

Ruien Wang 王睿恩

(Updated by 07/2023)

Department of Psychology, Queen's University, Kingston, ON, Canada

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Personal website: <https://rainneuro.github.io/> Lab website: <https://anitatusche.com/>

Education

Queen's University

Ph.D. in Cognitive Neuroscience

Kingston, ON, Canada

Expected 2028

Department of Psychology

Expected 2024

M.S. in Cognitive Neuroscience

Department of Psychology

Advised by Anita Tusche

Queen's Neuroeconomics Laboratory <https://anitatusche.com/>

University of Macau

BSS in Psychology

Macau SAR, China

Aug 2018 - June 2022

Research Interests

- Social cognitive neuroscience, MVPA, emotion, computation modeling, experience sampling
- Main topics: (1) social cognition and functioning; (2) real-world social neuroscience; (3) thoughts pattern and social behavior

Research Experiences

Social cognition in laboratory and real-world contexts

Department of Psychology, QU

09/2022 -

Neural computation of personal space and its influence on dynamic social navigation (ongoing project)

Center for Cognitive and Brain Sciences, UM

12/2021 -

The multi-modal representation of negative emotion experience under virtual reality

Center for Cognitive and Brain Sciences, UM

03/2021 – 06/2022

The effect of oxytocin on modulating self-other distinction

Center for Cognitive and Brain Sciences, UM

08/2020 – 10/2021

The abnormalities of resting-state EEG microstates in probable REM sleep behavior disorder (Cooperation with West China Hospital)

Center for Cognitive and Brain Sciences, UM

08/2020 – 10/2021

The abnormal electrophysiological signatures of patients with obstructive sleep apnea syndrome (Cooperation with West China Hospital)

Center for Cognitive and Brain Sciences, UM

10/2020 – 07/2021

An EEG & Mouse tracking dataset for assessing the brain dynamic of binary choice in the human brain

Center for Cognitive and Brain Sciences, UM

08/2020 – 04/2021

The neural mechanism of motivated dishonesty
Center for Cognitive and Brain Sciences, UM

09/2020 – 04/2021

Chinese translation of the book *Computational Modeling of Cognition and Behavior*
Center for Cognitive and Brain Sciences, UM

08/2020 – 09/2021

Investigating the neural pattern of morphological constraints in reading Chinese compound word: An EEG-fNIRS fusion study

Center for Cognitive and Brain Sciences, UM

11/2019 – 05/2020

Publications

- **Wang, R.**, Yu, R., Tian, Y., & Wu, H. (2022). Individual variation in the neurophysiological representation of negative emotions in virtual reality is shaped by sociability. *NeuroImage*, 263, 119596.
- Peng, A#, **Wang, R#.**, Huang, J., Wu, H.*, & Chen, L* (2021). Abnormalities of resting-state electroencephalographic microstate in REM sleep behavior disorder. *Frontiers in Human Neuroscience*, 607. doi: <https://doi.org/10.3389/fnhum.2021.728405> (co first-author)
- Wang, Y., **Wang, R.**, & Wu, H. (2022). The role of oxytocin in modulating self-other distinction brain: a pharmacological fMRI study. *Cerebral Cortex*. bhac167, <https://doi.org/10.1093/cercor/bhac167>.
- Chen, K., **Wang, R.**, Huang, J., Gao, F., Yuan, Z., Qi, Y., & Wu, H. (2022). A resource for assessing dynamic binary choices in the adult brain using EEG and mouse-tracking. *Scientific data*, 9(1), 1-10.
- Gao, F., **Wang, R.**, Armada-da-Silva, P., Wang, M. Y., Lu, H., Leong, C., & Yuan, Z. (2022). How the brain encodes morphological constraints during Chinese word reading: An EEG-fNIRS study. *Cortex*, 154, 184-196.

Manuscripts in preparation

- Constructing optimal interaction distance by combining others' and one's own using medial frontal cortex
- Towards the “Real” or “Natural” social neuroscience: recent advances, new tools and future directions
- Dissecting social brain contributions to dishonesty adaptation and consistency considerations.

Conference Presentations

The 14th The 14th Annual Meeting of the Social & Affective Neuroscience Society (SANS)

- Poster presentation: Individual variation in neurophysiological representation of negative emotional experiences is shaped by sociability: A naturalistic neuroimaging approach **May 5th 2022**

Center for the Cognitive Science of Language, Beijing Language and Culture University **Dec 2020**

- Investigating the neural pattern of morphological constraints in reading Chinese compound words using simultaneous EEG-fNIRS recording

Invited Talks

Otto Lab, Department of Psychology, McGill University

July 2023

- Individual variation in the neurophysiological representation of negative emotions in virtual reality is

shaped by sociability

Pain Publication Round, Institute of Psychology, CAS

Sep 2022

- Individual variation in the neurophysiological representation of negative emotions in virtual reality is shaped by sociability

NCC lab & AND lab joint Workshop, University of Macau

Aug 2022

- Individual variation in the neurophysiological representation of negative emotions in virtual reality is shaped by sociability

Center for Cognitive and Brain Sciences, University of Macau

Sep 2021

- Workshop on psychophysiological data processing in *Python*
- Workshop on EEG preprocessing pipeline for MATLAB

Center for Cognitive and Brain Sciences, University of Macau

Jun 2021

- CCBS NeuroTalk: Abnormalities of resting-state electroencephalographic microstate in REM sleep behavior disorder

Skills

- **Programming:** Python, MATLAB, R, Unity (C#)
- **Data acquisition:** EEG, 3T fMRI, fNIRS, Eye-tracking, BIOPAC, Virtual-reality technique
- **Neuromodulation:** TDCS
- **Data Analysis:** EEG, fMRI, Physiological signal (ECG,SKT,EMG)
- **Language:** Chinese (native), English (proficient)

Honors & Awards

08/2022 Graduate Student Award & Teaching Assistantship (About CAD 30,000, by Queens' University)

2018-2022 Dean's Honor list (Faculty of Social Sciences, University of Macau)

Professional Experiences

Teaching assistants

Developmental social neuroscience, Cognitive Neuroscience

Department of Psychology, Queen's University

2022-2023

Memberships

Social affective neuroscience association (SANS)

2022-2023

References

Anita Tusche, Assistant Professor

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Haiyan Wu, Assistant Professor

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Centre for Cognitive and Brain Sciences, University of Macau

Wei Deng, Assistant Professor

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Department of Psychology, University of Macau

Zhen Yuan, Professor

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Faculty of Health Sciences, University of Macau

Media

- <https://ccbs.ici.um.edu.mo/ccbs-research-team-revealed-association-between-individual-variation-of-sociality-and-neurophysiological-representation-of-negative-emotions/>