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

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

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

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

Donders Institute Autism Symposium
📅 *2021* 📍 *Virtual* 🎙 Presentation (invited)

Affective Brain Meeting
📅 *2019* 📍 *London, United Kingdom* 🎙 Presentation (invited)

Max Planck Computational Psychiatry Seminar
📅 *2019* 📍 *London, United Kingdom* 🎙 Presentation

Australasian Cognitive Neuroscience Society Conference
📅 *2018* 📍 *Melbourne, Australia* 🎙 Presentation

Association for the Scientific Study of Consciousness
📅 *2018* 📍 *Krakow, Poland* 🎙 Presentation

Systems and Computational Neuroscience Down Under
📅 *2017* 📍 *Brisbane, Australia* 🖥 Poster

International Cognitive Neuroscience Conference
📅 *2017* 📍 *Amsterdam, Netherlands* 🖥 Poster

Centre for Integrative Brain Function, Annual Meeting
📅 *2016* 📍 *Hobart, Australia* 🎙 Presentation

Australasian Cognitive Neuroscience Society Conference
📅 *2016* 📍 *Shoal Bay, Australia* 🎙 Symposium

Organisation for Human Brain Mapping Conference
📅 *2016* 📍 *Geneva, Switzerland* 🖥 Poster

Systems and Computational Neuroscience Down Under
📅 *2015* 📍 *Brisbane, Australia* 🖥 Poster

Australasian Cognitive Neuroscience Society Conference
📅 *2015* 📍 *Auckland, New Zealand* 🎙 Presentation

University of Queensland Undergraduate Conference
📅 *2014* 📍 *Brisbane, Australia* 🎙 Presentation

Awards

Paxinos-Watson Prize for
Most Significant Neuroscience Paper
2020 | Australasian Neuroscience Society - AUD $500

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