

THOMAS OLIVER MURRAY

RESEARCH EXPERIENCE

Postdoctoral Research Associate	University of Cambridge Lead projects combining neuroimaging, physiological, behavioural, and hormonal data to study learning under uncertainty. Collect and analyse ECG, PPG, and skin conductance data to derive indices of arousal and autonomic state. Apply Bayesian and machine learning models to infer latent cognitive mechanisms predictive of psychiatric symptoms. Collaborate closely with clinicians, radiographers, and biotechnicians on data collection and interpretation.	<i>Mar 2023 – Present</i>
Postdoctoral Research Assistant	Queen Mary University of London Used genetic algorithms and machine learning to model individual differences in emotional representation, and relation to psychiatric risk factors.	<i>Oct 2021 – Feb 2023</i>
Postdoctoral Research Assistant	Kings College London Investigated neural processing of emotional expressions in schizophrenia using fMRI connectivity analysis.	<i>Mar 2021 – Jun 2021</i>
Honorary Research Fellow	Brunel University London Studied lifespan changes in neural network connectivity during emotional processing.	<i>Nov 2020 – Nov 2021</i>

TECHNICAL SKILLS

PROGRAMMING AND ANALYSIS	Python, MATLAB, Bash scripting, GitHub
METHODS	Bayesian modelling, machine learning, time-series analysis, neuroimaging (MRI), psychophysiology (ECG, PPG, skin conductance)
DATA SCIENCE	NumPy, SciPy, scikit-learn, pandas, Jupyter
ACADEMIC	Experimental design, advanced statistics, data visualisation, open science, preregistration, public dissemination of results

EDUCATION

PhD	Cognitive Neuroscience <i>Brunel University London</i>	<i>2016 – 2020</i>
MSc	Cognitive Neuroscience <i>University of Essex</i>	<i>2014 – 2015</i>
BSc	Psychology <i>University of Essex</i>	<i>2011 – 2014</i>

AWARDS

Grindley Grant: £500, <i>Experimental Psychology Society</i>	2019
PhD Scholarship: £16,296 annual stipend, <i>Brunel University London</i>	2016 – 2019
Postgraduate Support Scheme: £5,000, <i>University of Essex</i>	2014

TEACHING AND SUPERVISION

Undergraduate supervisor	<i>The University of Cambridge</i>	2023 – present
Hourly Paid Lecturer	<i>Brunel University London</i>	2021 – present
Statistics Advisor	<i>Academic Skills and Advice Team, Brunel University London</i>	2017 – 2019
Graduate Teaching Assistant	<i>Brunel University London</i>	2016 – 2019
Lab Assistant and Graduate Demonstrator	<i>University of Essex</i>	2014 – 2015

PUBLICATIONS

- Murray, T., Binetti, N., Venkataramaiyer, R., Namboodiri, V., Cosker, D., Viding, E., & Mareschal, I. (2024). Expression perceptive fields explain individual differences in the recognition of facial emotions. *Communications Psychology*, 2(1), 62.
- Murray, T., Binetti, N., Carlisi, C., Namboodiri, V., Cosker, D., Viding, E., & Mareschal, I. (2024). Genetic algorithms reveal identity independent representation of emotional expressions. *Emotion*, 24(2), 495.
- Murray, T., O'Brien, J., Sagiv, N., & Kumari, V. (2022). Changes in functional connectivity associated with facial expression processing over the working adult lifespan. *Cortex*, 151, 211-223.
- Murray, T., O'Brien, J., Sagiv, N., & Garrido, L. (2021). The role of stimulus-based cues and conceptual information in processing facial expressions of emotion. *Cortex*, 144, 109-132.
- Murray, T., & Lawson, R.P. (**Under review**) Negative affect interacts with perceptual affective biases.

CONFERENCES

- Oral presentations at the **British Association of Cognitive Neuroscience** meeting (September 2025, Edinburgh, UK; September 2019, Cambridge, UK).
- Poster presentations at the **British Association of Psychopharmacology** summer meetings (June 2025, Manchester, UK; June 2024, Birmingham, UK).
- Oral presentations at the **Experimental Psychology Society** meetings (January 2025, London, UK; July 2019, Bournemouth).
- Poster presentation at the **Conference of the International Society for Research on Emotion** (July 2022, Los Angeles, USA).
- Oral presentation at the **British Society for the Psychology of Individual Differences** meeting (April 2019, Brunel University, UK).
- Poster presented at the **British Association of Cognitive Neuroscience** meeting (September 2017, Plymouth, UK).