Fernanda Ribeiro

Curriculum Vitae

Brisbane, QLD
Australia
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Education

2018–Present	**PhD in Computational Neuroscience**, *University of Queensland*, Australia.
2016-2018	**Master's degree in Neuroscience and Cognition**, *Federal University of ABC*, Brazil.
2011-2016	**Bachelor's degree in Physical and Biomolecular Sciences**, *University of Sao Paulo*, Brazil.

Research Experience

PhD Researcher

October 2018 - Present	**Advisor: Dr. Alexander M. Puckett and Prof. Ross Cunnington**, *University of Queensland*, School of Psychology.
	Applications of geometric deep learning for neuroscience. **Skills:** deep learning; geometric deep learning; pytorch; pytorch geometric; nilearn; pandas.

MSc researcher

September 2016 - September 2018	**Advisor: Dr. Claudinei E. Biazoli and Dr. Walter H. L. Pinaya**, *Federal University of ABC*, Center for Mathematics, Computing and Cognition.
	My master's project involved the study of intra and interindividual variability in the human functional connectome. **Skills:** imaging data preprocessing; fMRI data analysis; programming with Matlab and Python.

Undergraduate researcher

September 2015 - August 2016	**Advisor: Prof. Andrei Leitao**, *University of Sao Paulo*, Institute of Chemistry of Sao Carlos.
	Proteolytic activity assays in parasites (*L. chagasi* and *L. amazonensis*) for evaluation of cysteine proteases inhibitors. **Skills:** cell culture in suspension; fluorimetric assay; data analysis.

Undergraduate researcher

October 2014 - August 2015	**Advisor: Dr. Maria Arruda and Professor Stephen Hill.**, *University of Nottingham*, Cell Signalling Research Group.
	Protocol standardization for tube formation assay and competitive binding assays using human umbilical vein endothelial cells (HUVECs). **Skills:** literature review; primary cell culture; competitive binding assays; tube formation assay; fluorescence microscopy.

Undergraduate researcher

August 2012 - June 2014	**Advisor: Prof. Andrei Leitao**, *University of Sao Paulo*, Institute of Chemistry of Sao Carlos.
	Colorimetric assays for evaluation of new substances with antitumoral potential. **Skills:** adherent cell culture; colorimetric assay; teamwork; dose-response curves.

Teaching

Teaching Assistant

Semester 2 - 2019 · **Psychological Research Methodology I (PSYCH1040)**, *University of Queensland*.
Introduction to descriptive/inferential statistics for Psychology students.

Publications

Peer-reviewed publications

2019 · Rodrigues, J.S, *Ribeiro, F.L.*, Sato, J.R., Mesquita, R.C., Biazoli, C.E., Identifying individual using fNIRS-based cortical connectomes, *Biomedical Optics Express*, 10: 2889–2897.

2019 · Quilles, J.C. Jr., Tezuka, D.Y., Lopes, C.D., *Ribeiro, F.L.*, Laughton, C., de Albuquerque, S., Montanari, C.A., Leitao, A.,, Dipeptidyl nitrile derivatives have cytostatic effects against Leishmania spp. Promastigotes, *Experimental Parasitology*, 10: 2889–2897.

Preprints

2020 · *Ribeiro, F.L.*, Bollmann, S., Puckett, A.M., Predicting brain function from anatomy using geometric deep learning, *BioRxiv*, DOI: 10.1101/2020.02.11.934471.

2018 · *Ribeiro, F.L.*, Pinaya, W.H.L., Sato, J.R., Biazoli, C.E., Unique individual factors shape brain hubs organization of the human functional connectome, *BioRxiv*, DOI: 10.1101/437335.

Book Chapters

2018 · Alves, V.S., *Ribeiro, F.L.*, Oliveira, D.R., Oliveira, F.A., Calcium Deregulation in Alzheimer's Disease, In *Cellular Mechanisms in Alzheimer's Disease*, Volume 2, pp.202–215.

Awards

2018 · *OHBM Travel Stipend Award* for the 2018 OHBM Annual Meeting in Singapore

Fellowships

October 2018 - Present · **UQ Research Training Scholarship**, *University of Queensland*.
Living allowance stipend and tuition fee offset granted by the Australian Research Council (ARC) and the University of Queensland.

February 2017 - September 2018 · **Graduate Student Research Fellowship**, *Federal University of ABC*.
Brazilian government research fellowship (CAPES) awarded through the Center for Mathematics, Computing and Cognition.

January 2016 - August 2016 · **Undergraduate Student Research Fellowship**, *University of Sao Paulo*.
Undergraduate research fellowship granted by the Sao Paulo Research Foundation (FAPESP).

July 2014 - August 2015 · **Science without Borders Scholarship,**, *University of Nottingham*.
Brazilian government scholarship (CNPq) to study at the University of Nottingham (England).

February 2017 - September 2018	**Undergraduate Student Research Fellowship**, *University of Sao Paulo*. Brazilian government research fellowship (CNPq) awarded through the Institute of Chemistry of Sao Carlos.

Conference Talks

2020	***International Society for Magnetic Resonance in Medicine***, *upcoming*, Virtual. Predicting brain function from anatomy with geometric deep learning using high-resolution MRI data
2019	***Australasian Cognitive Neuroscience Society***, *Tasmania*, Australia. Predicting brain function from anatomy using deep learning
2018	***5th BRAINN Congress***, *Campinas, Sao Paulo*, Brazil. Genetic factors influence on connectome fingerprints and functional networks

Conference Poster Presentation

2020	***Medical Imaging with Deep Learning***, *upcoming*, Virtual, "DeepRetinotopy: Predicting the Functional Organization of Human Visual Cortex from Structural MRI Data using Geometric Deep Learning". Short paper is available at https://openreview.net/forum?id=Nw$_t$rRFjPE
2020	***Organization of Human Brain Mapping***, *upcoming*, Virtual, "Predicting brain function from anatomy in humans using neuroimaging and geometric deep learning".
2018	***Organization of Human Brain Mapping***, Singapore, "Genetic Factors Influence on Connectome Fingerprints and Functional Networks".

Additional Training

2019	**The 5th Whistler Scientific Workshop**, *Noosa, Queensland*, Australia.

Languages

English	**Fluent**
Portuguese	**Native**