

Curriculum vitae Prof. Philipp Sterzer, MD

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Employment and academic development:

2011	Professor of Psychiatry and Computational Neuroscience at Charité – Universitätsmedizin Berlin
2010	Board certificate Psychiatry (Facharzt für Psychiatrie und Psychotherapie)
since 2010	Faculty member at Graduate School ‘Sensory Computation in Neural Systems’, Bernstein Center for Computational Neuroscience Berlin
since 2009	Head of the Division of Neuroimaging, Department of Psychiatry, Charité Campus Mitte, Berlin
2008	Habilitation degree (Venia legendi in Experimental Psychiatry), Charité – Universitätsmedizin Berlin, Humboldt University Berlin, Germany. Thesis title: “Constructive processes in visual perception”
since 2008	Associate faculty member at the Berlin School of Mind and Brain and faculty member at the International Graduate Program Medical Neuroscience Berlin
since 2008	Junior research group leader (DFG Emmy-Noether Program), ‘The role of emotion and motivation in visual information processing: Neural mechanisms and their change in depressive disorder’
since 2007	Supervising psychiatrist and head of the research group ‘Neuroimaging of Affective Disorders’ at the Department of Psychiatry, Charité Campus Mitte, Berlin
2007	Board certificate Neurology (Facharzt für Neurologie)
2006-2008	Resident psychiatrist at the Department of Psychiatry, St. Hedwig Hospital/Charité University Hospital, Humboldt University, Berlin
2004-2006	Postdoctoral research fellow at the Wellcome Trust Centre for Neuroimaging, University College London, UK
2000-2003	Postdoctoral research fellow at Dept. of Neurology, Johann Wolfgang Goethe-University, Frankfurt am Main, Germany
1998-2004	Resident neurologist at the Dept. of Neurology, Johann Wolfgang Goethe University, Frankfurt am Main, Germany

Education:

2001	Doctoral degree from Ludwig Maximilians University, Munich, Germany
1995 - 1999	Work for doctoral thesis at Max-Planck-Institute of Psychiatry, Munich, Germany (Supervisor: Prof. F. Holsboer)

1998	Medical Degree at Ludwig Maximilians University, Munich, Germany
1991-1998	Medical School at Ludwig Maximilians University, Munich, Germany and Harvard Medical School, Boston, USA (fellowship “Munich Harvard Medical Education Alliance”)

Grants and awards

2010	DFG Graduate School at Bernstein Center for Computational Neuroscience Berlin (Co-Investigator)
2008	DFG Emmy-Noether Program
2006	Brain Travel Grant
2006	Vision Sciences Society Travel Award
2005	European Conference on Visual Perception Travel Award
2004	DFG Research fellowship (Forschungsstipendium)
2003	Award from the Frankfurt Medical Faculty for Innovation in Medical Education
2001	Human Brain Mapping Travel Award
1997	Scholarship from the Munich Harvard Medical Education Alliance

Memberships in academic societies:

- Organization for Human Brain Mapping (since 2003)
- Deutsche Gesellschaft für klinische Neurophysiologie (since 2004)
- Vision Sciences Society (since 2005)
- Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde (since 2007)

Reviewer (selection): American Journal of Psychiatry, Archives of General Psychiatry, Attention Perception & Psychophysics, Biological Psychiatry, Biological Psychology, Cerebral Cortex, Cortex, Frontiers in Neuroscience, Human Brain Mapping, Journal of Affective Disorders, Journal of Cognitive Neuroscience, Journal of Neuroscience, Journal of Psychiatry and Neuroscience, Journal of Vision, PloS One, Psychiatry Research, NeuroImage, Neuropsychologia, NeuroReport, Neuroscience, Neuroscience Letters, Psychological Medicine, Stroke; Deutsche Forschungsgemeinschaft; Medical Research Council, UK; Netherlands National Initiative Brain and Cognition; Schweizerischer Nationalfond, CH.

Publications in peer-reviewed journals

1. Deserno, L., **Sterzer, P.**, Wüstenberg, T., Heinz, A., Schlagenhaut, F., Reduced prefrontal-parietal effective connectivity and working memory deficits in schizophrenia. *J Neurosci*, in press
2. Stoy M, Schlagenhaut F, **Sterzer P**, Bempohl F, Hägele C, Suchotzki K, Schmack K, Wrase J, Ricken R, Knutson B, Adli M, Bauer M, Heinz A, Ströhle A. Hyporeactivity of ventral striatum towards incentive stimuli in unmedicated depressed patients normalizes after treatment with escitalopram. *J Psychopharmacol*, 2011 Sep 17. [Epub ahead of print]
3. Stein T & **Sterzer P**. High-level face shape adaptation depends on visual awareness: Evidence from continuous flash suppression. *J Vision*, 2011, 11, pii: 5, doi: 10.1167/11.8.5.

4. Gomez A, Rothkirch M, Kaul C, Weygandt M, Haynes JD, Rees G, **Sterzer P**. Emotion modulates the effects of endogenous attention on retinotopic visual processing. *Neuroimage*, 2011, 57: 1542-51.
5. Heinz AJ, Beck A, Meyer-Lindenberg A, **Sterzer P**, Heinz A. Cognitive and neurobiological mechanisms of alcohol-related aggression. *Nat Rev Neurosci*, 2011, 12: 400-13. doi: 10.1038/nrn3042.
6. Stein, T, Senju, A, Peelen, MV, **Sterzer, P**. Eye contact facilitates awareness of faces during interocular suppression. *Cognition*, 2011, 119(2): 307-11
7. **Sterzer, P**, Hilgenfeldt, T, Freudenberg, P, Bermpohl, F, Adli, M. Access of emotional information to visual awareness in patients with major depressive disorder. *Psychol Med*. 2011, doi: 10.1017/S0033291710002540
8. Stadler C, Poustka F, **Sterzer, P**. The heterogeneity of disruptive behaviour disorders – implications for neurobiological research and treatment. *Front. Psychiatry*, 1:21. doi: 10.3389/fpsyt.2010.00021
9. Schwarzkopf DS, **Sterzer, P**, Rees G. Decoding of coherent but not incoherent motion signals in early dorsal visual cortex. *Neuroimage*. 2010 Apr 10. [Epub ahead of print]
10. **Sterzer, P**, Kleinschmidt, A. Anterior insula activations in perceptual paradigms – often observed but barely understood. *Brain Struct Funct*. 2010 Jun;214(5-6):611-22.
11. **Sterzer, P**. Born criminals? What to make of early biological risk factors for criminal behavior. *Am J Psychiatry*, 2010, 167(1), 1-3
12. **Sterzer, P**, Stadler, C. Neuroimaging of aggressive and violent behaviour in children and adolescents. *Front Behav Neurosci*, 2009;3:35
13. Bermpohl, F, Walter, M, Sajonz, B, Lücke, C, Hägele, C, **Sterzer, P**, Adli, M, Heinz, A, Northoff, G. Attentional modulation of emotional stimulus processing in patients with major depression-Alterations in prefrontal cortical regions. *Neurosci Lett*. 2009 Oct 2;463(2):108-13.
14. **Sterzer, P**, Kleinschmidt, A, Rees, G. The neural bases of multistable perception. *Trends Cogn Sci*. 2009 Jul;13(7):310-8.
15. Friedel, E, Schlagenhaut, F, **Sterzer, P**, Park, SQ, Bermpohl, F, Ströhle, A, Stoy, M, Puls, I, Hägele, C, Wrase, J, Büchel, C, Heinz, A. 5-HTT genotype effect on prefrontal-amygdala coupling differs between major depression and controls. *Psychopharmacology (Berl)*. 2009 Aug;205(2):261-71.
16. **Sterzer, P**, Jalkanen, L, Rees, G. Electromagnetic responses to invisible face stimuli during binocular suppression. *NeuroImage*, 2009 Jul 1;46(3):803-8.
17. Schlagenhaut, F, **Sterzer, P**, Schmack, K, Ballmaier, M, Koslowski, M, Wrase, J, Gallinat, J, Heinz, A. Reward feedback alterations in unmedicated schizophrenic patients. *Biol Psychiatry*, 2009 Jun 15;65(12):1032-9.
18. Kienast, T, Hariri, AR, Schlagenhaut, F, Wrase, J, **Sterzer, P**, Buchholz, HG, Smolka, M, Gründer, G, Cumming, P, Kumakura, Y, Bartenstein, P, Dolan, RJ, Heinz, A. Dopamine storage capacity in the amygdala gates processing of aversive stimuli in amygdala and anterior cingulate cortex: a combined PET – fMRI study. *Nat Neurosci*, 2008 Dec; 11(12): 1381-1382.
19. **Sterzer, P**, Haynes, JD, Rees, G. Local activity patterns within high-level ventral visual areas encode the category of invisible objects. *J Vision*, 2008 Dec; 8(15): 10, 1-12
20. **Sterzer, P**, Frith, C, Petrovic, P. Believing is seeing: expectations alter visual awareness. *Curr Biol*, 2008, R697-698, 18

21. Schmack, K, Schagenhauf, F, **Sterzer, P**, Wrase, J, Beck, A, Dembler, T, Kalus, P, Puls, I, Sander, T, Heinz, A, Gallinat, J. Catechol-O-methyltransferase val158met genotype influences neural processing of reward anticipation. *Neuroimage*, 2008, 1631-1638, 42
22. **Sterzer, P**, Rees, G. A neural basis for perceptual memory during binocular rivalry in humans. *J Cogn Neurosci*, 2008, 389-399, 20
23. **Sterzer, P**, Stadler, C, Poustka, F, Kleinschmidt, A. A structural neural deficit in adolescents with conduct disorder and its association with lack of empathy. *NeuroImage*, 2007, 335-342, 37
24. **Sterzer, P**, Kleinschmidt, A. A neural basis for inference in perceptual ambiguity. *Proc Natl Acad Sci U S A*, 2007 Jan;104(1):323-8.
25. **Sterzer, P**, Haynes, J-D, Rees, G. Primary visual cortex activation on the path of apparent motion is mediated by feedback from hMT+/V5. *Neuroimage*. 2006 Sep;32(3):1308-16.
26. Lorenz, M, **Sterzer, P**, Sitzer, M. Evaluierung verschiedener Messprotokolle für die Leg-cuff-Methode zur Messung der dynamischen zerebralen Autoregulation. *Ultraschall Med*. 2006 Aug;27(4):368-73.
27. Friston, K, Rotshtein, P, Geng, JJ, **Sterzer, P**, Henson, RN. A critique of functional localisers *Neuroimage*. 2006 May 1;30(4):1077-87.
28. **Sterzer, P**, Rees, G. Perceived size matters. *Nat Neurosci*. 2006 Mar;9(3):302-4.
29. Stadler, C, **Sterzer, P**, Schmeck, K, Krebs, A, Kleinschmidt, A, Poustka, F. Reduced anterior cingulate activity in aggressive children and adolescents during affective stimulation: the role of temperament traits. *J Psychiatr Res*. 2007 Aug;41(5):410-7.
30. **Sterzer, P**, Kleinschmidt, A. A neural signature of color and luminance correspondence in bistable apparent motion, *Eur J Neurosci*, 21(11): 3097-106, 2005.
31. v. Kriegstein, K, Kleinschmidt A, **Sterzer, P**, Giraud, AL. Interaction of face and voice areas during speaker recognition, *J Cog Neurosci*, 17:367-376, 2005.
32. Rosler, A, Ulrich, C, Billino, J, **Sterzer, P**, Weidauer, S, Bernhardt, T, Steinmetz, H, Frölich, L, Kleinschmidt, A. Effects of arousing emotional scenes on the distribution of visuospatial attention: changes with aging and early subcortical vascular dementia. *J Neurol Sci.*, 229-230:109-16, 2005
33. **Sterzer, P**, Stadler, C, Krebs, A, Kleinschmidt, A, Poustka, F. Abnormal neural responses to emotional visual stimuli in adolescents with conduct disorder, *Biol Psychiatry*, 57, 7-15, 2005.
34. **Sterzer, P**, Wieggers, GJ, Reul, JMHM. Long-term in vivo administration of glucocorticoid hormones attenuates their capacity to accelerate in vitro proliferation of rat splenic T-cells, *Endocrinology*, 145, 3630-3638, 2004.
35. Rösler, A, Gönnerwein, C, Müller, N, **Sterzer, P**, Kleinschmidt, A, Frölich, L. The fuzzy frontier between subjective memory complaints and early dementia. A survey of patient management in German memory clinics, *Dement Geriatr Cogn Disord*, 17, 222-230, 2004.
36. Giraud, AL, Kell C, Thierfelder, C, **Sterzer, P**, Russ, MO, Preibisch, C, Kleinschmidt, A. Neural substrates of speech processing: effects of sensory features, auditory search and comprehension, *Cereb Cortex*, 14, 247-255, 2004.
37. **Sterzer, P**, Eger, E, Kleinschmidt, A. Responses of extrastriate cortex to switching perception of ambiguous visual motion stimuli, *NeuroReport*, 19, 2337-2341, 2003.
38. Laufs, H., Krakow, K, **Sterzer, P**, Eger, E, Beyerle A, Salek-Haddadi, A, Kleinschmidt, A. Electroencephalographic signatures of attentional and cognitive default modes in

spontaneous brain activity fluctuations at rest, *Proc Natl Acad Sci U S A*, 100, 11053-11058, 2003.

39. Eger, E, **Sterzer, P**, Russ, MO, Giraud, AL, Kleinschmidt, A. A supramodal number representation in human intraparietal cortex, *Neuron*, 37, 1-20, 2003.
40. **Sterzer, P**, Russ, MO, Preibisch, C, Kleinschmidt, A. Neural correlates of spontaneous direction reversals in ambiguous apparent visual motion. *NeuroImage* 15, 908-916, 2002.
41. **Sterzer, P**, Meintschel F, Rösler A, Lanfermann H, Steinmetz H, Sitzer M: Pravastatin improves cerebral vasomotor reactivity in patients with subcortical small-vessel disease. *Stroke* 32: 2817-2820, 2001.

Book chapters

1. **Sterzer, P**, Rees G. Bistable Perception and Consciousness. In: William P. Banks, (Editor), *Encyclopedia of Consciousness*. volume 1, pp. 93-106. Oxford: Elsevier, 2009
2. **Sterzer, P**, Stadler, C. Brain imaging in children with conduct disorder. in S. Hodgins, E. Viding, & A. Plodowski (Eds.): *Persistent violent offenders: neuroscience and rehabilitation*, Oxford University Press, 2009
3. Wieggers, GJ, Stec, IEM, **Sterzer, P**, Reul, JMHM. Glucocorticoids and the immune response, in Steckler, T, Kalin, NH, Reul, JMHM (eds.): *Handbook on stress and the brain*, Part 2: Stress: Integrative and clinical aspects, Elsevier, 2005.