

JESSICA MCFADYEN

Cognitive Neuroscientist

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🌐 jjmcfadyen.com

EDUCATION

PhD

Queensland Brain Institute, The University of Queensland

📅 2015 – 2019 📍 Brisbane, Australia

Supervised by Marta I. Garrido & Jason B. Mattingley

Thesis: *"Shortcuts for fear in the hierarchical visual brain"*

Bachelor of Psychological Science (Hons I)

School of Psychology, The University of Queensland

📅 2011 – 2014 📍 Brisbane, Australia

Supervised by Ross Cunningham

Thesis: *"The effect of caricatured faces on neural signatures of empathy"*

ACADEMIC POSITIONS

Research Fellow

Max Planck UCL Centre for Computational Psychiatry and Ageing Research

📅 2019 – present 📍 London, United Kingdom

Supervised by Ray Dolan

Postdoctoral Research Fellow

Queensland Brain Institute, The University of Queensland

📅 2018 – 2019 📍 Brisbane, Australia

Supervised by Oliver Baumann & Jason B. Mattingley

Research Assistant

The University of Queensland

📅 2012–2017 📍 Brisbane, Australia

Various casual positions serving the School of Psychology, the Queensland Brain Institute, and the Queensland Institute of Medical Research

TECHNICAL SKILLS

Programming

- MATLAB
- R
- Python
- JavaScript
- HTML
- CSS

Human neuroimaging

- Univariate & multivariate M/EEG (SPM, Fieldtrip)
- Dynamic causal modelling of fMRI and MEG data
- Tractography of diffusion-weighted images (FSL, MRtrix)
- Behavioural decision modelling

OTHER POSITIONS

Guest Lecturer

Department of Experimental Psychology, University College London

📅 2020 📍 London, United Kingdom

Master of Research, Brain Sciences

Chair of ECR Executive Committee

Australian Research Council's Centre for Integrative Brain Function

📅 2015 – 2016 📍 Brisbane, Australia

Tutor

Refugee Tutoring Program, The University of Queensland

📅 2015 📍 Brisbane, Australia

PUBLICATIONS

IN PREP. | **McFadyen J**, Liu Y, Wise T, & Dolan R

Differential replay between reward and punishment predicts approach behaviour

IN PREP. | **McFadyen J**, Tsuchiya N, Smout C, Mattingley J B, & Garrido M I

Surprising threats accelerate evidence accumulation for conscious perception

bioRxiv

2021 | **McFadyen J**, Nolan C, Pinocy E, Buteri D, & Baumann O

Doorways do not always cause forgetting: A multimodal investigation

BMC Psychology

2020 | **McFadyen J**, Dolan R J, & Garrido M I

The influence of subcortical shortcuts on disordered sensory and cognitive processing

Nature Reviews Neuroscience

2019 | **McFadyen J**

Investigating the subcortical route to the amygdala across species and in disordered fear responses

Journal of Experimental Neuroscience

2019 | **McFadyen J**, Mattingley J B, & Garrido M I

An afferent subcortical white matter pathway to the amygdala facilitates fear recognition

eLife

2018 | Baumann O, Vromen J M G, Cheung A, **McFadyen J**, Ren Y, & Guo C C

Neural correlates of temporal complexity and synchrony during audiovisual correspondence detection

eNeuro

2017 | Bret, A, Beffara B, **McFadyen J**, & Mermillod M

Right wing authoritarianism is associated with race bias in face detection

PLoS One

2017 | **McFadyen J**, Mermillod M, Mattingley J B, Halász V, & Garrido M I

A rapid subcortical amygdala route for faces irrespective of spatial frequency and emotion

Journal of Neuroscience

2015 | Bednark J G, Poonian S K, Palghat K, **McFadyen J**, & Cunnington R

Identity-specific predictions and implicit measures of agency

Psychology of Consciousness: Theory, Research, and Practice

2015 | Cao Y, Contreras-Huerta L S, **McFadyen J**, & Cunnington R

Racial bias in neural response to others' pain is reduced with other-race contact



















Cortex









2015 | Poonian S K, **McFadyen J**, Ogden J, & Cunnington R

Implicit agency in observed actions: Evidence for N1 suppression of tones caused by self-made and observed actions

Journal of Cognitive Neuroscience

CONFERENCE PRESENTATIONS

- Affective Brain Meeting
 2019  London, United Kingdom  Presentation
- Max Planck Computational Psychiatry Seminar
 2019  London, United Kingdom  Presentation
- Australasian Cognitive Neuroscience Society (ACNS)
Conference
 2018  Melbourne, Australia  Presentation
- Association for the Scientific Study of Consciousness (ASSC)
Conference
 2018  Krakow, Poland  Presentation
- Systems and Computational Neuroscience Down Under
(SCiNDU) Conference
 2017  Brisbane, Australia  Poster
- International Cognitive Neuroscience Conference (ICON)
 2017  Amsterdam, Netherlands  Poster

- Centre for Integrative Brain Function, Annual Meeting
 2016  Hobart, Australia  Presentation
- Australasian Cognitive Neuroscience Society (ACNS)
Conference
 2016  Shoal Bay, Australia  Symposium
- Organisation for Human Brain Mapping (OHBM) Conference
 2016  Geneva, Switzerland  Poster
- Systems and Computational Neuroscience Down Under
(SCiNDU) Conference
 2015  Brisbane, Australia  Poster
- Australasian Cognitive Neuroscience Society (ACNS)
Conference
 2015  Auckland, New Zealand  Presentation
- University of Queensland Undergraduate Conference
 2014  Brisbane, Australia  Presentation

AWARDS

- Candidate Development Award
2017 | The University of Queensland – AUD \$5,000
- Lyn Beazley Award for Outstanding Contribution
2016 | Australian Research Council's Centre for Integrative Brain Function
- Early Career Travel Award
2016 | Australian Research Council's Centre for Integrative Brain Function – AUD\$1,000

- Student Travel Award
2015 | Australasian Cognitive Neuroscience Society (ACNS) Conference – AUD \$1,000
- Australian Postgraduate Award
2014 | Australian Department of Education and Training
- Best Oral Presentation
2014 | The University of Queensland Undergraduate Conference – AUD \$1,000