

Linden Parkes, Ph.D.

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🐦 LindenParkes

Academic Positions

Postdoctoral Research Fellow

University of Pennsylvania, Department of Bioengineering

- Advisors: Prof. Danielle S. Bassett, Associate Prof. Theodore D. Satterthwaite

Philadelphia, PA

July 2019 - present

Visiting Scholar

Donders Institute for Brain, Cognition and Behaviour

- Advisors: Prof. Christian Beckmann, Dr. Andre Marquand

Nijmegen, The Netherlands

Sept. 2018 - Oct. 2018

Education

Doctor of Philosophy

Monash University

- Thesis: Mapping brain networks in health and mental disorder with structural and functional Magnetic Resonance Imaging
- Advisors: Prof. Murat Yucel, Prof. Alex Fornito, Dr. Ben Fulcher

Melbourne, Australia

March 2014 - June 2019

Bachelor of Science (Honors)

Swinburne University of Technology

- Thesis: Mapping language processes using Magnetoencephalography.
- Advisor: Associate Prof. Conrad Perry
- Honors, First Class
- Dux

Melbourne, Australia

2009 - 2013

Research Employment

Research Assistant

Monash Biomedical Imaging

- Analysis of positron emission tomography (PET) data

Melbourne, Australia

2018

Research Engineer

Torus Games & Cogstate

- Developed gamified cognitive tests for neuroscience research

Melbourne, Australia

2016 - 2017

Magnetoencephalography Technician

Swinburne University

- Collection, preprocessing, and analysis of Magnetoencephalography (MEG) data

Melbourne, Australia

2013

Teaching

Teacher's Assistant

University of Pennsylvania, Department of Bioengineering

- Class: Network Neuroscience
- Course evaluation score: 3.57/4

Philadelphia, PA

2020

Guest Lecturer

University of Pennsylvania, Department of Bioengineering

- Class: Network Neuroscience

Philadelphia, PA

2019

Guest Lecturer

Monash University

- Class: Neuroscience Methods

Melbourne, Australia

2017 - 2018

Recitation Tutor

Swinburne University

- Class: Undergraduate Psychology

Melbourne, Australia

2014 - 2015

Recitation Tutor

Swinburne University

Melbourne, Australia

2013

- Class: Undergraduate Physiology

Funding (pending)

Career Transition Awards.....

K99/R00 Pathway to Independence Award 2021 - 2026

National Institute of Mental Health (NIMH)

- Project title: Developing prognostic neuroimaging biomarkers of the psychosis spectrum using network control theory
- \$969,546 USD
- Received competitive impact score and program official has endorsed application for funding

Funding (awarded)

Fellowships & Scholarships.....

Young Investigator Award 2021 - 2022

Brain & Behavior Research Foundation

- Project title: Hybrid neurodevelopmental normative models for psychosis
- \$70,000 USD

Monash University Postgraduate Publication Award 2018

Monash University

- \$6,300 AUD

Monash University Graduate Research Scholarship 2014 - 2018

Monash University

- \$20,000 AUD

Australian Postgraduate Award Research Scholarship 2014 - 2018

Australian Government

- \$91,000 AUD

Grants.....

Innovations Connections Grant 2016 - 2017

Department of Industry, Innovation and Science, Australia

- \$50,000 AUD
- Associate investigator

Travel Awards.....

Abstract Merit Award 2021

Organization for Human Brain Mapping

- virtual, no monetary component

Abstract Merit Award 2020

Organization for Human Brain Mapping

- \$3,000 USD

Donders-Monash Erasmus Travel Award 2018

Donders Institute for Brain, Cognition and Behaviour | Monash University

- \$3,200 AUD

Future Leaders Travel Award 2015

Monash Institute of Cognitive and Clinical Neurosciences

- \$5,000 AUD

Presentations

Network controllability in transmodal cortex predicts positive psychosis spectrum symptoms 2021

Organization for Human Brain Mapping

- Oral presentation
- 3-minute summary available on [YouTube](#)

Network Neuroscience 2021

DataPhilly

- Invited talk
- available on [YouTube](#)

Average controllability better predicts cognition when compared to strength 2020

Organization for Human Brain Mapping

- Oral presentation

Psychopathology explain individual's unique deviations from normative neurodevelopment 2020

Organization for Human Brain Mapping

- Oral presentation

Dimensional psychiatry in corticostriatal circuits: lessons learnt from resting-state fMRI data 2018

University of Pennsylvania

- Invited talk

Transdiagnostic biomarkers in psychiatry 2018

Centre of Excellence for Integrative Brain Function, Melbourne, Australia

- Invited talk

Confounds in rs-fMRI processing 2016

Swinburne University, Melbourne, Australia

- Invited talk

Transcriptional signatures of connectomic subregions of the human striatum 2015

Students of Brain Research, Melbourne, Australia

- Oral presentation

Examining the N400m in affectively negative sentences. A magnetoencephalography study 2013

Australasian Cognitive Neuroscience Conference

- Oral presentation

Posters

First Author

Network controllability in transmodal cortex predicts positive psychosis spectrum symptoms 2021

Organization for Human Brain Mapping

Network controllability in transmodal cortex predicts positive psychosis spectrum symptoms 2021

Society of Biological Psychiatry

Psychopathology explain individual's unique deviations from normative neurodevelopment 2020

Organization for Human Brain Mapping

Impulsivity and compulsivity correlate with effective connectivity in corticostriatal circuits 2019

Organization for Human Brain Mapping

Impulsivity and compulsivity correlate with effective connectivity in corticostriatal circuits 2018

Australasian Cognitive Neuroscience Conference

Evaluating the efficacy and sensitivity of motion correction strategies for rs-fMRI 2018

Organization for Human Brain Mapping

Efficacy, reliability, and sensitivity of motion correction strategies for resting-state functional MRI 2017

IEEE International Symposium on Biomedical Imaging

Efficacy, reliability, and sensitivity of motion correction strategies for resting-state functional MRI 2017

Students of Brain Research

Academic Service

Committees

Organization for Human Brain Mapping, Student and Postdoc Special Interest Group 2019 - 2021

Treasurer

Australasian Cognitive Neuroscience Society, Early Career Researchers Committee 2017

Committee Member

Australasian Cognitive Neuroscience Society, Executive Committee Committee Member	2017
Students of Brain Research Treasurer	2016
Supervision & Mentorship	
Ashlea Segal PhD Student, Monash University	2018 - present
Tayla Currie Honors Student, Monash University	2018
John Fallon Honors Student, Monash University	2017
Luisa Prochazkova International Intern, Monash University	2016
Kristina Sabaroedin Honors Student, Monash University	2016
Lauren Den Ouden Honors Student, Monash University	2016
Stuart Oldham Honors Student, Monash University	2016
Danielle Amiet Honors Student, Monash University	2016
Outreach and community engagement	
International Mentoring Programme Organization for Human Brain Mapping, Student and Postdoc Special Interest Group	2021
○ Mentor	
NeuroDay Methodist Ladies' College, Melbourne, Australia	2018
○ Co-organizer	
○ Presenter	
BMH Mentor Forum Brain & Mental Health Research Hub, Monash University	2018
○ Co-organizer	
○ Mentor	
MBI Student Forum Monash Biomedical Imaging, Monash University	2014 - 2015
○ Co-organizer	
○ Presenter	
Peer Review	
○ NeuroImage	
○ Human Brain Mapping	
○ Network Neuroscience	
○ Scientific Reports	
○ Biological Psychiatry	
○ Psychological Medicine	
○ Neuropsychologia	
○ NeuroImage: Clinical	
○ Psychiatry Research: Neuroimaging	
○ Harvard Review of Psychiatry	
○ International Gambling Studies	
○ Journal of Cerebral Blood Flow & Metabolism	

Select Publications

Citations = 690, h-index = 13, i10-index = 16

For a complete list of my publications see my [Google Scholar](#)

First-author.....

Parkes L, Moore TM, Calkins ME, Cieslak M, Roalf DR, Wolf DH, Gur RC, Gur RE, Satterthwaite TD & Bassett DS (2021). Network controllability in transmodal cortex predicts positive psychosis spectrum symptoms. [Biological Psychiatry](#).

Parkes L, Moore TM, Calkins ME, Cook PA, Cieslak M, Roalf DR, Wolf DH, Gur RC, Gur RE, Satterthwaite TD & Bassett DS (2021). Transdiagnostic dimensions of psychopathology explain individuals' unique deviations from normative neurodevelopment in brain structure. [Translational Psychiatry](#).

Parkes L, Satterthwaite TD & Bassett DS (2020). Towards precise resting-state fMRI biomarkers in psychiatry: synthesizing developments in transdiagnostic research, dimensional models of psychopathology, and normative neurodevelopment. [Current Opinion in Neurobiology](#).

Parkes L, Tiego J, Aquino K, Braganza L, Chamberlain SR, Fontenelle L, Harrison BJ, Lorenzetti V, Paton B, Razi A, Fornito A, & Yucel M (2019). Transdiagnostic variations in impulsivity and compulsivity in obsessive-compulsive disorder and gambling disorder correlate with effective connectivity in cortical-striatal-thalamic-cortical circuits. [NeuroImage](#).

Parkes L, Fulcher B, Yucel M, & Fornito A (2018). An evaluation of the efficacy, reliability, and sensitivity of motion correction strategies for resting-state functional MRI. [NeuroImage](#).

- Amongst the top 20 downloaded from the journal in 2018
- In the top 0.01% most cited publications relative to other publications in 2018 in the field of Neuroscience

Parkes L, Fulcher B, Yucel M, & Fornito A (2017). Transcriptional signatures of connectomic subregions of the human striatum. [Genes, Brain and Behavior](#).

- Amongst the top 20 downloaded from the journal in 2017

*Prochazkova L, ***Parkes L**, Dawson A, Youssef G, Ferreira GM, Lorenzetti V, Segrave RA, Fontenelle LF, & Yucel M (2017). Unpacking the role of self-reported compulsivity and impulsivity in obsessive-compulsive disorder. [CNS spectrums](#).

*These authors contributed equally.

Parkes L, Perry C, & Goodin P (2016). Examining the N400m in affectively negative sentences. A magnetoencephalography study. [Psychophysiology](#).

Book chapters.....

Segrave RA, Hendrikse J, & **Parkes L**, (2019). DBS, TMS and tDCS for obsessive compulsive disorder. In *A Transdiagnostic Approach to Obsessions, Compulsions and Related Phenomena*. Cambridge University Press