Curriculum Vitae Bernhard Staresina, Ph.D.

School of Psychology University of Birmingham Edgbaston, B15 2TT, UK

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Academic History

since 2014 Birmingham Fellow

• School of Psychology, University of Birmingham, UK

2010 – 2014 Sir Henry Wellcome Postdoctoral Fellow

- Department of Psychology, Stanford University, USA
 Dr. Anthony Wagner
- MRC Cognition and Brain Sciences Unit, Cambridge, UK Dr. Richard Henson
- Donders Centre for Cognitive Neuroimaging, Nijmegen, Netherlands
 Dr. Ole Jensen

2009 - 2010 Postdoctoral Fellow

 Department of Epileptology, University of Bonn, Germany Dr. Juergen Fell

2004 – 2009 Ph.D., Experimental Psychology

 Department of Psychology, New York University, USA Dr. Lila Davachi

1999 – 2004 B.Sc., M.Sc., Psychology

 University of Vienna, Austria Dr. Peter Walla

Publications

Staresina, B.P., Alink, A., Kriegeskorte, N. and Henson, R.N. (2013). Awake reactivation predicts memory in humans. <u>Proceedings of the National Academy of Sciences of the United States of America</u> 110(52):21159 – 21164.

Staresina, B.P., Fell, J., Dunn, J., Axmacher, N. and Henson, R.N. (2013). Using state-trace analysis to dissociate the functions of the human hippocampus and perirhinal cortex in recognition memory. <u>Proceedings of the National Academy of Sciences of the United States of America</u> 110(8):3119 – 3124.

Staresina, B.P., Cooper, E. and Henson, R.N. (2013). Reversible information flow across the medial temporal lobe: The hippocampus links cortical modules during memory retrieval. *The Journal of Neuroscience* 33(35):14184 - 14192.

Staresina, B.P., Fell, J., Do Lam, A.T., Axmacher, N. and Henson, R.N. (2012). Memory signals are temporally dissociated in and across human hippocampus and perirhinal cortex. *Nature Neuroscience* 15(8):1167 - 1173.

Staresina, B.P., Henson, R.N., Kriegeskorte, N. and Alink, A. (2012). Episodic reinstatement in the medial temporal lobe. *The Journal of Neuroscience* 32(50):18150 - 18156.

Fell, J., **Staresina, B.P.**, Do Lam, A.T., Widman, G., Helmstaedter, C., Elger, C.E. and Axmacher N. (2012). Memory modulation by weak synchronous deep brain stimulation: A pilot study. <u>Brain Stimulation</u> 5(4).

Do Lam, A.T., Axmacher, N., Fell, J., **Staresina, B.P.**, Gauggel, S., Wagner, T., Olligs, J. and Weis, S. (2012). Monitoring the mind: the neurocognitive correlates of metamemory. *PloS One* 7(1): e30009.

Staresina, B.P., Duncan, K.D. and Davachi, L. (2011). Perirhinal and parahippocampal cortices differentially contribute to later recollection of object- and scene-related event details. *The Journal of Neuroscience* 31(24):8739 - 8747.

Fell, J., Ludowig, E., **Staresina, B.P.**, Wagner, T., Kranz, T., Elger, C.E. and Axmacher, N. (2011). Medial temporal lobe theta/alpha power enhancement precedes successful memory encoding: evidence based on intracranial EEG. *The Journal of Neuroscience* 31(14): 5392 - 5397.

Staresina, B.P. and Davachi, L. (2010). Object unitization and associative memory formation are supported by distinct brain regions. *The Journal of Neuroscience* 30(29): 9890 - 9897.

Devinsky, O., Davachi, L., Santchi, C., Quinn, B.T., **Staresina, B.P.** and Thesen, T. (2010). Hyperfamiliarity for faces. *Neurology* 74(12): 970 - 974.

Staresina, B.P. and Davachi, L. (2009). Mind the gap: Binding experiences across space and time in the human hippocampus. *Neuron* 63(2): 267 - 276.

Staresina, B.P., Gray, J.C. and Davachi, L. (2009). Event congruency enhances memory encoding through semantic elaboration and relational binding. *Cerebral Cortex* 19(5): 1198 - 1207.

Öztekin, I., McElree, B., **Staresina, B.P.** and Davachi, L. (2009). Neural correlates of working memory retrieval. *Journal of Cognitive Neuroscience* 21(3): 581 - 593.

Staresina, B.P. and Davachi, L. (2008). Selective and shared contributions of the hippocampus and perirhinal cortex to episodic item and associative encoding. *Journal of Cognitive Neuroscience* 20(8): 1478 - 1489.

Staresina, B.P. and Davachi, L. (2006). Differential encoding mechanisms for subsequent associative recognition and free recall. *The Journal of Neuroscience* 26(36): 9162 - 9172.

Staresina, B.P., Bauer, H., Deecke, L. and Walla, P. (2005). Magnetoencephalographic correlates of different levels in subjective recognition memory. *NeuroImage* 27(1): 83 - 94.

Staresina, B.P., Bauer, H., Deecke, L. and Walla, P. (2005). Neurocognitive correlates of incidental verbal memory encoding: a magnetoencephalographic (MEG) study. *NeuroImage* 25(2): 430 - 443.

Staresina, B. (2004). Epiphänomenalismus. Anlass zur Skepsis gegenüber Bewusstsein. In: A. Batthyany (Hrsg.), *Bewusstsein: Neuronale Grundlagen und subjektives Erleben*. [Epiphenomenalism. Reason for Skepticism Towards Consciousness. In: A. Batthyany (Ed.), *Consciousness: Neural Fundamentals and Subjective Experience*.] Kassel: Kassel University Press.

Fellowships and Awards

| 2012 | Laird Cermak Award, Memory Disorders Research Society (MDRS) | |
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| 2012 | Medical Research Council intramural project grant | |
| 2012 | Elected Fellow of the Royal Society of the Arts (FRSA) | |
| 2011 – 2014 | Junior Research Fellow, St. Catharine's College, University of Cambridge | |
| 2011 | Postdoctoral Researcher, St. John's College, University of Cambridge | |
| 2010 – 2014 | Sir Henry Wellcome Postdoctoral Fellowship, The Wellcome Trust | |
| 2008 | American Psychological Association (APA) Dissertation Research Award | |
| 2008 | Martin Braine Fellowship, New York University | |
| 2007 | Katzell Summer Fellowship, New York University | |
| 2006 | Travel Grant, "Neuroimaging and Psychological Theories of Human Memory", | |
| | Marburg, Germany | |
| 2006 | Research Support: "Neuroimaging Studies of Emotional and Attentional | |
| | Influences, Cognition and Perception", The Seaver Foundation | |

2005 GSAS Student Travel Grant, New York University
 2004 – 2009 McCracken Fellowship, New York University

Professional Memberships

| 2013 – | Memory Disorders Research Society (MDRS) |
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| 2010 – | Organization for Human Brain Mapping |
| 2005 – | Society for Neuroscience |
| 2004 – | Cognitive Neuroscience Society |

Poster Presentations

Staresina, B.P., Fell, J., Do Lam, A.T., Axmacher, N. and Henson, R.N. *Qualitatively different memory signals in human rhinal cortex and hippocampus revealed via iEEG*. (Poster at the 2012 Organization for Human Brain Mapping Annual Meeting)

Fell, J., Axmacher, N., Elger, C.E., and **Staresina, B.P.** *Phase-amplitude coupling in human hippocampal EEG recordings during waking state and sleep.* (Poster at the 2012 Organization for Human Brain Mapping Annual Meeting)

Gruber, M., Hsieh, B., **Staresina, B.P.**, Elger, C.E., Fell, J., Do Lam, A.T., Axmacher, N. and Ranganath, C. *Novelty modulates intracranial EEG signals in the prefrontal cortex during memory encoding*. (Poster at the 2012 42nd Society for Neuroscience Annual Meeting)

Staresina, B.P., Wagner, T., Ranganath, C., Fell, J. and Axmacher, N. *MTL mechanisms supporting episodic memory encoding and retrieval revealed via intracranial EEG*. (Poster at the 2010 Organization for Human Brain Mapping Annual Meeting)

Staresina, B.P., Duncan, K. and Davachi, L. *Domain specificity in medial temporal lobe cortex during episodic memory formation*. (Poster at the 2010 Cognitive Neuroscience Society Annual Meeting)

Duncan, K., **Staresina, B.P.** and Davachi, L. *Temporal dynamics of blood-oxygen-level dependent (BOLD) responses in the medial temporal lobe during associative encoding*. (Poster at the 2010 Cognitive Neuroscience Society Annual Meeting)

Staresina, B.P. and Davachi, L. *Contributions of the perirhinal cortex to associative memory formation.* (Poster at the 2009 Cognitive Neuroscience Society Annual Meeting)

Staresina, B.P., Gray, J.C. and Davachi, L. *Mind the gap: Associative binding in the medial temporal lobe*. (Poster at the 2008 38th Society for Neuroscience Annual Meeting)

Staresina, B.P., Thesen, T., Donner, T.H., Carlson, C., Devinsky, O. and Davachi, L. *Functional dynamics of successful retrieval in the human MTL revealed using intracranial EEG recordings.* (Poster at the 2008 Cognitive Neuroscience Society Annual Meeting)

Staresina, B.P. and Davachi, L. *The beneficial effect of affirmative responses on episodic memory encoding.* (Poster at the 2007 Cognitive Neuroscience Society Annual Meeting)

Öztekin, I., McElree, B., **Staresina, B**. and Davachi, L. *Isolating focal attention from memory representations: Converging neuroimaging evidence from two distinct working memory paradigms*. (Poster at the 2006 36th Society for Neuroscience Annual Meeting)

Staresina, B.P. and Davachi, L. *Differential brain activity for subsequent recognition and free recall.* (Poster at the 2005 35th Society for Neuroscience Annual Meeting)

Staresina, B.P., Bauer, H., Deecke, L. and Walla, P. *Verbal memory encoding: a magnetoencephalocraphic (MEG) study.* (Poster at the 2003 8th Meeting of the Austrian Neuroscience Association)

Selected Talks

Oscillatory mechanisms of episodic encoding and retrieval in the human hippocampus. (ICON 2014 - The 12th International Cognitive Neuroscience Conference, Brisbane, Australia)

Episodic memory in the human medial temporal lobe. (UCL Institute of Cognitive Neuroscience)

Memory signals are temporally dissociated within and across human hippocampus and perirhinal cortex. (42nd Society for Neuroscience Annual Meeting. New Orleans, LA, USA)

Event-specific reinstatement in the medial temporal lobe during recollection. (2012 Annual Meeting of the Memory Disorders Research Society. Davis, CA, USA)

Episodic memory in the medial temporal lobe: Who does what when and how. (Konstanz, Germany)

Episodic memory: Who does what in the medial temporal lobe. (Symposium at the International Graduate School of Neuroscience [IGSN]. Bochum, Germany)

Perirhinal cortex contributions to episodic memory. (5th International Conference on Memory [ICOM]. York, UK)

Hippocampal cross-frequency coupling during sleep. (1st Conference on High Frequency Oscillations in Cognition and Epilepsy, Montreal Neurological Institute. Montreal, CA)

The formation of a memory trace in the brain. (CUBRIC Seminar Series at the Department of Psychology, Cardiff University. Cardiff, UK)

Building memories across temporal gaps. (Ninth International Conference on Neuroesthetics: "Time and Timing in the Brain". Berkeley, CA, USA)

The formation of a memory trace in the brain. (Translational Neuroscience Seminar Series at the Mount Sinai School of Medicine. New York, NY, USA)

The formation of a memory trace in the brain. (New School for Social Research conference: "Is an Interdisciplinary Field of Memory Studies Possible?". New York, NY, USA)

Item recognition and source recollection. (1st Aquitaine Conference in Neuroscience: "Memory in health and disease". Arcachon, France)

Neural correlates of intra-item and contextual associative memory formation. (36th Society for Neuroscience Annual Meeting. Atlanta, GA, USA)

Ad Hoc Referee

Nature Neuroscience The Journal of Neuroscience

PNAS Current Biology
Journal of Experimental Psychology: General Cortex

Journal of Cognitive Neuroscience Journal of Neurophysiology

Cognitive, Affective and Behavioral Neuroscience NeuroImage

Human Brain Mapping Neuropsychologia*

Social Cognitive and Affective Neuroscience Hippocampus

Brain Structure and Function Brain Research

Brain Structure and Function Brain Research
Frontiers in Human Neuroscience PLoS ONE

^{*}awarded with the Certificate of Reviewing Excellence 2014

Editorial Work

Cogent Psychology, editorial board member Cognitive Science & Neuroscience

Teaching Experience

Spring, 2007 Teaching Assistant for Dr. Clayton Curtis, *Cognitive Neuroscience*

Spring, 2005 Teaching Assistant for Dr. Denis Pelli, *Perception*

Public Engagement

Naked Scientists Question of the Week (science radio broadcast on BBC regional radio and BBC Five Live in addition to worldwide podcast audience), October 2012: why can't I remember names?

Organisation of a 1-day workshop, November 2011: *Integrating direct brain recordings in cognitive neuroscience: Bridges from neurons to behaviour.*

Cambridge Science Festival, March 2011: *A window on the brain* (interactive demonstration of memory experiments).