LAURENCE TUDOR HUNT

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Positions

2013 – present	Sir Henry Wellcome Fellow, University College London (funded to Dec 2016)
2011 – 2013	Postdoctoral Research Fellow, FMRIB Centre, University of Oxford

Education

2007 – 2011	DPhil Neuroscience, Department of Experimental Psychology, University of Oxford (*viva voce* examination March 2012) Dissertation: 'Modelling decision under risk and uncertainty'
2006 – 2007	MSc in Neuroscience, University of Oxford **(Distinction)**
2003 – 2006	BA Hons, Medical and Veterinary Sciences, University of Cambridge

Research Funding

2014 – 2016	Sir Henry Wellcome Fellowship Supplement **(£200,000)**
2013 – 2016	Sir Henry Wellcome Fellowship **(£250,000)**
2006 – 2010	Wellcome Trust 4-Year DPhil Studentship in Neuroscience **(~£150,000)**
2005	Wellcome Trust Biomedical Vacation Scholarship **(£1,280)**

Awards

2013	*Organisation for Human Brain Mapping* trainee abstract award
2011	*Brain* travel award for Society for Neuroeconomics meeting, USA
2009	Keeley senior scholarship, Wadham college, Oxford
2009	*Organisation for Human Brain Mapping* trainee abstract award
2008	*Brain* travel award for FENS Forum, Geneva
2006	Runner up, *Daily Telegraph* Young Science Writer awards
2003	Distinction, Advanced Extension Award, English Literature

Publications

Published/In Press

1. Kolling N, **Hunt LT**. Divide and conquer: strategic decision areas. **Nature Neuroscience** (News and Views), *in press*.
2. **Hunt LT**, Dolan RJ, Behrens TEJ. Hierarchical competitions subserving multi-attribute choice. **Nature Neuroscience**, 2014; 17(11), 1613–22.
3. Jocham G, Furlong PM, Kröger IL, Kahn MC, **Hunt LT**, Behrens TEJ. Dissociable contributions of ventromedial prefrontal and posterior parietal cortex to value-guided choice. **NeuroImage**, 2014; 100C, 498–506.
4. **Hunt LT.** What are the neural origins of choice variability? **Trends in Cognitive Science**, 2014; 18(5), 222-4
5. Chau BKH, Kolling N, **Hunt LT**, Walton ME, Rushworth MFS. A neural mechanism underlying failure of optimal choice with multiple alternatives. **Nature Neuroscience**, 2014; 17(3), 463–70
6. **Hunt LT**, Woolrich MW, Rushworth MF, Behrens TEJ. Trial-type dependent frames of reference for value comparison. **PLoS Computational Biology,** 2013;9(9):e1003225
7. Brazil IA, **Hunt LT**, Bulten BH, Kessels RPC, de Bruijn ERA, Mars RB. Psychopathic traits and the implementation of social and non-social information during learning: a computational approach. **Frontiers in Psychology**, 2013; 4:952.

- *Featured Manuscript of the Month,* Psychopathy Society, March 2014

8. Nicolle A, Klein-Flügge MC, **Hunt LT**, Vlaev I, Dolan RJ, Behrens TEJ. An agent independent axis for executed and modelled choice in medial prefrontal cortex. **Neuron**, 2012 Sep 20;75(6):1114-21
   - *Preview* by Simon Dunne and John O'Doherty, *Neuron*, September 2012
9. Jocham G, **Hunt LT**, Near J, Behrens TEJ. A mechanism for value-guided choice based on the excitation-inhibition balance in prefrontal cortex. **Nature Neuroscience**, 2012 Jun 17;15(7):960-1
10. **Hunt LT,** Kolling N, Soltani A, Woolrich MW, Rushworth MFS, Behrens TEJ. Mechanisms underlying cortical activity during value-guided choice. **Nature Neuroscience**, 2012 Jan 8;15(3):470-6
    - *News and views* by John Pearson and Michael Platt, *Nature Neuroscience*, January 2012
11. Klein-Flügge MC, **Hunt LT,** Bach DR, Dolan RJ, Behrens TEJ. Learning in time and reward: Human ventral tegmental area encodes a temporal difference reward prediction error whereas ventral striatum encodes task-specific learning signals. **Neuron**, 2011 Nov 17;72(4):654-64
12. Woolrich MW, **Hunt LT**, Groves AR, Barnes G. MEG beamforming using Bayesian PCA for adaptive data covariance matrix regularisation. **Neuroimage** 2011 Aug 15; 57(4): 1466-79
13. **Hunt LT**, Behrens TEJ. Frames of reference in human social decision-making; in *Handbook of Motivational and Cognitive Control*, MIT Press, 2011 (editors Mars, Sallet, Rushworth, Yeung)
14. Behrens TE, **Hunt LT**, Rushworth MF. The computation of social behavior. **Science** 2009 May 29; 324(5931): 1160-1164.
15. Behrens TE*, **Hunt LT***, Woolrich MW, Rushworth MF. Associative learning of social value. **Nature** 2008 Nov 13; 456: 245-249 (* authors contributed equally).
    - *Research Highlight* by Leonie Welberg in *Nature Reviews Neuroscience*, January 2009
    - *Recommended* by Phil Corlett and Paul Fletcher on *F1000 Biology*, March 2009
16. **Hunt LT.** Distinctive roles for the ventral striatum and ventral prefrontal cortex during decision-making. **Journal of Neuroscience** 2008 Aug 27; 28(35): 8658-9
17. Pinnock SB, Balendra R, Chan M, **Hunt LT,** Turner-Stokes T, Herbert J. Interactions between nitric oxide and corticosterone in the regulation of progenitor cell proliferation in the dentate gyrus of the adult rat. **Neuropsychopharmacology** 2007 Feb; 32(2): 493-504

Submitted/In Preparation

1. **Hunt LT**, Behrens TEJ, Hosokawa T, Wallis JD, Kennerley SW. Bridging microscopic and macroscopic choice dynamics in prefrontal cortex. *Currently in preparation for* ***Nature***.
2. Hauser T*, **Hunt LT*,** Iannaccone R, Brandeis D, Walitza S, Brem S, Dolan RJ. Temporally dissociable contributions of human medial prefrontal subregions to reward-guided learning. *Under revision,* ***Journal of Neuroscience***. (* authors contributed equally)
3. Malalasekera N, Cavanagh S, **Hunt LT**, Miranda B, Kennerley SW. Primates Prefer To Use Covert Attention When Making Value Guided Decisions. *Currently in preparation for* ***PNAS***.
4. Lim MSM, Jocham G, **Hunt LT**, Behrens TEJ, Rogers RD. Impulsivity and cognitive biases undermine action-value learning in gambling behaviour. *Submitted to* ***International Gambling Studies***.

Research Talks

International and National Meetings

2015	Symposium on Biology of Decision-Making, Paris, France
2015	Computational & Systems Neuroscience (Cosyne), Salt Lake City, USA
2015	British Neuroscience Association, Edinburgh, UK
2015	Tohoku University Neuroscience Symposium, Japan
2014	Society for Neuroscience, Washington, D.C.
2014	Bristol Decision Making Conference, Bristol, UK
2014	4th Einstein Symposium on Decision Making, Berlin, Germany
2014	Computational & Systems Neuroscience (Cosyne), Salt Lake City, USA
2013	Autumn School in Cognitive Neuroscience, Oxford
2013	Society for Neuroeconomics Annual Meeting, Lausanne, Switzerland
2013	3rd Einstein Symposium on Decision Making, Berlin, Germany
2013	Human Brain Mapping Conference, Seattle

2011	Society for Neuroeconomics Annual Meeting, Evanston, USA
2011	Duke University, Durham, USA
2011	MEG UK meeting, University of Glasgow, UK
2009	MEG UK meeting, University of Oxford, UK

University Seminars and Small Meetings

2015	Cognitive Neuroscience Seminar, University of Oxford
2015	CiNet, University of Osaka, Japan
2015	Riken Brain Sciences Institute, Japan
2014	University Of Hamberg Cognitive Neuroscience Seminar, Germany
2014	Early Career Neuroscientist Talk, Queen Square Symposium, UCL, UK
2014	London Judgement and Decision Making Group, London, UK
2013	Columbia University, New York
2013	New York University, New York
2013	University of Newcastle, UK
2013	Donders Centre for Cognition, Nijmegen, Netherlands
2012	Brain Meeting, Wellcome Trust Centre for Neuroimaging, UCL, UK
2012	University of Zurich, Switzerland
2012	Centre for Human Brain Activity, Oxford, UK
2012	Oxford Neurosciences Symposium, University of Oxford, UK
2011	FMRIB Centre, Oxford, UK
2011	Emotion Club, UCL, UK
2010	Max Planck Institute for Neurological Research, Cologne, Germany
2009	University of Zurich, Switzerland

Teaching

2012-	Lecturer, MSc in Neuroscience course, University of Oxford *(course: computational neuroscience)*
2012	Course tutor, SPM for MEG/EEG course, University College London.
2010-12	Introductory lectures and practical workshops, FMRIB and OHBA graduate programs, University of Oxford *(topics: Fundamentals of MEG/EEG; MEG data analysis; principles of neurophysiology; 2010-2012).*

Students

Current

2014 – present	James Street, BSc Neuroscience, UCL
2014 – present	Tricia Seow, MSci Neuroscience, UCL
2012 – present	Nishantha Malalasekera, PhD Neuroscience, UCL (joint with Steve Kennerley)

Past

2013 – 2014	Natasha Bobrowski-Khoury, MSc Neuroscience, UCL *(currently research assistant with Richard Axel, Columbia University and Adam Kepecs, Cold Spring Harbor)*
2013 – 2014	Daniel Grigat, MSc Cognitive and Decision Sciences, UCL *(currently PhD student in Financial Computing, University College London)*
2012 – 2013	Nikolina Skandali, MSc Clinical Neuroscience, UCL *(currently PhD student with Barbara Sahakian, University of Cambridge)*
2008 – 2009	George Wallis, MSc Neuroscience, Oxford *(subsequently DPhil student with Kia Nobre, University of Oxford; now at medical school)*
2008 – 2009	Nils Kolling, MSc Neuroscience, Oxford *(subsequently DPhil student with Matthew Rushworth, University of Oxford; now Junior Research Fellow, University of Oxford)*

Public Engagement

One of eight scientists behind *The Great Brain Experiment,* a Wellcome Trust funded smartphone app, providing members of the public with the opportunity to participate in large-scale psychology research and learn about cognitive neuroscience. Downloaded by >110,000 users, generating >600,000 gameplays.

Organisational Service

2013	Breakout group chair, *Analysis Techniques for Neuroimaging in Non-Human Primates*, National Council for Replacement, Refinement and Reduction of animals in research
2010	Organising committee, *Workshop on Motivational and Cognitive Control*, 3-day conference held at University of Oxford (with Rogier Mars, MaryAnn Noonan, Jerome Sallet)
2010	Invited moderator, *Reward and Decision making in the Brain*, Hebrew University, Jerusalem

Ad hoc reviewer

Cognitive, Affective and Behavioral Neuroscience; Current Biology; eLife; Human Brain Mapping; Journal of Cognitive Neuroscience; Journal of Neuroscience; Journal of Neurophysiology; Nature; Nature Neuroscience; Neuroimage; PLoS Biology; PLoS Computational Biology; PLoS One; Science

References

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