



RYSSA MOFFAT

POSTDOCTORAL RESEARCH FELLOW

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RESEARCH SKILLS

Experimental techniques

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

Software

- PsychoPy • OpenPose • Praat • Adobe

Programming languages

- R • Python • 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 LING
- 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
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
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

Peer-reviewed Articles

- Caruana, **Moffat**, Blanco & Cross. Perceptions of intelligence & sentence shape children's interactions with robot reading companions: A mixed methods study. Submitted to *Scientific Reports*.
- **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. Submitted to *Human Brain Mapping*.

Conference 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.

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.

Invited Talks

- *Towards an fNIRS paradigm to map emotional prosody processing*. Sunnybrook Health Science Centre, Feb 2020.