hippocampus-dependent learning. *J Neural Transm*, **113**, 347-356.
127. □ Amrein, I., Dechmann, D.K., Winter, Y. & Lipp, H.P. 2007 Absent or low rate of adult neurogenesis in the hippocampus of bats (chiroptera). *PLoS ONE*, **2**, e455.
128. □ Ben Abdallah, N.M., Slomianka, L. & Lipp, H.P. 2007 Reversible effect of X-irradiation on proliferation, neurogenesis, and cell death in the dentate gyrus of adult mice. *Hippocampus*, **17**, 1230-1240.
129. □ Bickel, S., Lipp, H.P. & Umbricht, D. 2007 Impaired attentional modulation of auditory evoked potentials in N-methyl-D-aspartate NR1 hypomorphic mice. *Genes Brain Behav*, **6**, 558-568.
130. □ Bickel, S., Lipp, H.P. & Umbricht, D. 2007 Early auditory sensory processing deficits in mouse mutants with reduced NMDA receptor function. *Neuropsychopharmacology*.
131. □ Daumas, S., Betourne, A., Halley, H., Wolfer, D.P., Lipp, H.-P., Lassalle, J.-M. & Francés, B. 2007 Transient activation of the CA3 Kappa opioid system in the dorsal hippocampus modulates complex memory processing in mice. *Neurobiol. Memory Learn.*, **88**, 94-103.
132. □ Gagliardo, A., Ioalè, P., Savini, M., Lipp, H.-P. & Dell'Omo, G. 2007 Finding home: the final step of the pigeons' homing process studied with a GPS data logger. *J. Exp. Biol.*, **210**, 1132-1138.
133. □ Poirier, R., Jacquot, S., Vaillend, C., Southiphong, A.A., Libbey, M., Davis, S., Laroche, S., Hanauer, A., Welzl, H., Lipp, H.P. & Wolfer, D.P. 2007 Deletion of the Coffin-Lowry Syndrome Gene Rsk2 in Mice is Associated With Impaired Spatial Learning and Reduced Control of Exploratory Behavior. *Behav Genet*, **37**, 31-50.
134. □ Agrimi, U., Nonno, R., Dell'Omo, G., Di Bari, M.A., Conte, M., Chiappini, B., Esposito, E., Di Guardo, G., Windl, O., Vaccari, G. & Lipp, H.P. 2008 Prion protein amino acid determinants of differential susceptibility and molecular feature of prion strains in mice and voles. *PLoS Pathog*, **4**, e1000113.
135. □ Bickel, S., Lipp, H.P. & Umbricht, D. 2008 Early auditory sensory processing deficits in mouse mutants with reduced NMDA receptor function. *Neuropsychopharmacology*, **33**, 1680-1689.
136. □ Costantini, D., Dell'Ariceia, G. & Lipp, H., -P. 2008 Long flights and age affect oxidative status of homing pigeons (*Columba livia*). *J. Exp. Biol.*, **211**, 377-381.
137. □ Gebhardt-Henrich, S.G., Edwards, J.F., Famula, T.R., Lipp, H.-P. & Steiger, A. 2008 Hereditary hydrocephalus internus in a laboratory strain of golden hamsters (*Mesocricetus auratus*). *Animal*, **2**, 1265-1272.
138. □ Bianchi, V., Farisello, P., Baldelli, P., Meskenaite, V., Milanese, M., Vecellio, M., Muhlemann, S., Lipp, H.P., Bonanno, G., Benfenati, F., Toniolo, D. & D'Adamo, P. 2009 Cognitive impairment in Gdi1-deficient mice is associated with altered synaptic vesicle pools and short-term synaptic plasticity, and can be corrected by appropriate learning training. *Hum Mol Genet*, **18**, 105-117.

139. □ Bianchi, V., Farisello, P., Baldelli, P., Meskenaite, V., Milanese, M., Vecellio, M., Muhlemann, S., Lipp, H.P., Bonanno, G., Benfenati, F., Toniolo, D. & D'Adamo, P. 2009 Cognitive impairment in Gdi1-deficient mice is associated with altered synaptic vesicle pools and short-term synaptic plasticity, and can be corrected by appropriate learning training. *Hum Mol Genet*, **18**, 105-117.
140. □ Branchi, I., D'Andrea, I., Cirulli, F., Lipp, H.P. & Alleva, E. 2009 Shaping brain development: Mouse communal nesting blunts adult neuroendocrine and behavioral response to social stress and modifies chronic antidepressant treatment outcome. *Psychoneuroendocrinology*.
141. □ Costantini, D. & Lipp, H.P. 2009 Short restraint time does not influence markers of serum oxidative stress in homing pigeons (*Columba livia*). *J Anim Physiol Anim Nutr (Berl)*.
142. □ Dell'Araccia, G., Costantini, D., Dell'Omo, G. & Lipp, H.P. 2009 Waiting time before release increases the motivation to home in homing pigeons (*Columba livia*). *The Journal of Experimental Biology*, **212**, 3361-3364.
143. □ Dell'Araccia, G., Dell'Omo, G. & Lipp, H.-P. 2009 The influence of experience in orientation: GPS tracking of homing pigeons released over the sea after directional training. *The Journal of Experimental Biology*, **212**, 178-183.
144. □ Dell'Araccia, G., Dell'Omo, G. & Lipp, H.-P. 2009 The influence of experience in orientation: GPS tracking of homing pigeons released over the sea after directional training. *The Journal of Experimental Biology*, **212**, 178-183.
145. □ Hauser, T., Klaus, F., Lipp, H.P. & Amrein, I. 2009 No effect of running and laboratory housing on adult hippocampal neurogenesis in wild caught long-tailed wood mouse. *BMC Neurosci*, **10**, 43.
146. □ Jaholkowski, P., Kiryk, A., Jedynak, P., Ben Abdallah, N.M., Knapska, E., Kowalczyk, A., Piechal, A., Blecharz-Klin, K., Figiel, I., Lioudyno, V., Widy-Tyszkiewicz, E., Wilczynski, G.M., Lipp, H.P., Kaczmarek, L. & Filipkowski, R.K. 2009 New hippocampal neurons are not obligatory for memory formation; cyclin D2 knockout mice with no adult brain neurogenesis show learning. *Learn Mem*, **16**, 439-451.
147. □ Klaus, F., Hauser, T., Slomianka, L., Lipp, H.P. & Amrein, I. 2009 A reward increases running-wheel performance without changing cell proliferation, neuronal differentiation or cell death in the dentate gyrus of C57BL/6 mice. *Behav Brain Res*, **204**, 175-181.
148. □ Vyssotski, A.L., Dell'Omo, G., Dell'Araccia, G., Abramchuk, A.N., Serkov, A.N., Latanov, A.V., Loizzo, A., Wolfer, D.P. & Lipp, H.-P. 2009 EEG in flying pigeons responds to familiar visual landmarks. *Curr. Biol.*, **19**, 1-8.
149. □ Ben Abdallah, N.M., Slomianka, L., Vyssotski, A.L. & Lipp, H.P. 2010 Early age-related changes in adult hippocampal neurogenesis in C57 mice. *Neurobiol Aging*, **31**, 151-161.
150. □ Etholm, L., Arabadzisz, D., Lipp, H.P. & Heggelund, P. 2010 Seizure logging: A new approach to synchronized cable-free EEG and video recordings of seizure activity in mice. *J Neurosci Methods*, **192**, 254-260.
151. □ Gatome, C.W., Mwangi, D.K., Lipp, H.P. & Amrein, I. 2010 Hippocampal neurogenesis and cortical cellular plasticity in Wahlberg's epauletted fruit bat: a qualitative and quantitative study. *Brain Behav Evol*, **76**, 116-127.
152. □ Gatome, C.W., Slomianka, L., Lipp, H.P. & Amrein, I. 2010 Number estimates of neuronal phenotypes in layer II of the medial entorhinal cortex of rat and mouse. *Neuroscience*.

153. □ Gatome, C.W., Slomianka, L., Mwangi, D.K., Lipp, H.P. & Amrein, I. 2010 The entorhinal cortex of the Megachiroptera: a comparative study of Wahlberg's epauletted fruit bat and the straw-coloured fruit bat. *Brain Struct Funct*, **214**, 375-393.
154. □ Krackow, S., Vannoni, E., Codita, A., Mohammed, A.H., Cirulli, F., Branchi, I., Alleva, E., Reichelt, A., Willuweit, A., Voikar, V., Colacicco, G., Wolfer, D.P., Buschmann, J.U., Safi, K. & Lipp, H.P. 2010 Consistent behavioral phenotype differences between inbred mouse strains in the IntelliCage. *Genes Brain Behav*.
155. □ Voikar, V., Colacicco, G., Gruber, O., Vannoni, E., Lipp, H.P. & Wolfer, D.P. 2010 Conditioned response suppression in the IntelliCage: assessment of mouse strain differences and effects of hippocampal and striatal lesions on acquisition and retention of memory. *Behav Brain Res*, **213**, 304-312.
156. □ Amrein, I. & Lipp, H.P. 2011 Comparing adult hippocampal neurogenesis in mammalian species and orders: influence of chronological age and life stage. *Eur. J. Neurosci.*, **in press**.
157. □ Ben Abdallah, N.M., Fuss, J., Trusel, M., Galsworthy, M.J., Bobsin, K., Colacicco, G., Deacon, R.M., Riva, M.A., Kellendonk, C., Sprengel, R., Lipp, H.P. & Gass, P. 2011 The puzzle box as a simple and efficient behavioral test for exploring impairments of general cognition and executive functions in mouse models of schizophrenia. *Exp Neurol*, **227**, 42-52.
158. □ Daan, S., Spoelstra, K., Albrecht, U., Schmutz, I., Daan, M., Daan, B., Rienks, F., Poletaeva, I., Dell'Omo, G., Vyssotsky, A.L. & Lipp, H.-P. 2011 Lab mice in the field: unorthodox daily activity and effects of a dysfunctional circadian clock allele. *J. Biol. Rhythms*, **26**, 118-129.
159. □ Endo, T., Maekawa, F., Voikar, V., Haijima, A., Uemura, Y., Zhang, Y., Miyazaki, W., Suyama, S., Shimazaki, K., Wolfer, D.P., Yada, T., Tohyama, C., Lipp, H.P. & Kakeyama, M. 2011 Automated test of behavioral flexibility in mice using a behavioral sequencing task in IntelliCage. *Behav Brain Res*, **221**, 172-181.
160. □ Kiryk, A., Mochol, G., Filipkowski, R.K., Wawrzyniak, M., Lioudyno, V., Knapska, E., Gorkiewicz, T., Balcerzyk, M., Leski, S., Van Leuven, F., Lipp, H.P., Wójcik, D.K. & Kaczmarek, L. 2011 Cognitive abilities of Alzheimer's disease transgenic mice are modulated by social context and circadian rhythm. *Curr. Alzheimer Res.*, **in press**.
161. □ Klaus, F., Hauser, T., Lindholm, A.K., Cameron, H.A., Slomianka, L., Lipp, H.-P. & Amrein, I. 2011 Different regulation of adult hippocampal neurogenesis in Western house mice (*Mus musculus domesticus*) and C57BL/6 mice. *Behav. Brain Res.*, **in press**.
162. □ Ramakers, G., Wolfer, D.P., Rosenberger, G., Kuchenbecker, K., Kreienkamp, H.J., Prange-Kiel, J., Rune, G., Richter, K., Langnaese, K., Masneuf, S., Boesl, M., Fischer, K.D., Krugers, H., Lipp, H.P. & Kutsche, K. 2011 Dysregulation of Rho GTPases in the alphaPix/Arhgef6 mouse model of X-linked intellectual disability is paralleled by impaired structural and synaptic plasticity and cognitive deficits. *Human Molecular Genetics*, **in press**.

Reviews and commentaries

163. Lipp, H.-P. 1979 Brain complexity enhances speed of behavioral evolution. *Behavioral and Brain Sciences*, **2**, 42.
164. Lipp, H.-P. 1980 Brieftauben in der Armee - ein Anachronismus? *Krieg im Aether*, **19/3**, 1-24.
165. Lipp, H.-P. 1988 Les variations structurelles du cerveau: leur rôle dans l'évolution, et leur utilisation pour l'analyse du comportement d'apprentissage. *Bulletin de la Société Française pour l'Etude du Comportement Animal*, **3(2)**, 87-89.
166. Lipp, H.-P., Schwegler, H., Crusio, W.E., Wolfer, D.P., Heimrich, B., Driscoll, P. & Leisinger-Trigona, M.-C. 1989 Using genetically-defined rodent strains for the identification of hippocampal traits relevant for two-way avoidance learning: a non-invasive approach. *Experientia*, **45**, 845-859.
167. Lipp, H.-P. 1990 Flechsig's rule and quantitative behavior genetics. *Behavioral and Brain Sciences*, **10**, 320-322.
168. Lipp, H.-P. 1996 "Columba militaris helvetica": Biologie und Verhaltensleistungen der schweizerischen Armeebrieftauben. *Acta Biologicae Benrodis*, **Suppl. 3**, 85-103.
169. Silva, A.J., Simpson, E.M., Takahashi, J.S., Lipp, H.-P., Nakanishi, S., Wehner, J.M., Giese, K.P., Tully, T., Abel, T., Chapman, P.F., Fox, K., Grant, S.G.N., Itohara, S., Lathe, R., Mayford, M., McNamara, J.O., Morris, R.J., Picciotto, M., Roder, J.C., Shin, H.-S., Slesinger, P.A., Storm, D.R., Stryker, M.P., Wang, Y. & Wolfer, D.P. 1997 Banbury Conference. Mutant mice and Neuroscience: recommendations concerning genetic background. *Neuron*, **19**, 755-759.
170. Wolfer, D.P. & Lipp, H.-P. 1997 Gedächtnis und Lernen bei transgenen Mäusen: Fakt oder Artefakt? *Physiologie*, **8(6)**, 16-19.
171. Lipp, H.-P. & Wolfer, D.P. 1998 Genetically modified mice and cognition. *Current Opinion in Neurobiology*, **8**, 272-280.
172. Wolfer, D.P., Stagliar-Bozicevic, M. & Lipp, H.-P. 1998 Spatial memory and learning in transgenic mice: fact or artefact? *News in Physiological Sciences*, **13**, 118-123.
173. Lipp, H.-P. 2000 Big brains as shelters for odd genes: how fast does complex behavior evolve? *Behavioral and Brain Sciences*, **23**, 155-156.
174. Wolfer, D.P. & Lipp, H.-P. 2000 Dissecting the behavior of transgenic mice: is it the mutation, the genetic background or the environment? *Experimental Physiology*, **85**, 627-634.
175. Welzl, H., D'Adamo, P. & Lipp, H.P. 2001 Conditioned taste aversion as a learning and memory paradigm. *Behavioural Brain Research*, **125**, 205-213.
176. Lipp, H.-P. & Wolfer, D.P. 2002 Big brains for bad genes: non-mental correlates of encephalization. *Evolutionary Anthropology*, **11**, 126-131.
177. Wolfer, D.P., Crusio, W.E. & Lipp, H.-P. 2002 Knockout mice: simple solutions to the problems of genetic background and flanking genes. *Trends Neurosci*, **25**, 336-340.
178. Lipp, H.-P. & Wolfer, D.P. 2003 Genetic background problems in the analysis of cognitive and neuronal changes in genetically modified mice. *Clin.Neurosci.Res.*, **3**, 221-232.

179. Lipp, H.-P. (2005) High-throughput and automated behavioural screening of normal and genetically modified mice *Future Drug Discovery 2005*. Touch Briefings, London.
180. Amrein, I. & Lipp, H.P. 2009 Adult hippocampal neurogenesis of mammals: evolution and life history. *Biol Lett*, **5**, 141-144.
181. Lipp, H.P. 2009 Towards the neurobiology of large-scale spatial cognition (Commentary on Gagliardo et al.). *Eur J Neurosci*, **29**, 2388.

Book chapters

182. Lipp, H.-P. 1979 Possible neural bases for aggressive interactions in the marmoset monkey *Callithrix jacchus*. In *Biology and Behaviour of Marmosets* (eds H. Rothe, J. Hearn & J. Wolters). pp. 75-80: Rothe Verlag, Goettingen.
183. Lipp, H.-P. & Frei, U. 1982 Variations of nocturnal performance in pigeons. In *Avian Navigation* (eds F. Papi & H.G. Wallraff). pp. 271-280, Berlin: Springer.
184. Lipp, H.-P. & Schwegler, H. 1982 Hippocampal mossy fibers and avoidance learning. In *Genetics of the Brain* (eds I. Liebllich). pp. 326-364, Amsterdam: Elsevier.
185. Schwegler, H., Heimrich, B., Crusio, W.E. & Lipp, H.-P. 1985 Hippocampal mossy fiber distribution and two-way avoidance learning in rats and mice. In *Brain Plasticity, Learning, and Memory* (eds B.E. Will, P. Schmitt & J.C. Dalrymple-Alford). pp. 127-138: Plenum Publishing Corporation, London.
186. De Viragh, P.A., Wolfer, D.P., Lipp, H.-P. & Celio, M.R. 1988 Behavioral changes in chronically D-hypervitaminotic animals. In *Vitamin D: Molecular, Cellular and Clinical Endocrinology* (eds A.W. Norman). pp. 1001-1006, Berlin/New York: Walter de Gruyter.
187. Lipp, H.-P. 1988 The forebrain as a playground of mammalian evolution. In *Intelligence and Evolutionary Biology. NATO ASI Series Vol. G17* (eds H.J. Jerison & I. Jerison). pp. 109-118, Berlin/Heidelberg: Springer.
188. Lipp, H.-P. & Schwegler, H. 1989 Structural variations of the hippocampal mossy fiber system and avoidance learning. In *The Hippocampus - New Vistas* (eds C. Köhler & V. Chan-Palay). pp. 295-307, New York: Alan Liss Inc.
189. Driscoll, P., Cohen, C., Fackelman, P., Lipp, H.-P. & Bättig, K. 1991 Effects of pre- and postnatal injections of "smoking doses" of nicotine, or vehicle alone, on the maternal behavior and second-generation adult behavior of Roman High- and Low-avoidance rats. In *Effects of Nicotine on Biological Systems. Advances in Pharmacological Sciences* (eds F. Adlkofer & K. Thurau). pp. 465-469, Basel: Birkhäuser.
190. Lipp, H.-P. 1992 Chaos und Fuzzy Systems in der Schweizer Armee: ein Fall für Brieftauben. In *Informationstechnik und Armee, Vol. 31* (eds BAUEM). pp. 4/1-4/16, Bern: EDMZ.
191. Lipp, H.-P. & Wahlsten, D. 1992 Absence of the corpus callosum. In *Genetically-Defined Animal Models of Neuro-Behavioral Dysfunction* (eds P. Driscoll). pp. 217-252, Boston: Birkhaeuser.
192. Lipp, H.-P. & Wolfer, D.P. 1995 New paths towards old dreams: microphenology or the study of intact brains in intact worlds. In *Behavioural Brain Research in Naturalistic and*

- Semi-Naturalistic Settings: Possibilities and Perspectives* (eds E. Alleva, A. Fasolo, H.-P. Lipp, L. Nadel & L. Ricceri). pp. 1-39, Dordrecht, The Netherlands: Kluwer.
193. Schenk, F., Grobéty, M.-C., Lavenex, P. & Lipp, H.-P. 1995 Dissociation between basic components of spatial memory in rats. In *Behavioural Brain Research in Naturalistic and Semi-Naturalistic Settings: Possibilities and Perspectives* (eds E. Alleva, A. Fasolo, H.-P. Lipp, L. Nadel & L. Ricceri). pp. 277-300, Dordrecht, The Netherlands: Kluwer.
 194. Schwegler, H. & Lipp, H.-P. 1995 Variations in the morphology of the septo-hippocampal complex and maze learning in rodents: correlation between morphology and behavior. In *Behavioural Brain Research in Naturalistic and Semi-Naturalistic Settings: Possibilities and Perspectives* (eds E. Alleva, A. Fasolo, H.-P. Lipp, L. Nadel & L. Ricceri). pp. 259-276, Dordrecht, Netherlands: Kluwer.
 195. Lipp, H.-P. & Wolfer, D.P. 1999 Natural genetic variation of hippocampal structures and behavior. In *Cellular and Quantitative Methods in Neurogenetics. Methods in Life Sciences - Cellular and Molecular Neuropharmacology (Lakoski)* (eds B.C. Jones & P. Mormède). pp. 217-235, Boca Raton, Florida: CRC Press.
 196. Lipp, H.-P. 2000 Variazione biologica delle capacità cognitive e dell'apprendimento. In *Frontiere della Vita, Vol. 4, Il Mondo dei Viventi* (eds E. Alleva & P.P.G. Bateson). pp. 111-132, Roma: Istituto delle Enciclopedia Italiana Treccani.
 197. Lipp, H.-P., Bürgi, C., Werffeli, S., Steiner, I., Tröster, G. & Wolfer, D.P. 2000 A miniaturized GPS system and WINTRACK software for analysis of homing paths in pigeons. In *Measuring Behavior 2000. Proceedings of the 3rd International Conference on Methods and Techniques in Behavioral Research* (eds L.P.J.J. Noldus). pp. 201-203, Wageningen, Netherlands: 2000 Noldus Information Technology.
 198. Lipp, H.-P. & Wolfer, D.P. 2000 Assessing behavior, memory and learning of genetically modified mice by factor analysis based on track analysis using ETHOVISION and WINTRACK. In *Measuring Behavior 2000. Proceedings of the 3rd International Conference on Methods and Techniques in Behavioral Research* (eds L.P.J.J. Noldus). pp. 204-206, Wageningen, Netherlands: 2000 Noldus Information Technology.
 199. Lipp, H.-P. 2002 Assessing complex rodent behavior in ecotoxicology. In *Behavioural Ecotoxicology* (eds G. Dell'Omo). pp. 231-272, Chichester, West Sussex: Wiley & Sons.
 200. Lipp, H.-P. & Wolfer, D.P. 2002 Big brains for bad genes: non-mental correlates of encephalization. In *Primateology and Anthropology: Into the Third Millennium* (eds C. Soligo, G. Anzenberger & R.D. Martin). pp. in press, New York: Wiley.
 201. Lipp, H.-P. & Wolfer, D.P. 2003 Neurogenetic Approaches. In *Encyclopedia of Cognitive Science* (eds L. Nadel). pp. 305-314, London: Nature Publishing Group.
 202. Lipp, H.-P., Amrein, I. & Wolfer, D.P. 2006 Natural genetic variation of hippocampal structures and behavior - an update. In *Neurobehavioral Genetics: Methods and Applications, Second Edition* (eds B.C. Jones), Boca Raton, Florida: CRC Press.
 203. Lipp, H.-P., Litvin, O., Galsworthy, M., Vyssotski, A.L., Vyssotski, D.L., Zinn, P., Rau, A.E., Würbel, H., Nitsch, R. & Wolfer, D.P. 2006 Automated behavioral analysis of mice using INTELLICAGE: inter-laboratory comparisons and validation with exploratory behavior and spatial learning. In *Proceedings of the 4th International Conference on Methods and Techniques in Behavioral Research* (eds L.P.J.J. Noldus). pp. 3363-366, Wageningen, Netherlands: Noldus Information Technology.

204. Lipp, H.-P., Amrein, I. & Wolfer, D.P. 2007 Natural genetic variation of hippocampal structures and behavior - an update. In *Neurobehavioral Genetics: Methods and Applications, Second Edition* (eds B.C. Jones & P. Mormède). pp. 389-410, Boca Raton, Florida: CRC Press.
205. Amrein, I., Boonstra, R., Lipp, H.P. & Wojtowicz, J.M. 2008 Adult hippocampal neurogenesis in natural populations of mammals. In *Adult Neurogenesis* (eds F.H. Gage, G. Kempermann & H. Song). pp. 645-659, Cold Spring Harbor, New York: Cold Spring Harbor Laboratory Press.
206. Lipp, H.-P. & Wolfer, D.P. 2008 Natural neurobiology and behavior of the mouse: relevance for behavioral studies in the laboratory. In *Handbook of Behavioral Genetics of the Mouse. Vol. 1 Genetics of Behavioral Phenotypes* (eds W.E. Crusio, F. Sluyter & R.T. Gerlai), New York: Elsevier Press.
207. Lipp, H.-P. 2010 Natural neurobiology and behavior of the mouse: relevance for behavioral studies in the laboratory. In *Handbook of Behavioral Genetics of the Mouse. Vol. 1 Genetics of Behavioral Phenotypes* (eds W.E. Crusio, F. Sluyter & R.T. Gerlai), New York: Elsevier Press. **In press**

Monographies & edited books

208. Lipp, H.-P. (1975) Droh-, Angriffs- und Fluchtverhalten beim Krallenäffchen *Callithrix jacchus*. Natürliche Verhaltensweisen und deren zentralnervöse Repräsentation im ventromedialen Hypothalamus. Eine neuroethologische Studie. *Institute of Physiology*. University of Zürich, Zürich, pp. 1-237.
209. Alleva, E., Fasolo, A., Lipp, H.-P., Nadel, L. & Ricceri, L. (eds) 1995 *Behavioural Brain Research in Naturalistic and Semi-Naturalistic Settings: Possibilities and Perspectives*. Dordrecht, Netherlands: Kluwer.
210. Lipp, H.-P., Dell'Arricia, G., Biro, D., Holland, R.A., Kanevskyi, V.A., Knaden, M., Patzke, N., Prior, H. & Smulders, T.V. (eds) 2009 *Large-scale spatial cognition in birds and mammals - ESF CompCog Workshop March 2009*. Testa di Lepre, Italy: University of Zürich.