

Ruien Wang 王睿恩

(Updated by 5/2026)

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

Education

Queen's University

Ph.D in Psychology

Kingston, ON, Canada

Expected 2028

Department of Psychology

M.S. in Psychology

9/2022 – 9/2024

Department of Psychology

Advised by [Anita Tusche](#)

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

University of Macau

BSS in Psychology

Macau SAR, China

8/2018 – 6/2022

Research Interests

1. Neurocomputational mechanisms of individual differences in social and affective cognitions

(A) Macroscale brain organizations and cortical gradients; (B) Multivariate neural signatures; (C) Drift diffusion model and mentalizing; (D) Experience sampling and real-world social affective functioning.

2. The role of emotion in adaptive social affective behaviors

Publications

12. **Wang, R.**, Janet, R., Morawetz, C., & Tusche, A. (2026). Emotion regulation success involves systematic gradient-based reconfigurations of large-scale activation patterns in the human brain. *PLOS Biology*, 24(4), e3003666.
11. **Wang, R.**, Bas, L. M., Janet, R., Smallwood, J., Xu, Y., Morawetz, C., & Tusche, A. (2026). Patterns of Ongoing Thought Are Associated With Emotion Regulation and Negative Affect in Daily Life. *Affective Science*, 1-19.
10. **Wang, R.**, Luo, Y., Wang, Y., Zhang, L., & Wu, H. (2026). Towards naturalistic social neuroscience: A multi-level framework integrating real-world phenotyping, neurobiology, and computational mechanisms. *Cognitive, Affective, & Behavioral Neuroscience*, 1-17.
9. Sandhu, T.#, Saju, S.#, **Wang, R.#**, Tusche, A. (2026). Prosociality and the Brain: Understanding When and Why We Help, Share, and Cooperate. Chapter in *Neuroeconomics: Core Topics and Current Directions*. Eds. Smith, D., Fareri, D. & Lockwood. Springer Nature (# Equal contribution; joint first author)
8. Xu, X. J., Yang, G., Huang, J., **Wang, R.**, & Wu, H. (2025). Unraveling the neural basis of repeated moral decisions with mouse tracking and fMRI. *Imaging Neuroscience*.

9/2022 Pain Publication Round, Institute of Psychology, Chinese Academy of Science
 [Virtual Talk] Exploring the Impact of Sociability on Neurophysiological Responses to Negative Emotions in Virtual Reality.

8/2022 Southern University of Science & Technology & University of Macau
 [Virtual Talk] Individual variation in the neurophysiological representation of negative emotions in virtual reality is shaped by sociability

5/4/2022 Social Affective Neuroscience Society (SANS) 2022
 [Poster] Individual variation in neurophysiological representation of negative emotional experiences is shaped by sociability: A naturalistic neuroimaging approach.

12/2021 Center for the Cognitive Science of Language, Beijing Language and Culture University
 [Virtual Talk] Investigating the neural pattern of morphological constraints in reading Chinese compound words using simultaneous EEG-fNIRS recording.

9/2021 Center for Cognitive and Brain Sciences, University of Macau
 [Tutorial Talk] Introduction to and tutorial on psychophysiological data processing in Python

9/2021 Center for Cognitive and Brain Sciences, University of Macau
 [Tutorial Talk] Workshop on EEG preprocessing pipeline for MATLAB

6/2021 CCBS NeuroTalk, Center for Cognitive and Brain Sciences, University of Macau
 [Talk] Abnormalities of resting-state electroencephalographic microstate in REM sleep behavior disorder.

Honors & Awards

2026 - 2028	Canada Graduate Scholarships-Doctoral (CAD 40,000 * 2 years)
2025 – 2026	Ontario Graduate Scholarship (CAD 15,000)
9/2025	Graduate Research Fellowship (CAD 25,000), Queen’s University
2024 - 2025	Ontario Graduate Scholarship (CAD 15,000)
6/2024	Graduate Research Fellowship (CAD 25,000), Queen’s University
2019-2022	Dean’s Honor list, Faculty of Social Sciences, University of Macau

Programming & Experimental 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)

- **Language:** Chinese (native), English (proficient)

Mentoring

1. Kiera Kenny (Honor thesis, Queen's University)
2. Veronika Wendler (Directed lab student, Queen's University)
3. Aryanna Rastan (Directed lab student, Queen's University)
4. Zemen Raswork (Directed lab student, Queen's University)
5. Erin Lockett (Directed lab student, Queen's University)
6. Georgia Brunicke (Research Assistant, Queen's University)
7. Kate Staatsen (Research Assistant, Queen's University)
8. Lucas Scarvelis (Research Assistant, Queen's University)
9. Maya Mhakai (Research Assistant, Queen's University)

Teaching experience

Teaching assistant

1. PSYC 325: Cognitive Neuroscience (NOMINATED FOR TA PRIZE) [Instructor: Dr. Jonnathan Smallwood]
2. PSYC 398/327: Laboratory in Decision Making (independently lead lab tutorial session) [Instructor: Dr. Anita Tusche]
3. PSYC 320: Individual Differences [Dr. Jordan Poppenk]
4. PSYC 221: Brain and Behavior [Instructor: Dr. Jordan Poppenk]
5. PSYC 350: Developmental Social Neuroscience [Instructor: Dr. Michele Morningstar]
6. PSYC 376: Functional Neuroimaging the Human Brain and Mind [Instructor: Dr. Jason Gallivan]

Guest Lecture

1. Neuroimaging Unit (PSYC 320: Individual Differences)

Professional Affiliation

- Social affective neuroscience society (SANS)
- Canadian Society for Brain, Behavior, and Cognitive Science (CSBBCS)

Involvement in Student Organizations/Service

1. Co-chair, fMRI Journal Club, Queen's University (9/2025 – 5/2026)
2. Co-chair, Cognitive Neuroscience Proseminar, Queen's University (1/2026 – 5/2026)
3. Association for Graduate Student in Psychology, Cognitive Neuroscience Area Student Representative, Queen's University (9/2022 – 9/2024)

Outreach

1. Queens NeuGeneration conference (interactive booth event at an annual conference organized by students to provide a foundational understanding of the field of neuroscience to the Queens community and public). 2/2024.
2. Head of Paint for the Musical: Jinsha - The Journey, Yu Theater, Queen's University, 9/2023 – 4/2024.
3. Head of Paint for the Musical: Song of Wafting, Yu Theater, Queen's University, 12/2024 – 4/2025.