Tom E. Hardwicke

tom.hardwicke@stanford.edu | tomhardwicke.netlify.com

Academic appointments

2017-present **Postdoctoral Fellow**
Meta-Research Innovation Center at Stanford (METRICS)
Stanford University, United States of America
Advisors: John Ioannidis, Steven Goodman, Michael Frank

Education

2016 **PhD Experimental Psychology**
University College London, United Kingdom.
Advisor: David Shanks
Thesis title: "Persistence and plasticity in the human memory system: An empirical investigation of the overwriting hypothesis"

2012 **MRes Brain Imaging and Cognitive Neuroscience**
The University of Birmingham, United Kingdom.

2011 **BSc Psychology** (First Class Honours)
Cardiff University, United Kingdom.

Awards

2013 **Best Poster Prize**
Economic and Social Research Council Annual Meeting.

2011 **The George Westby Prize** (highest degree grade)
Cardiff University.

2011 **The Stuart Diamond Memorial Prize** (best final year project)
Cardiff University.

2011 **The British Psychological Society Undergraduate Award**
Cardiff University.

2010 **Best Presentation Award**
British Psychological Society Student Conference.

Publications

Hardwicke, T. E. & Ioannidis, J. P. A. (2018). Mapping the universe of Registered Reports. *Nature Human Behaviour*. 1-4.

Hardwicke, T. E., Mathur, M. B., MacDonald, K. E., Nilsonne, G., Banks, G. C., Kidwell, M. C., Hofelich Mohr, A., Clayton, E., Yoon, E. J., Henry Tessler, M., Lenne, R. L., Altman, S., Long, B., & Frank, M. C. (2018). Data availability, reusability, and analytic reproducibility: Evaluating the impact of a mandatory open data policy at the journal Cognition. *Royal Society Open Science*, *5*, e180448.

Hardwicke, T. E. & Ioannidis, J. P. A. (2018). Populating the Data Ark: An Attempt to retrieve, preserve, and liberate data from the most highly-cited psychology and psychiatry articles. *PLOS ONE*, *13*, e0201856.

Hardwicke, T. E., Tessler, M. H., Peloquin, B. N., Frank, M. C. (2018). A Bayesian decision-making framework for replication. *Behavioral and Brain Sciences*, *41*, e132.

Klein, O., **Hardwicke, T. E.**, Aust, F., Breuer, J., Danielsson, H., Hofelich Mohr, A., IJzerman, H., Nilsonne, G., Vanpaemel, W., & Frank, M. C. (2018). A practical guide for transparency in psychological science. *Collabra: Psychology, 4*, 20.

Cristea, I. A., Naudet, F., Shanks, D. R., **Hardwicke, T. E.** (2017). Post-retrieval Tetris should not be likened to a 'cognitive vaccine'. *Molecular Psychiatry*. 1-2.

Hardwicke, T. E. (2016). Persistence and plasticity in the human memory system: An empirical investigation of the overwriting hypothesis. *PhD Thesis*.

Hardwicke, T. E. & Shanks, D. R. (2016). Reply to Walker and Stickgold: Proposed boundary conditions on memory reconsolidation will require empirical verification. *Proceedings of the National Academy of Sciences of the United States of America*, *113*, 1-2.

Kidwell, M. C., Lazarević, L. B., Baranski, E., **Hardwicke, T. E.,** Piechowski, S., Falkenberg, L-S., Kennett, C., Slowik, A., Sonnleitner, C., Hess-Holden, C., Errington, T. M., Fiedler, S., & Nosek, B. A. (2016). Badges to acknowledge open practices: A simple, low cost, effective method for increasing transparency. *PLOS Biology*, *14*, 1-15.

Hardwicke, T. E., Mahdi, T., & Shanks, D. R. (2016). Post-retrieval new learning does not reliably induce human memory updating via reconsolidation. *Proceedings of the National Academy of Sciences of the United States of America*, *113*, 5206-5211.

Vadillo, M. A., **Hardwicke, T. E.**, Shanks, D. R. (2016). Publication bias, vote counting, and money priming effects: A comment on Rohrer, Pashler, and Harris (2015) and Vohs (2015). *Journal of Experimental Psychology: General*, *145*, 655-663.

Baker, R., Dexter, M., **Hardwicke, T. E.**, Goldstone, A., Kourtzi, Z. (2014). Learning to predict: Exposure to temporal sequences facilitates prediction of future events. *Vision Research*, *99*, 124-133.

Ludwig, C. J. H., Farrell, S., Ellis, L. A., **Hardwicke, T. E.**, & Gilchrist, I. D. (2012). Context-gated statistical learning and its role in visual-saccadic decisions. *Journal of Experimental Psychology: General*, *141*, 150-169.

Presentations

Hardwicke, T. E., Mathur, M. B., Nilsonne, G., McCarthy, R., Hofelich Mohr, A., & Lindsay, D. S. (2018). Analysis Exchange: Developing an online platform to request verification of analytic reproducibility and statistical expertise. *Society for Improving Psychological Science Conference*. [talk]

Hardwicke, T. E. (2018). SMART pre-registrations: Developing a citation system to facilitate comparison of protocols and papers. *Society for Improving Psychological Science Conference*. [talk]

Hardwicke, T. E. (2018). Fostering the preservation, liberation, and re-use of data in psychological science. *Department of Psychology, U.C. Davis*. [talk]

Hardwicke, T. E. (2017). Open data are not enough: An evaluation of data availability and computational reproducibility at the journal Cognition. *Department of Psychology, Stanford University*. [talk]

Hardwicke, T. E. (2017). Open data are not enough: An evaluation of data availability and computational reproducibility at the journal Cognition. Society for Improving Psychological Science Conference. [talk]

Hardwicke, T. E. (2017). Principles of reproducible research. Stanford SPECTRUM Scholars Seminar. [talk]

Hardwicke, T. E., & Shanks, D. R. (2016). Revisiting the misinformation effect: Does reconsolidation overwrite existing memories? *6th International Conference on Memory*. [poster]

Hardwicke, T. E., Mahdi, T., & Shanks, D. R. (2016). Post-retrieval new learning does not reliably induce human memory updating via reconsolidation. *6th International Conference on Memory*. [talk]

Hardwicke, T. E., & Shanks, D. R. (2015). Does reconsolidation enable human memory updating? *Experimental Psychology Society London Meeting*. [talk]

Hardwicke, T. E., & Shanks, D. R. (2014). Does reconsolidation enable human memory updating? *UCL Faculty of Brain Sciences Symposium*. [poster]

Hardwicke, T. E. (2013). The stability and plasticity of human knowledge. *ESRC UCL DTC Annual Meeting*. [poster]

Hardwicke, T. E., Ludwig, C. J. H., Farrell, S., Ellis, L. A., & Gilchrist, I. D. (2010). Learning the environmental statistics facilitates effective gaze allocation. *BPS Welsh Branch Annual Student Conference*. [talk]

Hardwicke, T. E., Ludwig, C. J. H., Farrell, S., Ellis, L. A., & Gilchrist, I. D. (2010). Statistical learning facilitates effective gaze allocation. *BVI Young Researchers' Colloquium*. [poster]

Grants and funding

2017-
2018   **Postdoctoral Fellowship**
Meta-Research Innovation Center at Stanford (METRICS), USA.

2016   **Grindley Grant (travel), International Conference on Memory**
Experimental Psychology Society, UK.

2016   **Travel Grant, International Conference on Memory**
University College London, UK.

2015   **ESRC Collaborative Placement Funding**
Economic and Social Research Council, UK.

2014   **Travel Grant, Human Factors in Science Symposium**
University College London, UK.

2012   **ESRC PhD Studentship**
Economic and Social Research Council, UK.

2009   **Undergraduate Research Opportunities Program**
Cardiff University, UK.

Teaching experience

2018   **Ad-Hoc Lecturer** ("Writing reproducible research papers"). *Experimental Methods (graduate-level)*, Department of Psychology, Stanford University.

2018   **Ad-Hoc Lecturer** ("Data visualization in R"). *Introduction to R (undergraduate-level)*, Department of Psychology, Stanford University.

2018   **Ad-Hoc Lecturer** ("Repeatability, Reproducibility, and Validation"). *Scientific Method and Bias (undergraduate-level)*, Stanford University.

2018   **Ad-Hoc Lecturer** ("Principles of Reproducible Research"). *Essentials of Clinical Research (graduate level)*, Stanford Medicine, Stanford University.

2017   **Ad-Hoc Lecturer** ("On the Nature of Replication"). *CSLI Summer School (undergraduate-level),* Center for the Study of Language and Information, Stanford University.

2017   **Ad-Hoc Lecturer** ("Building a Reproducible Research Workflow"). *Essentials of Clinical Research (graduate-level)*, Stanford Medicine, Stanford University.

2014/16 **Postgraduate Teaching Assistant.** *Research and Quantitative Methods in Psychology (undergraduate-level)*, Department of Experimental Psychology, University College London.

2016   **Ad-hoc lecturer** ("Introduction to Open Science"). *Social Cognition (graduate-level)*, Department of Experimental Psychology, University College London.

2015   **Ad-hoc lecturer** ("Introduction to Memory & Learning"). *Cognitive and Decision Sciences (graduate-level)*, Department of Experimental Psychology, University College London.

Supervision of student projects

2018   Athena Braun (undergraduate).

2017   Emily Huxtable (undergraduate).

2016   Bethany Manning (undergraduate).

2015   Gudmundur Haraldsson (post-graduate).

2014   Mahdi Taqi (post-graduate).

Additional roles and professional service

2018-present	**Chair (Conference Program Committee)**	Society for Improving Psychological Science 2019 Annual Conference.
2018-present	**Executive Committee Member**	Society for Improving Psychological Science
2017 - present	**Open Science Catalyst**	Berkeley Initiative for Transparency in the Social Sciences (BITSS).
2015 - present	**Open Science Ambassador**	Center for Open Science.
2015	**Scholar in Residence**	Center for Open Science.
2015	**Convener**	Is Science Broken?	Public debate	University College London.
2012 - 2015	**Co-founder of CRITUCL**	Postgraduate discussion group.
2012 - 2015	**Opticon1826 Faculty Editor (Brain Sciences)**	University College London.
2012 - 2014	**ESRC Student Representative**	University College London.
2009-2010	**Research collaborator**	School of Psychology	University of Bristol
Ad-hoc	**Peer-Reviewer**	Royal Society Open Science	Research Integrity and Peer Review	Advances in Methods and Practices in Psychological Science	Collabra: Psychology	Journal of Experimental Psychology: Learning Memory & Cognition	Behavioural Brain Research	PeerJ.

Open research practices

The following can be found via my Open Science Framework page (osf.io/i8w73):

- Open data
- Open materials

- Open analysis scripts
- Pre-registered study protocols

Programming languages

R, Javascript, HTML.

Referees

Available on request.