Caroline J. Charpentier, PhD

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Current Position

California Institute of Technology (Pasadena, USA)	Postdoctoral Scholar in Neuroscience (2016-Present), *Advisor: Prof John O'Doherty*

Education

University College London (London, UK)	PhD in Cognitive Neuroscience (September 2016), *Advisors Prof Jonathan Roiser, Prof Tali Sharot* Masters in Cognitive Neuroscience (September 2012), *Advisor: Prof Tali Sharot*
Ecole Normale Supérieure (Lyon, France)	Masters in Biosciences (June 2011) Bachelors in Fundamental Biology (September 2009)

Peer-reviewed publications

12. **Charpentier CJ**, O'Doherty JP (2018). The application of computational models to social neuroscience: promises and pitfalls. *Social Neuroscience*, 13(6): 637-647.

11. **Charpentier CJ**, Bromberg-Martin ES, Sharot T (2018). Valuation of knowledge and ignorance in mesolimbic reward circuitry. *Proceedings of the National Academy of Sciences*, 115(31): E7255-E7264

10. **Charpentier CJ**, Aylward J, Roiser JP, Robinson OJ (2017). Enhanced risk aversion, but not loss aversion, in unmedicated pathological anxiety. *Biological Psychiatry,* 81(12): 1014-1022.

9. Nord CL, Gray A, **Charpentier CJ**, Robinson OJ, Roiser JP (2017). Unreliability of putative fMRI biomarkers during emotional face processing. *Neuroimage*, 156: 119-127.

8. **Charpentier CJ**, De Neve J-E, Li L, Roiser JP, Sharot T (2016). Models of affective decision-making: how do feelings predict choice? *Psychological Science,* 27(6): 763-775.

7. **Charpentier CJ***, Hindocha C*, Roiser JP, Robinson OJ (2016). Anxiety promotes memory for mood-congruent faces but does not alter loss aversion. *Scientific Reports*, 6: 24746. * equal contribution

6. **Charpentier CJ**, De Martino B, Sim AL, Sharot T, Roiser JP (2016). Emotion-induced loss aversion and striatal-amygdala coupling in low anxious individuals. *Social Cognitive and Affective Neuroscience,* 11(4): 569-579.

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

4. Arcizet F, Mirpour K, Foster DJ, **Charpentier CJ**, Bisley JW (2015). LIP activity in the inter-stimulus interval of a change detection task biases the behavioral response. *Journal of Neurophysiology*, 114(5): 2637-2648.

3. Mandairon N, Kermen F*, **Charpentier CJ***, Sacquet J, Linster C, Didier A (2014). Context-driven activation of odor representations in the absence of olfactory stimuli in the olfactory bulb and piriform cortex. *Frontiers in Behavioral Neuroscience*, 8:138. * equal contribution

2. **Charpentier CJ**, Moutsiana C, Garrett N, Sharot T (2014). The brain's temporal dynamics from a collective decision to individual action. *The Journal of Neuroscience*, 34(17): 5816-5823.

1. Nord CL, Lally N, **Charpentier CJ** (2013). Harnessing electric potential: DLPFC tDCS induces widespread brain perfusion changes. *Frontiers in Systems Neuroscience,* 7:99.

Manuscripts in preparation / under review

Charpentier CJ, Gädeke M, Sharot T. Paying for knowledge and ignorance: the role of anxiety in information-seeking (*in prep*).

Charpentier CJ, Iigaya K, O'Doherty JP. Arbitration between imitation and emulation during human observational learning (*in prep*).

Nord C, Halahakoon DC, Limbachya T, **Charpentier CJ**, Lally N, Walsh V, Leibowitz J, Pilling S, Roiser JP. Neural, cognitive, and clinical effects of prefrontal cortex stimulation to enhance psychotherapy in depression: a double-blind randomized controlled trial (*under review*)

Awards and Fellowships

- Kavli Summer Institute in Cognitive Neuroscience Fellow, 2017
- Robert Kerwin International Conference Bursary, 2015
- UCL School of Life and Medical Sciences External Training Courses Fund Award, 2015
- British Association for Psychopharmacology Training Bursary, 2015 & 2013
- NYU Shanghai Neuroeconomics Summer School Fellow, 2015
- Bogue Research Fellowship, 2014
- UCL Graduate School Conference Fund Award, 2014
- Guarantors of Brain Travel Award, 2014 & 2012
- UCL Grand Challenge PhD Studentship, 2012-2015
- Non-tenured position of remunerated trainee civil servant ("Normalien") with full studentship (Ecole Normale Supérieure of Lyon, France), 2008-2011

Conference presentations

05/2018 Symposium for the Biology of Decision-Making, Paris (Poster)
11/2017 Society for Neuroscience annual meeting, Washington D.C. (Poster & Talk)
10/2017 Society for Neuroeconomics annual meeting, Toronto (Talk)
11/2016 Society for Neuroscience annual meeting, San Diego (Poster)
07/2016 British Association for Psychopharmacology meeting, Brighton (Poster)
05/2016 Symposium for the Biology of Decision-Making, Paris (Poster)
04/2016 Boston Judgment and Decision Making Day, Boston College (Talk)
10/2015 Society for Neuroscience annual meeting, Chicago (Talk)
07/2015 British Association for Psychopharmacology annual meeting, Bristol (Poster)
05/2015 Symposium for the Biology of Decision-Making, Paris (Poster)
09/2014 Society for Neuroeconomics annual meeting, Miami (Poster)
07/2014 British Association for Psychopharmacology meeting, Cambridge (Poster & Talk)
04/2014 Cognitive Neuroscience Society annual meeting, Boston (Poster)
07/2013 British Association for Psychopharmacology meeting, Harrogate (Poster)
10/2012 Society for Neuroscience annual meeting, New Orleans (Talk)

Invited talks

12/2018 University of Zurich, Zurich Center for Neuroeconomics
12/2018 Institut des Sciences Cognitives, Lyon
11/2018 Ecole Normale Supérieure, Paris, Human Reinforcement Learning team
03/2018 University of Miami, Timpano & Heller Lab Research Meeting (online)
02/2016 University of Cambridge, Department of Psychology, Marr Club
12/2015 California Institute of Technology, O'Doherty Lab
12/2015 Columbia University, Kavli Institute for Brain Science, Gottlieb Lab
11/2015 Brown University, Laboratory of Neural Computation and Cognition
03/2015 University College London, Affective Brain Lab talk series
10/2014 London School of Economics, Centre for Economic Performance
01/2013 University College London, Affective Brain Lab talk series

Teaching

Fall 2018 Part-time lecturer, *Social Psychology* (Psy 115), Caltech
2017 & 2018 Guest lectures, *Brains, Minds and Society* (Psy 102), Caltech
2013 & 2014 Teaching assistant for Matlab & SPM tutorials, *Methods in Cognitive Neuroscience II: Neuroimaging*, UCL

Ad Hoc Reviewer

Social Cognitive and Affective Neuroscience (SCAN); Biological Psychiatry; Psychological Medicine; Scientific Reports; Frontiers in Human Neuroscience; Psychological Reports; Brain Research; Psychiatry Research; Cognitive Behavioral and Affective Neuroscience (CABN); Current Directions in Psychological Science; Cognition and Emotion

Student supervision

- Maria Gädeke, Masters student: 3-month internship (2017)
- Tara Srirangarajan, 3rd year undergraduate: 3-month internship (2015-2016)
- Lucy Li, MSc: 5-month internship (2015)
- Lena Coutrot, 3rd year undergraduate: 4-month internship (2015)
- Chandni Hindocha, 1st year PhD student: 3-month rotation (2014-2015)
- Eleanor Barley and Joshua Lim: 2nd year undergraduate mini-projects (2014)
- Alena Sim, 2nd year undergraduate: 2-month summer internship (2013)

Technical Skills

- Programming, data analysis & computational modelling: MATLAB, Python, JAGS, STAN
- Data analysis, frequentist and Bayesian statistics: SPSS, JASP, R
- Experimental design, stimuli presentation and timing control: Cogent, PsychToolBox, PsychoPy, EyeLink eye-tracking
- fMRI data analysis: SPM, FSL, ANTs, fmriprep

Public Engagement – Outreach

03/2018 Science for March, Caltech
02/2016 Friday Late Spectacular: Feeling Emotional, Wellcome Collection, London
07/2013 Wrong! Wellcome Collection, London

Referees

- Prof John O'Doherty: jdoherty@caltech.edu
- Prof Jonathan Roiser: j.roiser@ucl.ac.uk
- Dr Tali Sharot: t.sharot@ucl.ac.uk