



RYSSA MOFFAT

POSTDOCTORAL RESEARCH FELLOW

RESEARCH SKILLS

Experimental techniques

- fNIRS • EEG • TMS
- Ultrasound tongue imaging
- Behavioural
- Semi-structured interviews

Software

- PsychoPy • OpenPose • Praat • Adobe

Programming languages

- R • Python • HTML • MATLAB

Natural languages

Fluent English, German, French
Intermediate Croatian, Finnish, Spanish

TEACHING ACTIVITIES

July 2019 - Dec 2020

Macquarie University |

Departments of Cognitive Science & Linguistics

- Delusions and Disorders of the Mind and Brain
- Introductory Phonetics and Phonology
- Introduction to Psycholinguistics
- Phonological Analysis
- Language as Evidence

COMMUNITY INVOLVEMENT

2022 | Camp Aspire

Workshop on measuring motor synchrony and for indigenous highschool students

2022 | LEAP UP University Experience Day

Introducing refugee highschool students to robotic reading companions and their research and intervention applications

2021 | Widening Participation

Reading robot buddy activities with refugee highschool students

2019 | Innovate Hear at Venture Cafe

Moderation of panel discussion on 'hearable' devices for Macquarie University Hearing Strategy

AWARDS

- 2022 | ECR Travel Award to AS4SAN
- 2019 | Student Travel Award to CIAP
- 2019 | Graduate Research Funding
- 2018-2022 | IDEALAB PhD Fellowship
- 2016-2018 | Erasmus+ Mobility Grant

RECENT TRAINING

- 2022 | Deaf Awareness Training
- 2022 | Mental Health First Aid Training
- 2022 | Supervision Masterclass
- 2022 | Foundations of Supervision
- 2021 | Manawari Cultural Safety Training

EDUCATION

2018 - 2022

PhD in Cognitive Science

Joint degree from Macquarie University, Newcastle University, Universities of Groningen & Potsdam
Thesis title : *Recognition and cortical haemodynamics of vocal emotions – an fNIRS perspective*
Advisers : Prof. David McAlpine, Prof. Deniz Baskent, Dr. Lindsey van Yper, Dr. Robert Luke

2016 - 2018

M.Sc. in Clinical Linguistics

Joint degree from Universities of Eastern Finland, Groningen & Potsdam
Thesis title : *Coarticulation as a synchronic predictor of reading dysfluency*
Advisers : Prof. Martijn Wieling, Dr. Aude Noiray

2012 - 2016

HBA, Major in German Language and Culture, Minor in Linguistics

University of Ottawa
Exchange year at University of Bonn (Oct 2014 - Oct 2015)

ACADEMIC EMPLOYMENT

Sept 2021 - present

Postdoctoral Research Fellow | School of Psychological Science, Macquarie University

Social Brain in Action (SoBA) Lab

- Interpersonal motor synchrony • Human-Robot interaction • Inhibition • fNIRS • Aesthetic appreciation

Jan - Sep 2021

Research Assistant | School of Psychological Science, Macquarie University

Social Brain in Action (SoBA) Lab

- Child-Robot interaction • Artificial agent perception • Qualitative analysis

Mar - Dec 2018

Research Assistant | Department of Linguistics, University of Potsdam

Laboratory for Oral Language Acquisition (LOLA) & BabyLAB

- Lingual coarticulation • Developmental language disorders • Ultrasound imaging • fNIRS

May - Aug 2016

Research Assistant | Department of Neurology, RWTH Aachen University Hospital

Section for Clinical Cognition Sciences & Stroke/Aphasia Units

- Language production • TMS • EEG • Electrical pharyngeal stimulation

RESEARCH OUTPUTS

Preprints

- Caruana, Moffat, Blanco & Cross. Perceptions of intelligence & sentience shape children's interactions with robot reading companions: A mixed methods study. Under review at *Scientific Reports*. [doi: 10.31234/osf.io/7t2w9](https://doi.org/10.31234/osf.io/7t2w9)
- **Moffat**, Baskent, Luke, McAlpine & van Yper. Cortical haemodynamic responses predict individual ability to recognise vocal emotions with uninformative pitch cues but do not distinguish different emotions. Under review at *Human Brain Mapping*. [doi: 10.31234/osf.io/jkvyd](https://doi.org/10.31234/osf.io/jkvyd)

Talks/ Workshops

- *Cortical correlates of inhibition when observed by synchronised vs. non-synchronised peers*. SFN, Nov 2022.
- *Exploring metabolic responses to emotional prosody with fNIRS*. Listen and Learn Workshop, Nov 2019.
- *Pilot: Processing emotional prosody in normal hearing listeners with fNIRS*. CIAP, Jul 2019.
- Workshop: *Using fNIRS to Map Auditory Cortical Function*. IERASG, Jul 2019.
- *Towards an fNIRS paradigm to map emotional prosody processing*. Sunnybrook Health Science Centre, Feb 2020.

Conference Posters

- *A welcome social presence: Attentive and responsive robot reading buddies are preferred*. AS4SAN, Jun 2022.
- *Cortical responses to vocal emotions with attenuated voice pitch variation measured with fNIRS*. sfNIRS, Oct 2021.
- *Pilot: Mapping emotional prosody in normal hearing listeners with fNIRS*. ARO, Jan 2020.
- *Pilot: Using fNIRS to explore emotional prosody perception*. SPIN Workshop, Jan 2020.