# **Neil Garrett, PhD**

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Oxford / Princeton University

#### **Academic Positions**

08/2018 - Present

00/2010 1163611	On Fierry Wendome Research Fellow	Oxford / Triffector Offiversity
09/2016 – 06/2018	Postdoctoral Researcher Advisor: Nathaniel Daw	Princeton University
Education		
09/2012 – 06/2016	Ph.D. Experimental Psychology Advisor: Tali Sharot	University College London
09/2010 – 09/2011	MSc Cognitive and Decision Sciences Advisor: Benedetto De Martino	University College London
09/2001 - 06/2004	BSc Economics and Philosophy	London School of Economics

Sir Henry Wellcome Research Fellow

## **Publications & Preprints**

Garrett N & Daw N (2019) Biased belief updating and suboptimal choice in foraging decisions. BioRxiv.

Dundon NM, **Garrett N**, Babenko V, Cieslak M, Daw ND, Grafton ST (2019) Sympathetic and parasympathetic involvement in time constrained sequential foraging. *BioRxiv*.

**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, Kroes M, Phelps E & Daw N Model based and model free systems in aversive learning

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

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

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

### **Invited Talks**

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	Neil Garrett CV 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 Barbra
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

## **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)