

**Tobias Bast, List Of Publications**

1. Pezze M, Bast T (2012) Dopaminergic modulation of hippocampus-dependent learning: Blockade of hippocampal D1-class receptors during learning impairs 1-trial place memory at a 30-min retention delay. *Neuropharmacology* 63: 710-718
2. Bast T (2011) The hippocampal learning-behavior translation and the functional significance of hippocampal dysfunction in schizophrenia. *Curr. Opin. Neurobiol.* 21: 492-501
3. Jackson SJ, Hussey R, Jansen MA, Merrifield GD, Marshall I, MacLulich A, Yau JLW, Bast T (2011) Manganese-enhanced magnetic resonance imaging (MEMRI) of rat brain after systemic administration of MnCl<sub>2</sub>: hippocampal signal enhancement without disruption of hippocampus-dependent behavior. *Behav. Brain Res.* 216:233-300
4. Bast T, Wilson IA, Witter MP, Morris RGM (2009) From rapid place learning to behavioral performance – a key role for the intermediate hippocampus. *PLoS Biol.* 7(4): e1000089. doi:10.1371/journal.pbio.1000089
5. Bast T (2007) Toward an integrative perspective on hippocampal function – from the rapid encoding of experience to adaptive behavior. *Rev. Neurosci.* 18: 253-281
6. Bast T, Da Silva BM, Morris RGM (2005) Distinct contributions of hippocampal NMDA and AMPA receptors to encoding and retrieval of one-trial place memory. *J. Neurosci.* 25: 5845-5856; also see: <http://www.f1000biology.com/article/id/1023939/evaluation#cite>
7. Peleg-Raibstein D, Pezze MA, Ferger B, Zhang W-N, Murphy CA, Feldon J, Bast T (2005) Activation of dopaminergic neurotransmission in the medial prefrontal cortex by NMDA stimulation of the ventral hippocampus in rats. *Neuroscience* 132: 219-232
8. Bannerman DM, Rawlins JNP, McHugh SB, Deacon RMJ, Yee BK, Bast T, Zhang W-N, Pothuizen HHJ, Feldon J (2004) Regional dissociations within the hippocampus – memory and anxiety. *Neurosci. Biobehav. Rev.* 28:273-283
9. Bast T, Feldon J (2003) Hippocampal modulation of sensorimotor processes. *Prog. Neurobiol.* 70: 319-345
10. Bast T, Zhang W-N, Feldon J (2003) Dorsal hippocampus and classical fear conditioning to tone and context in rats: the effects of local NMDA-receptor blockade and stimulation. *Hippocampus* 13: 657-675
11. Pezze MA, Bast T, Feldon J (2003) Significance of dopamine transmission in the rat medial prefrontal cortex for conditioned fear. *Cereb. Cortex* 13: 371-380
12. Bast T, Pezze MA, Feldon J (2002) Effects of dopamine receptor blockade or stimulation in the rat medial prefrontal cortex on regulation of prepulse inhibition and locomotor activity. *Behav. Pharmacol.* 13: 669-673
13. Bast T, Diekamp B, Thiel C, Schwarting RKW, Güntürkün O (2002) Functional aspects of dopamine metabolism in the putative prefrontal cortex analogue and striatum of pigeons (*Columba livia*). *J. Comp. Neurol.* 446: 58-67
14. Zhang W-N, Bast T, Feldon J (2002) Effects of hippocampal N-methyl-D-aspartate infusion on locomotor activity and prepulse inhibition: differences between the dorsal and ventral hippocampus. *Behav. Neurosci.* 116: 72-84
15. Zhang W-N, Bast T, Feldon J (2002) Prepulse inhibition in rats with temporary inhibition/inactivation of ventral or dorsal hippocampus. *Pharmacol. Biochem. Behav.* 73:929-940
16. Bast T, Zhang W-N, Feldon J (2001) Hippocampus and classical fear conditioning. *Hippocampus* 11: 828-831
17. Bast T, Zhang W-N, Feldon J (2001) Hyperactivity, decreased startle reactivity, and disrupted prepulse inhibition following disinhibition of the rat ventral hippocampus by the GABA<sub>A</sub> receptor antagonist picrotoxin. *Psychopharmacology* 156: 225-232

18. Bast T, Zhang W-N, Feldon J (2001) The ventral hippocampus and fear conditioning in rats: different anterograde amnesias of fear after tetrodotoxin inactivation and infusion of the GABA<sub>A</sub> agonist muscimol. *Exp. Brain Res.* 139: 39-52
19. Bast T, Zhang W-N, Heidbreder C, Feldon J (2001) Hyperactivity and disruption of prepulse inhibition induced by N-methyl-D-aspartate stimulation of the ventral hippocampus and the effects of pretreatment with haloperidol and clozapine. *Neuroscience* 103: 325-335
20. Zhang W-N, Bast T, Feldon J (2001) The ventral hippocampus and fear conditioning in rats: different anterograde amnesias of fear after infusion of N-methyl-D-aspartate or its noncompetitive antagonist MK-801 into the ventral hippocampus. *Behav. Brain Res.* 126: 159-174
21. Bast T, Zhang W-N, Feldon J, White IM (2000) Effects of MK801 and neuroleptics on prepulse inhibition: Re-examination in two strains of rats. *Pharmacol. Biochem. Behav.* 67: 647-658
22. Zhang W-N, Bast T, Feldon J (2000) Microinfusion of the noncompetitive N-methyl-D-aspartate antagonist MK-801 (dizocilpine) into the dorsal hippocampus of Wistar rats does not affect latent inhibition and prepulse inhibition but increases startle reaction and locomotor activity. *Neuroscience* 101: 589-599

***Published abstracts***

23. Bast T, McGarrity S, Mason R, Fone KC, Pezze M (2013) Schizophrenia-related behavioural deficits caused by hippocampal and prefrontal disinhibition. 26th ECNP congress, symposium contribution, submitted
24. McGarrity S, Mason R, Fone KC, Pezze M, Bast T (2013) Cognitive deficits caused by hippocampal disinhibition: attentional and memory deficits. 26th ECNP congress, submitted
25. Bast T, McGarrity S, Eaton C, Pezze M (2013) Hippocampal learning-behaviour translation: a role for the medial prefrontal cortex? *British Neurosc. Assoc. Abstr.* 22, P3-D-142
26. McGarrity S, Mason R, Fone KC, Pezze M, Bast T (2013) Schizophrenia-related cognitive effects of hippocampal disinhibition: attentional and memory deficits. *British Neurosc. Assoc. Abstr.* 22, P3-D-143
27. Heath F, Bast T, Pezze M, Voigt P, Stevenson C (2013) Effects of D1 receptor antagonism on contextual fear conditioning. *British Neurosc. Assoc. Abstr.* 22, P3-D-148
28. McGarrity S, Mason R, Fone KC, Pezze MA, Bast T (2012) Schizophrenia-related neuro-behavioral effects caused by hippocampal disinhibition: attentional deficits. *FENS Abstr.* vol. 6: 044.1
29. Pezze M, Bast T, Fone KC, Eaton C (2011) Too little or too much: both functional inhibition and disinhibition of prefrontal cortex cause impairments in attention and executive function. *BNA 21st Biennial Meeting, Poster* 52
30. Bast T, Fone KC, Mason R, Pezze MA, Prior M, Schluppeck D, Spicer C (2010) Functional significance of hippocampal overactivity in schizophrenia – integrative in vivo studies in a rat model. *FENS Abstr.* vol. 5: 079.2
31. Bast T, Wilson IA, Witter MP, Morris RG (2008) The intermediate hippocampus is critical for translating rapid place learning into navigational behavior. *Soc. Neurosci. Abstr.* 34: 389.9
32. Martin SJ, Bast T, Steffenach H-A, Paterson A, Witter M, Morris RGM (2008) Interruption of longitudinal transmission within hippocampal area CA3: implications for spatial memory. *Soc. Neurosci. Abstr.* 34: 389.8

33. Bast T (2008) From rapid place learning to adaptive behaviour: functional integration in the intermediate hippocampus. FENS Abstr. vol. 4: 166.4 (symposium presentation, see: <http://fens2008.neurosciences.asso.fr/pages/symp.html#S36>)
34. Da Silva BM, Bast T, Olverman HJ, Kelly PA, Vazdarjanova A, Morris RG (2008) A new behavioural paradigm to investigate the synaptic tagging and capture hypothesis of memory formation. FENS Abstr. vol. 4: 127.1
35. Pezze MA, Bast T, Morris RG (2008) Dopamine gating of information entry into hippocampal memory. FENS Abstr. vol. 4: 193.1
36. Wilson IA, Bast T, Witter MP, Morris RG (2008) Spatial representation in septal CA1 after lesions of the temporal to intermediate hippocampus. FENS Abstr. vol. 4: 224.15
37. Bast T (2008) From rapid place learning to adaptive behaviour: functional integration in the intermediate hippocampus. FENS Abstr. vol. 4: A062.4
38. Da Silva BM, Bast T, Morris RGM (2007) A new behavioural paradigm to investigate implications of the synaptic tagging and capture hypothesis. Soc. Neurosci. Abstr. 33:205.1.
39. Bast T, Morris RGM (2006) The speedy seahorse: hippocampal contributions to rapid vs. incremental place learning. FENS Abstr. vol. 3: A019.7
40. Da Silva BM, Bast T, Morris RGM (2006) Modulating the persistence of memory: developing behavioural paradigms to investigate implications of the synaptic tagging hypothesis. FENS Abstr. vol. 3: A019.13
41. Da Silva BM, Bast T, Morris RGM (2005) Forgetting of 1-trial place memory in rats: an indication of recall- and familiarity-like processes? Soc. Neurosci. Abstr. 31:995.6
42. Kakeyama M, Tse D, Bast T, Morris RGM (2005) Flavour maps: paired-associate learning in an event arena as an animal model of associative recall. Soc. Neurosci. Abstr. 31:995.5
43. Martin SJ, Bast T, Steffenach H-A, Paterson A, Morris RGM (2005) Temporally graded retrograde amnesia for place information following transection of longitudinal fibres in area CA3 of the dorsal hippocampus. Soc. Neurosci. Abstr. 31:995.4
44. Bast T, Da Silva BM, Morris RGM (2004) Dissecting episodic-like memory in rats: 1-trial place memory in an event arena. Soc. Neurosci. Abstr. 30:205.5
45. Bast T, Da Silva BM, Morris RGM (2004) Distinct contributions of hippocampal NMDA and AMPA receptors to encoding and retrieval of one-trial place memory. FENS Abstr. vol. 2:A112.5
46. Peleg D, Pezze MA, Ferger B, Murphy CA, Feldon J, Bast T (2003) Effect of ventral hippocampal NMDA stimulation on dopamine transmission in medial prefrontal cortex: in vivo microdialysis study in freely moving rats. In: Kehr J, Fuxe K, Ungerstedt U, Svensson TH (Eds) Monitoring Molecules in Neuroscience. Proceedings of the 10<sup>th</sup> International Conference on In Vivo Methods, Karolinska University Press, Stockholm: 332-334
47. Bast T, Zhang WN, Ferger B, Feldon J (2002) Hyperactivity induced by subconvulsive NMDA stimulation of the rat ventral hippocampus: post mortem neurochemistry does not reveal concomitant alterations of dopamine (DA) or serotonin (5-HT) transmission in ventral hippocampal projection areas. FENS Abstr. vol. 1, A175.3
48. Pezze M, Bast T, Feldon J (2002) The significance of dopamine transmission in the rat medial prefrontal cortex for conditioned fear. FENS Abstr. vol. 1, A042.21
49. Zhang W-N, Bast T, Pothuizen H, Feldon J (2002) Hippocampus and two-way active avoidance learning: effects of permanent excitotoxic lesion and reversible tetrodotoxin inactivation or muscimol inhibition of the dorsal and ventral hippocampus. FENS Abstr. vol. 1, A175.28
50. Bast T, Zhang W-N, Feldon J (2001) Effects of the atypical neuroleptic clozapine in the prepulse inhibition paradigm. Behav. Pharmacol. 12 (Supplement 1): S5

51. Bast T, Zhang W-N, Feldon J (2001) Effects of NMDA receptor stimulation or blockade in the rat dorsal hippocampus on the formation of classical fear conditioning to explicit and contextual cues. *Behav. Pharmacol.* 12 (Supplement 1): S5
52. Feldon J, Bast T, Zhang W-N (2001) Temporary inhibition or inactivation of the dorsal or ventral hippocampus disrupts prepulse inhibition. *Soc. Neurosci. Abstr.* 27: 851.9
53. Pezze M, Bast T, Feldon J (2001) Effects of dopamine receptor stimulation or blockade in the medial prefrontal cortex on locomotor activity, sensorimotor gating, and conditioned fear. *Behav. Pharmacol.* 12 (Supplement 1): S77
54. Bast T, Diekamp B, Güntürkün O (1999) The monoaminergic innervation of the pigeon telencephalon: a further characterization by means of in vivo microdialysis. *Proceedings of the 1<sup>st</sup> Göttingen Conference of the German Neuroscience Society 1999, Vol. II* (Eds: Elsner N, Eysel U). Thieme, Stuttgart/New York, p. 611