

Neil Garrett, PhD

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Academic Positions

08/2018 – Present	Sir Henry Wellcome Research Fellow	Oxford / Princeton University
09/2016 – 06/2018	Postdoctoral Researcher <i>Advisor:</i> Nathaniel Daw	Princeton University

Education

09/2012 – 06/2016	Ph.D. Experimental Psychology <i>Advisor:</i> Tali Sharot	University College London
09/2010 – 09/2011	MSc Cognitive and Decision Sciences <i>Advisor:</i> Benedetto De Martino	University College London
09/2001 – 06/2004	BSc Economics and Philosophy	London School of Economics

Publications & Preprints

Garrett N & Daw ND (2020) Biased belief updating and suboptimal choice in foraging decisions. *Nature Communications*, 11:3417

Dundon NM, **Garrett N**, Babenko V, Cieslak M, Daw ND, Grafton ST (2020) Sympathetic and parasympathetic involvement in time constrained sequential foraging. *Cognitive, Affective and Behavioural Neuroscience*, 20, 730-745.

Garrett N, González-Garzón AM, Foulkes L, Levita L & Sharot T (2018) Updating Beliefs Under Perceived Threat, *Journal of Neuroscience*, 38(6), 7901-7911.

Garrett N & Sharot T (2017) Optimistic update bias holds firm: Three tests of robustness following Shah et al. *Consciousness & Cognition*, 50, 12-22.

Garrett N, Lazzaro S, Ariely D & Sharot T (2016) The Brain Adapts to Dishonesty. *Nature Neuroscience*, 19, 1727-1732.

Sharot T & **Garrett N** (2016) Forming Beliefs: Why Valence Matters. *Trends in Cognitive Sciences*, 20(1).

Moutsiana C, Charpentier C, **Garrett N**, Cohen MX & Sharot T (2015) Human frontal-subcortical circuit and asymmetric belief updating, *Journal of Neuroscience*, 35(42): 14077-14085.

Garrett N, Sharot T, Faulkner P, Korn CW, Roiser JP & Dolan RJ (2014) Losing the rose-tinted glasses: neural substrates of unbiased belief updating in depression. *Frontiers in Human Neuroscience*, 8:639.

Garrett N & Sharot T (2014) How robust is the optimistic update bias for estimating self-risk and population base rates? *PLOS ONE*, 9(6).

Charpentier C, Moutsiana C, **Garrett N** & Sharot T (2014) The brain's temporal dynamics from a collective

decision to individual action. *Journal of Neuroscience*, 34(17): 5816-5823.

Moutsiana C, **Garrett N**, Clarke RC, Lotto RB, Blakemore SJ & Sharot T (2013) Human development of the ability to learn from bad news. *Proceeding of the National Academy of Sciences*, 110 (41): 16396–16401.

De Martino B, Fleming S, **Garrett N** & Dolan RJ (2013) Confidence in value-based choice. *Nature Neuroscience*, 16, 105–110.

Publications In Preparation

Garrett N*, Glitz L*, Juchems K & Summerfield C (in prep) Computational mechanisms of structure learning: how humans update relational knowledge

Khalighinejad N*, **Garrett N***, Priestley L*, Lockwood P & Rushworth MFS (in prep) A habenula-insular circuit encodes whether it is worth acting

Garrett N, Kroes M, Phelps E & Daw N (in prep) Model based and model free systems in aversive learning

Ossola P, **Garrett N**, Sharot T & Marchesi C (in prep) Biases in Belief Updating in Bipolar Disorder

Vellani V, **Garrett N**, Gaule A, Patil KR & Sharot T (in prep) Heritability of belief updating is valence dependent

Dundon NM, **Garrett N**, Babenko V, Cieslak M, Daw ND, Grafton ST (in prep) Global and contextual hysteresis in value-based action-selection

*denotes equal contribution

Invited Talks

04/2020 New York Medical College, Department of Psychiatry and Behavioural Sciences, USA

05/2019 Pint of Science Festival, London, UK

03/2019 WIN Mood Disorders Day, University of Oxford, Oxford, UK

03/2019 Psychology Seminar Series, University of Roehampton, London, UK

03/2019 Affective Brain Lab Seminar Series, University College London, London, UK

02/2019 Computational Psychiatry Seminar Series, Max Planck UCL, London, UK

10/2018 Italian Society of Biological Psychiatry, Turin, Italy
Symposium session: Mood Congruency and Bipolar Disorder

10/2018 University of Parma, Department of Neuroscience, Parma, Italy

10/2018 Kappes Lab, London City University, London, UK

10/2018 Spotlight Poster Presentation, Society for Neuroeconomics Conference, Philadelphia, USA

05/2018 Manhattan Area Memory Meeting (MAMM), Columbia University, USA

10/2017 EmTech Conference, Toulouse, France

Keynote Lecture: Using Information to Change Beliefs

- 09/2017 Parallel Distributed Processing (PDP) Seminar Series, Princeton University, USA
- 08/2017 Law and the Whole Truth, University of Glasgow, UK
- 04/2017 Neuroscience and Social Decision Making Seminar Series, Princeton University, USA
- 06/2016 European Conference on Positive Psychology, Angers, France
Keynote Lecture: How the Human Brain Forms Optimistic Beliefs
- 05/2016 Daw Lab, Princeton Neuroscience Institute, Princeton University, USA
- 05/2016 Summerfield Lab, Department of Psychology, University of Oxford, Oxford, UK
- 01/2016 Marr Club, Department of Psychology, University of Cambridge, Cambridge, UK
- 09/2015 Society for Neuroeconomics Conference, Miami, USA
Symposium Session: Social preferences and strategic interactions.
- 04/2015 Harvard Intergroup Neuroscience Lab, Harvard University, Boston, USA
- 03/2015 Affective Brain Lab Seminar Series, University College London, London, UK
- 03/2015 EEG Journal Club, Department of Psychology, Goldsmiths University, London, UK
- 09/2014 Saxe Lab, Massachusetts Institute of Technology, Boston, USA
- 09/2013 Society for Psychophysiological Research Conference, Florence, Italy
Symposium session: Neural mechanisms underlying positive and negative cognitive biases in emotion.
- 10/2012 Society for Neuroscience Conference, New Orleans, USA
Nanosymposium session: Effects of Feedback, Reinforcement and Reward on Human Learning.

Poster Presentations

- 07/2019 Reinforcement Learning and Decision-Making Conference, Montreal, Canada
- 05/2019 Symposium on Biology of Decision Making, Oxford, UK
- 10/2018 Society for Neuroeconomics Conference, Philadelphia, USA
- 04/2015 Social and Affective Neuroscience Society (SANS) Conference, Boston, USA
- 11/2014 Society for Neuroscience Conference, Washington DC, USA
Session: Human Decision-Making, Social and Emotional Factors
- 09/2013 Society for Neuroeconomics Conference, Lausanne, Switzerland

Research Collaborations

Daw Lab, Princeton University

Summerfield Lab, Oxford University
 Rushworth Lab, Oxford University
 Grafton Lab, University of Santa Barbara
 Phelps Lab, Harvard University
 Ann Graybiel, Massachusetts Institute of Technology
 McLean Medical School, Harvard University
 Department of Neuroscience, University of Parma
 Department of Psychology, London City University
 Department of Psychology, Roehampton University

Teaching Experience

UCL, MSc in Cognitive Neuroscience (2018/2019) (Contributing Lecturer)
 Oxford University, BSc in Psychology (2018/2019): Memory, Attention and Information Processing (Tutor)
 UCL, MSc in Developmental Neuroscience and Psychopathology (2015/2016): Affective Neuroscience Module (Contributing Lecturer)
 UCL, MSc in Social Cognition (2014/2015, 2015/2016): Understanding Individuals and Groups Module (Contributing Lecturer)
 UCL, MSc in Neuroscience (2015/2016): Cognitive Systems Neuroscience Module (Contributing Lecturer)
 UCL, MSc in Cognitive Neuroscience (2015/2016): Cognitive Neuroscience II: Elaborative and Adaptive Processes (Contributing Lecturer)
 UCL, MSc in Research Methods (2014/2015): Cognitive Psychology Module (Contributing Lecturer)

Awards/Research Grants

2019	WIN Seed Grant, Oxford University (joint w/Nima Khalighinejad): £12K
2018-2022	Sir Henry Wellcome Postdoctoral Fellowship (lead PI, 209108/Z/17/Z): £250K
2015	Summer Institute for Cognitive Neuroscience Fellowship, UC Santa Barbara
2014	SLMS Student Conference Fund, University College London Scholarship to attend 2014 Society for Neuroscience Conference.
2014	Graduate School Research Project Fund, University College London Funding to undertake project at Harvard Medical School investigating attention and learning biases in bipolar patients.
2013	Guarantors of Brain Travel Award, University College London Scholarship to attend 2013 Society for Psychophysiological Research conference.
2012	UCL Impact Award: £32,535 3-year PhD studentship in collaboration with Centre for Advanced Hindsight (Duke University).

Ad Hoc Reviewer

Journal of Experimental Psychology; Psychological Science; Neuroimage; Journal of Neuroscience; Social Cognitive and Affective Neuroscience (SCAN); Emotion; Cerebral Cortex; Cognition and Emotion; Cognitive, Affective & Behavioural Neuroscience (CABN); Consciousness and Cognition; Brain Structure and Function; Perspectives on Psychological Science; Proceedings of the National Academy of Sciences (PNAS)

Students Supervised

Leonie Glitz; Oxford University PhD Student
 Luke Priestly (co-supervised w/Nima Khalighinejad); Oxford University MSc Student
 Sean Allan: Princeton University Research Assistant (Daw Lab)
 Gabriella Montinola: UCL Affiliate Student
 Anja Hallan Wolff: UCL Internship Student
 Ana Maria Gonzalez: UCL MSc Student
 Tara Srirangarajan: UCL Lab Manager (Affective Brain Lab)
 Molly Wilner: UCL Affiliate Student
 Lennart Wittkuhn: UCL Internship Student
 Sarah Hadden: UCL Internship Student
 Raeesa Anjum: UCL Undergraduate Student

Essays In Popular Media

The Conversation: *Why being dishonest is a slippery slope*
Aeon Magazine: *Dishonesty gets easier the more you do it*
The Dana Foundation: *How dishonesty can snowball*
NBC op-ed: *Trump's lying seems to be getting worse. Psychology suggests there's a reason why*

TV and Radio

Radio: BBC Radio 4 (Bringing Up Britain), BBC Radio 5 Live (Rod Sharpe), CBC Canada, KABC Radio, Newstalk1010, Radio New Zealand, Deutschland Radio, Swedish National Radio (SVT)
TV: Sky (Secrets of the Brain)

Written Press Coverage (selected)

The Guardian: *From porkies to whoppers: over time lies may desensitize brain to dishonesty*
New York Times: *Why Big Liars Often Start Out as Small Ones*
TIME Magazine: *The Fascinating Reason Why Liars Keep On Lying*
New Scientist: *Lying feels bad at first but our brains soon adapt to deceiving*
Wired: *The more we lie, the easier it is for our brains to be increasingly more deceitful*
Associated Press: *Slippery slope: Study finds little lies lead to bigger ones*
Huffington Post: *How lying changes your brain in just a short period of time*
Discover Magazine: *From Fibs to Fraud: Why Lying Is a Slippery Slope*
The Telegraph: *Little white lies make it easier to go on and tell big whoppers*
Scientific American: *Liar, Liar: How the Brain Adapts to Telling Tall Tales*
New Scientist: *Lying feels bad at first but our brains soon adapt to deceiving*
The Scientist: *Lying Repetitively Linked to Decreased Amygdala Activity*
The Telegraph: *Little white lies make it easier to go on and tell big whoppers*
The Independent: *Whenever you lie, your brain adjusts to make telling bigger whoppers study finds*
LA Times: *Neuroscientists show how tiny fibs snowball into big lies*
San Francisco Chronicle: *Slippery Slope: Study finds little lies lead to bigger ones*
Washington Post: *Neuroscientists show how tiny fibs snowball into big lies*
CBS News: *How little lies lead to bigger lies*
Newsweek: *Why Telling Lies Trains Our Brains to be Dishonest*
Vice: *Lying Appears to Make It Easier to Tell More Lies*
The Australian: *Little white lies the start of 'slippery slope', scientists find*
The Times of India: *Liars in Making Small lies tune your brain to be dishonest*
CNN: *Lying may be your brain's fault, honestly*
Sky News: *Brain adapts to dishonesty*
Forbes: *Why Lying Becomes Easier Over Time: It's A 'Slippery Slope', Study Finds*

Smithsonian Magazine: *How White Lies Snowball Into Full-On Deception*

NPR: *How Small Fibs Lead To Big Lies*

Quartz: *Science shows that telling small, white lies actually turns us into bigger liars*

Vox: *How do politicians get so comfortable with lying? One theory: practice.*

Public Engagement

05/2019 Pint of Science Festival, London

01/2017 Imperfect Cognitions Blog (article on Optimistic Belief Updating)

06/2016 Michelle Mcquaid Podcast series (<http://www.michellemcquaid.com>)

03/2016 Imperfect Cognitions Blog (article on [Depressive Realism](#))

07/2013 Wrong! Wellcome Collection, London (July 2013)