

# Jörn Alexander Quent, PhD.

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Post doctoral research associated with Fudan University  
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## Education & Academic Positions

<i>Fudan University</i> (China) Postdoctoral research associate	2021 - now
Institute of Science and Technology for Brain-inspired Intelligence (ISTBI)	
PI: Deniz Vatansever	
<i>University of Cambridge</i> (UK), PhD in Biological Sciences at MRC CBU	2017 - 2021
MRC Cognition and Brain Sciences Unit (MRC CBU)	
PI: Rik Henson	
College: Clare Hall	
<i>Ruhr-University Bochum</i> (GER), M.Sc. Psychology and Cognitive Neuroscience	2015 - 2017
<i>University of Nebraska - Omaha</i> (US), Term abroad in Psychology	2014
<i>Ruhr-University Bochum</i> (GER), B.Sc. Psychology	2012 - 2015

## Grants, Fellowships, Scholarships & Honours

<i>The National Foreign Experts Program</i>	2023 - 2024
State Administration of Foreign Experts Affairs	
<i>Research Fund For International Young Scientists (RFIS-I)</i>	2023 - 2024
National Natural Science Foundation of China (NSFC), China	
Amount: 400,000 RMB (\$56,000/57,000€) for two years	
<i>Fellowship of China Postdoctoral Science foundation</i>	2022
China Postdoctoral Science foundation	
Amount: 80,000 RMB (\$11,080/10,200€)	
<i>Zhufeng young scholar</i>	2021
Fudan University - Ministry of Education Frontiers Center for Brain Science	
<i>Postdoctoral international exchange program</i> (博士后国际交流计划)	2021
China Postdoctoral Management Committee (中国博士后管理委员会), China	
<i>Grindley Grant</i> to travel to Beijing (China)	2019
Experimental Psychology Society (cancelled due to the COVID-19 pandemic)	
<i>Gates Cambridge Scholarship</i>	2017 - 2021
Melinda and Bill Gates Foundation, USA	
<i>University of Nebraska - Omaha's Chancellor's list</i>	2014
<i>Scholarship for a term abroad</i>	2014

## Publications

### *Journal Articles & Preprints*

- Tibon, R., Greve, A., Humphreys, G., **Quent, J. A.**, & Henson, R. (2026). Neural activations and representations during episodic versus semantic memory retrieval. *Nature Human Behaviour*. <https://doi.org/10.1038/s41562-025-02390-4>
- Quent, J. A.**, Song, L., Liang, X., Su, Y., Yu, W., Wang, H., & Vatansever, D. (2026). Graded encoding of spatial novelty scales in the human brain. *Nature Communications*, 17(1), 303. <https://doi.org/10.1038/s41467-025-67012-z>
- Raza, S., Schomaker, S. **Quent, J. A.**, Anderson M. C. & Henson, R. N. (2025). Proactive and retroactive effects of novelty and rest on memory. *Quarterly Journal of Experimental Psychology*, 17470218251346156. <https://doi.org/10.1177/17470218251346156>
- Tibon, R., Greve, A., Humphreys, G., **Quent, J. A.**, & Henson, R. (2023). Do activations and representations differ during successful retrieval from episodic vs. Semantic memory? *Brain and Cognition*, 170, 106033. <https://doi.org/10.1016/j.bandc.2023.106033> (**Note:** this is a conference abstract)
- Quent, J. A.**, Greve, A. & Henson, R. N. (2022). Shape of U: The Nonmonotonic Relationship Between Object–Location Memory and Expectedness. *Psychological Science*. <https://doi.org/10.1177/09567976221109134>, Pre-print version can be found <https://doi.org/10.31234/osf.io/xq37j>
- Quent, J. A.** & Henson, R. N. (2022). Novel immersive virtual reality experiences do not produce retroactive memory benefits for unrelated material. *Quarterly Journal of Experimental Psychology*, 1 – 14. <https://doi.org/10.1177/17470218221082491>
- Quent, J. A.**, Henson, R. N., Greve, A. (2021). A predictive account of how novelty influences declarative memory. *Neurobiology of Learning and Memory*. <https://doi.org/10.1016/j.nlm.2021.107382>
- Goodrich, R. I., Baer, T. L., **Quent, J. A.**, & Yonelinas, A. P. (2019). Visual working memory impairments for single items following medial temporal lobe damage. *Neuropsychologia*, 134. <http://doi.org/10.1016/j.neuropsychologia.2019.107227>
- Quent, J. A.**, McCullough, A. M., Sazma, M., Wolf, O. T., & Yonelinas, A. P. (2018). Reward

anticipation modulates the effect of stress-related increases in cortisol on episodic memory. *Neurobiology of Learning and Memory*, 147, 65–73. <https://doi.org/10.1016/J.NLM.2017.11.007>

#### Software

**Quent, J. A.**, & Vatansever, D. (2025). Object Location Memory Task build with Unity3D (Version v4.0.4) [Computer software]. Zenodo. <https://doi.org/10.5281/ZENODO.17482414>

**Quent, J. A.** (2022). Questionnaire Presenter - A standalone program to collect questionnaire data made with Unity3D (Version 1.0.0) [Computer software]. <https://doi.org/10.5281/zenodo.7180407>

**Quent, J. A.** (2021). Mental rotation task for MATLAB (Version 1.11) [Computer software]. <https://doi.org/10.5281/zenodo.5502450>

**Quent, J. A.** (2021). N-back task for MATLAB (Version 1.8) [Computer software]. <https://doi.org/10.5281/zenodo.5502474>

#### Talks

*Graded encoding of spatial novelty scales in the human brain* 30th January 2026  
Edge Hill University at Tse Memory Lab  
Ormskirk, England

*Precise mapping of the neural landscape underlying recognition memory* 26th June 2025  
OHBM  
Brisbane, Australia

*Graded encoding of spatial novelty scales in the human hippocampus* 20th May 2025  
Spring Hippocampal Research Conference  
Verona, Italy

*Spatial novelty-familiarity gradient in the hippocampus using VR and ultra-high-field fMRI* 15th  
December 2023  
BISA Meeting  
Fudan University, Shanghai

*Influence of conceptual knowledge on spatial memory in a virtual reality environment* 29th  
May 2023  
Spring Hippocampal Research Conference  
Verona, Italy

*Neural signatures of spatial navigation & memory using ultra-high-resolution 7T fMRI* 14th  
December 2022  
Fudan Cambridge Symposium  
Fudan University, Shanghai

- Where PIMMS fails: limitations with our framework for memory* 26th January 2022  
 Wednesday Lunch Time Seminar  
 University of Cambridge  
 MRC Cognition and Brain Sciences Unit
- Neuroimaging of mental navigation using virtual reality environments* 15th December 2021  
 Post-doc introduction talk  
 Fudan University  
 ISTBI
- Power Between the People: Bayesian Sequential Designs* 30th November 2020  
 Methods day  
 University of Cambridge  
 MRC Cognition and Brain Sciences Unit  
[https://www.youtube.com/watch?v=mF-MPO\\_\\_jWo](https://www.youtube.com/watch?v=mF-MPO__jWo)
- Plan to produce strong evidence: Bayesian Sequential Designs* 8th September 2020  
 Open Research Working Group (ORWG) virtual meeting hosted by British Neuroscience Association  
 Link: [https://www.youtube.com/watch?v=FGaxLQ\\_o8D4](https://www.youtube.com/watch?v=FGaxLQ_o8D4)
- Bayesian Sequential Designs* 29th July 2020  
 Open Science Day  
 University of Cambridge  
 MRC Cognition and Brain Sciences Unit
- Bayesian multilevel models* 11th November 2019  
 Imaging Interest Group  
 University of Cambridge  
 MRC Cognition and Brain Sciences Unit  
 Link: <https://osf.io/f56bw/>
- Using immersive virtual reality to examine the U-shaped relationship between schema and memory performance* 15th May 2019  
 Wednesday Lunch Time Seminar  
 University of Cambridge  
 MRC Cognition and Brain Sciences Unit
- Using immersive reality to examine the U-shaped relationship between schema and memory performance* 4th April 2019  
 Cambridge Memory Meeting  
 University of Cambridge
- U-shaped relationship between object-location expectancy and memory performance in an immersive reality environment* 3rd Jan 2019

Annual meeting of the Experimental Psychology Society  
London

*Open notebooks in cognitive neuroscience*

20th Nov 2018

Open Science Day

University of Cambridge

MRC Cognition and Brain Sciences Unit

Link: [https://www.youtube.com/watch?v=jKmv3-Nk8iE&ab\\_channel=MRCCBU](https://www.youtube.com/watch?v=jKmv3-Nk8iE&ab_channel=MRCCBU)

*Using RMarkdown to create scientific manuscripts*

5th Dec 2017

Methods day

University of Cambridge

MRC Cognition and Brain Sciences Unit

*Interaction between reward anticipation and stress hormone during memory formation* 1st Nov 2017

Gates Cambridge internal symposium

*Reward anticipation modulates the effect of cortisol on memory*

1st Jan 2017

Research colloquium “Cognitive Psychology and Psychoneuroendocrinology”

Ruhr-University Bochum

Faculty of Psychology

### *Posters*

**Quent, J. A.**, Zhuang, K., Liang X., Wang, Y., Vatansever, D. (June 2025). Precise mapping of the neural landscape underlying recognition memory. *OHBM*, Brisbane (Australia).

**Quent, J. A.**, Liang X., Song, L., Su, Y., Zhuang, K., Vatansever, D. (June 2024). A gradient of spatial novelty and familiarity along the hippocampal long axis. *OHBM*, Seoul (South Korea).

**Quent, J. A.**, Liang X., Song, L., Su, Y., Vatansever, D. (June 2023). Spatial Memory Within Virtual Reality Environments: An Ultra-High Field 7T fMRI Investigation. *OHBM*, Montreal (Canada).

**Quent, J. A.**, Henson, R. N. (April 4, 2019). Using hydrocortisone to modulate the U-shape between expectancy and memory. *BNA 2019 Festival of Neuroscience*, Dublin (Ireland).

**Quent, J. A.**, Meyer, M. Ros, T., Kuchinke, L. (May 31, 2018). Reading prevails: automatic word recognition in a single-letter Stroop task. *Psychologie und Gehirn 2018*, Gießen (Germany).

Meyer, M., Manrique Aristizabal, J. A., **Quent, J. A.**, Crawford, B., & Vuilleumier, P. (May 11, 2018). Regulating With The Mind’s Eye: The Link Between Mental Imagery And Emotion Regulation. *36. Symposium der Fachgruppe Klinische Psychologie und Psychotherapie der DGPs*, Landau (Germany).

**Quent, J. A.**, McCullough, A. M., Sazma M., Wolf O. T., Yonelinas A. P. (March 12, 2018). Tag-and-capture theory in light of reward anticipation and post-encoding stress. *Cambridge Neuroscience Seminar 2018*, Cambridge (United Kingdom).

### *Theses*

*Reward anticipation modulates the effect of cortisol on memory*, M.Sc. 2017

Supervisors: Oliver T. Wolf & Uta Wiemers

Grade: 1.0

*Reading prevails: the electrophysiological signature of semantic access in a Stroop task*, B.Sc. 2015

Supervisors: Lars Kuchinke & Marcel Meyer

Grade: 1.0

### **Research Experience & Employment**

*Research assistant* Oct 2015 - Sep 2016

Ruhr-University Bochum

Supervisors: Lars Kuchinke & Marcel Meyer

*Visiting scholar* Feb 2016 - May 2016

UC Davis

Department of Psychology

Human Memory Lab

Supervisor: Andrew Yonelinas

*Undergraduate research assistant* Feb 2015 - Sep 2015

Ruhr-University Bochum

Supervisor: Oliver T. Wolf

*Undergraduate research assistant* Feb 2015 - Sep 2015

Ruhr-University Bochum

Supervisor: Lars Kuchinke

*Internship* 2014

St. Joseph Hospital Bochum

Neurological Clinic of the Ruhr-University Bochum

Supervisor: Christian Prehn

### **Teaching**

*Undergraduate supervisor* Apr 2020 - Jun 2020

PBS4: Psychology and Cognitive Neuroscience

University of Cambridge

Corpus Christi College	
<i>Undergraduate supervisor</i>	Jan 2020 - Mar 2020
PBS4: Psychology and Cognitive Neuroscience	
University of Cambridge	
Corpus Christi College	
<i>Undergraduate supervisor</i>	Oct 2019 - Dec 2019
PBS4: Psychology and Cognitive Neuroscience	
University of Cambridge	
Corpus Christi College	
<i>Tutor</i>	Jul 2019
Neuroscience	
Oxford Summer Courses	
<i>Undergraduate supervisor</i>	Jan 2019 - Mar 2019
PBS4: Psychology and Cognitive Neuroscience	
University of Cambridge	
Corpus Christi College	
<i>Undergraduate supervisor</i>	Oct 2018 - Dec 2019
PBS4: Psychology and Cognitive Neuroscience	
University of Cambridge	
Corpus Christi College	
<i>Tutor</i>	Jul 2018
Neuroscience	
Oxford Summer Courses	
<i>Undergraduate supervisor</i>	Jan 2018 - Mar 2018
PBS4: Psychology and Cognitive Neuroscience	
University of Cambridge	
Wolfson College	
<i>Teaching staff</i>	Oct 2015 - Feb 2016
Introductory course for R (seminar)	
Ruhr-University Bochum	
Faculty of Psychology	
<i>Teaching assistant</i>	Apr 2014 - Sep 2014
Tutorial for 2nd year statistics	
Ruhr-University Bochum	
Faculty of Psychology	

## **Adhoc reviews for academic journals**

Neurobiology of Learning and Memory  
Brain and Cognition  
Behavior Research Methods  
Memory  
PlosOne  
Learning and Memory  
Philosophical Transactions B  
Quarterly Journal of Experimental Psychology  
Scientific Reports  
Royal Society Open Science

## **Organisation of events**

BISA partnership  
First virtual “Cambridge Fudan ECR Cognitive Neuroscience Symposium” (2020)  
“Open Science Day 2018” at the MRC CBU, Cambridge

## **Current and former memberships in professional societies**

British Neuroscience Association  
OHBM