Meng-Yun Wang
Jonas Lies vei 91,
Bergen, Norway
Phone: (047) 92070995
E-mail: mengyun.wang@uib.no
Personal website: https://bit.ly/313ik04

EMPLOYMENT

07.2020 - Present Postdoctoral Researcher *(PI. Prof. Karsten Specht)*
Faculty of Psychology; MMIV
University of Bergen (UiB), Bergen, Norway

10.2022 - 01.2023 Visiting Researcher *(PI. Prof. Thomas Yeo)*
Yong Loo Lin School of Medicine
National University of Singapore (NUS), Singapore

09.2019 - 06.2020 Research Assistant
Faculty of Health Sciences; CCBS
University of Macau (UM), Macau SAR, China

05.2012 - 08.2012 **&**
08.2015 - 12.2015 Research Assistant
Faculty of Psychology
Southwest University (SWU), Chong Qing, China

EDUCATION

01.2016 - 07.2019 Ph.D., Cognitive Neuroscience *(PI. Prof. Zhen Yuan)*
Faculty of Health Sciences
University of Macau (UM), Macau SAR, China

09.2012 - 07.2015 M.Ed., Psychology
Faculty of Psychology
Southwest University (SWU), Chong Qing, China

09.2007 - 07.2011 B.S., Psychology
Qiqihar University, Hei Long Jiang, China

RESEARCH INTERESTS

Precision Human Brain Mapping

Naturalistic Neuroimaging

Human Brain Development

Brain Patterns of Mental Disorders

SKILLS & KNOWLEDGE

Software: EEGlab; SPSS; E-prime; HOMER; BCT; SPM; FSL; Freesurfer; nilearn

Programming: MATLAB; Python; Shell scripting; R

Skills: Neuroimaging (M/EEG, fNIRS, f/MRI) data collection and analysis; Experimental design and methodology; Project management and implementation

Languages: Chinese (native); English (fluent); Norwegian (intermediate)

PUBLICATIONS (*Corresponding author)

Refereed articles:

The full publication list can be retrieved through my **Google Scholar** or **ResearchGate** or **ORCiD** pages. Scripts used in my publications can be found on my **GitHub** page.

Below is a list of selected publications, on which I served as the first-author or co-first-author, generated from the projects I have contributed to:

Project 4: The Intra-sub Reliability of MRI Measurements on Human Brains
Goals: This project aims to assess the intra-subject reliability of MRI measurements. Prior studies, limited by only a few data points per subject, have failed to accurately chart the precision of MRI measurements for individuals. To address this limitation and achieve our objective, we acquired the Bergen Breakfast Scanning Club (BBSC) deep brain imaging dataset, involving repeated scans of three subjects over a one-year period. Our focus is to examine the reliability of MRI measurements within each subject using this dataset.

Timeline: 2021 – present

Funding: Research Council of Norway

Roles: Conceptualisation; Experiment design; Data collection; Data curation and analysis; Manuscript drafting; Manuscript submission and revision

Related work:

Wang, M-Y. *, Korbmacher, M., Eikeland R., Specht K. * (in prep). The reliability of different diffusion models on quantifying white matter of the same brain structure across one year.

Wang, M-Y. *, Korbmacher, M., Eikeland R., Specht K. * (in prep). The intra-individual reliability of T1w and T1w/T2w ratio measurement across one year.

Wang, M-Y. *, Korbmacher, M., Eikeland R., Specht K. * (in prep). The long night effect on the brain organization. (The manuscript is underway, but see our poster for this)

Wang, M-Y. *, Korbmacher, M., Eikeland R., Craven A. R., Specht K. * (in press). The intra-individual reliability of 1H-MRS measurement in the anterior cingulate cortex across one year. ***Human Brain Mapping***

Wang, M-Y. *, Korbmacher, M., Eikeland R., Specht K. * (2023). The Bergen Breakfast

Scanning Club dataset: a deep brain imaging dataset. ***bioRxiv***, 2023.05.30.542072. doi: https://doi.org/10.1101/2023.05.30.542072

Wang, M-Y. *, Korbmacher, M., Eikeland R., Specht K. * (2022). Deep brain imaging of three participants across 1 year: The Bergen Breakfast Scanning Club project. ***Frontiers in human neuroscience***, 16, 1021503.

Project 3: Naturalistic Neuroimaging

Goals: This project aims to investigate brain activations in realistic or lifelike settings, as opposed to controlled laboratory environments. To achieve this, we employ naturalistic stimuli (such as dynamic faces, and movies) and naturalistic settings (such as hyperscanning, where multiple subjects interact while their brain activity is simultaneously recorded).

Timeline: 2018 – present

Funding: University of Macau; Science and Technology Development Fund (Macau)

Roles: Conceptualisation; Experiment design; Data collection; Data curation and analysis; Manuscript drafting; Manuscript submission and revision

Related work:

Wang, M-Y., & Yuan, Z.* (2021). EEG Decoding of Dynamic Facial Expressions of Emotion: Evidence from SSVEP and Causal Cortical Network Dynamics. ***Neuroscience***, 459, 50-58.

Wang, M-Y., Luan, P., Zhang, J., Xiang, Y. T., Niu, H., & Yuan, Z.* (2018). Concurrent mapping of brain activation from multiple subjects during social interaction by hyperscanning: a mini-review. ***Quantitative Imaging in Medicine and Surgery***, 8(8), 819-837.

Wang, M-Y./He, Y. (co-first), Li, D. *, & Yuan, Z. * (2017). Optical mapping of brain activity underlying translation asymmetry during Chinese/English sight translation. ***Biomedical Optics Express***, 8(12), 5399-5411.

Project 2: Applications of fNIRS in Cognitive Neuroscience

Goals: While EEG and fMRI have been widely used in cognitive neuroscience, the application of fNIRS in this field is still in its early stages. Therefore, we seek to explore the potential of fNIRS in addressing inquiries in cognitive neuroscience.

Timeline: 2016 – 2020

Funding: University of Macau; Science and Technology Development Fund (Macau)

Roles: Conceptualisation; Experiment design; Data collection; Data curation and analysis; Manuscript drafting; Manuscript submission and revision

Related work:

Wang, M-Y., Yuan, A., Zhang, J., Xiang, Y., & Yuan, Z.* (2020). fNIRS can detect low-frequency hemodynamic oscillations in the prefrontal cortex during SSVEP-inducing periodic facial expression stimuli presentation. ***Visual Computing for Industry, Biomedicine, and Art***, 3(1), 1-8.

Wang, M-Y., Lu, F. M., Hu, Z., Zhang, J., & Yuan, Z.* (2018). Optical mapping of

prefrontal brain connectivity and activation during emotion anticipation. ***Behavioural Brain Research***, 350, 122-128.

Wang, M-Y., Zhang, J., Lu, F. M., Xiang, Y. T., & Yuan, Z.* (2018). Neuroticism and conscientiousness respectively positively and negatively correlated with the network characteristic path length in the dorsolateral prefrontal cortex: A resting‐state fNIRS study. ***Brain and Behavior***, e01074.

Project 1: Cognitive Deficit in OCD Patients

Goals: In this project, we investigated the cognitive deficits present in individuals with OCD or subclinical OCD symptoms. Our findings indicate that OCD patients exhibit excessive avoidance of OCD-related stimuli, providing experimental evidence for the efficacy of exposure therapy in treating OCD.

Timeline: 2012 – 2015

Funding: National Natural Science Foundation of China

Roles: Conceptualisation; Experiment design; Data collection; Data curation and analysis; Manuscript drafting; Manuscript submission and revision

Related work:

Wang, M-Y./Zhang, Z-M. (co-first), Guo X., Miao, X., Zhang, T., Gao, D., & Yuan, Z.* (2017). Attentional avoidance of threats in obsessive-compulsive disorder: an event-related potential study. ***Behaviour Research and Therapy***, 97, 96-104.

Wang, M-Y./Zhang, Z-M. (co-first), Miao, X., Li, Y., Hitchman, G., & Yuan, Z.* (2017). Individuals with high obsessive-compulsive tendencies or undermined confidence rely more on external proxies to access their internal states. ***Journal of Behavior Therapy and Experimental Psychiatry***, 54, 263-269.

Books:

Associate Editor:

1. **Wang, M.-Y.**, Miao, X., Li. Y., Peng Y., Zhang, Z.-M., (Eds.) (2013). A handbook for left-behind children: How to maintain positive emotions. Chongqing, China: Southwest Normal University Press (*In Chinese*)

Chapters:

1. Vaisvilaite, L., **Wang, M.-Y.,** Andersson, M., & Specht, K. (2023). The Effect of Exogenous and Endogenous Parameters on Group Resting-State Effective Connectivity and BOLD Signal. In: Stoyanov, D., Draganski, B., Brambilla, P., Lamm, C. (eds) Computational Neuroscience. Neuromethods, vol 199. Humana, New York, NY. https://doi.org/10.1007/978-1-0716-3230-7_13

Conference poster presentations (selected):

5. **Wang, M.-Y.**, Korbmacher, M., Eikeland, R., Specht K., (2023, Jul.). The long night effect on the brain organization. In the ***OHBM 2023 Annual Meeting*** (poster 861). Organization for Human Brain Mapping.

4. **Wang, M.-Y.**, Korbmacher, M., Eikeland, R., Specht K., (2021, Dec.). Precision Brain Mapping: BBSC project. In the ***4th MMIV Conference*** (poster 120).

3. **Wang, M.-Y.**, Yuan, Z., (2018, Jun.). An fNIRS study on the relationship between personality traits and small-world properties in dlPFC. In the ***OHBM 2018 Annual Meeting*** (poster 1962). Organization for Human Brain Mapping.

2. Yuan, Z., **Wang, M.-Y.**, He, Y., & Li, D. (2017, Nov.). The difference in brain activation patterns during Chinese/English Translation: A pilot functional near-infrared spectroscopy study. In ***Asia Communications and Photonics Conference*** (pp. M1I-2). Optical Society of America.

1. **Wang, M.-Y.**, Zhang Z-M., & Yuan, Z. (2017, Jan.). Neutral time course of emotional Stroop task in Obsessive-Compulsive disorder. In ***The 10th International Conference on Computational Physics***.

Newspaper articles:

1. **Wang, M.-Y.**, Dette lærte jeg da jeg strøk på førerprøven. ***Bergens Tidende***, 14. august 2022 (*In Norwegian*)

FUNDING & AWARDS

Funding

09. 2022 Research Mobility Grant, Research Council of Norway (NFR)

2020-2023 Postdoctoral Research Fellow, Research Council of Norway (NFR)

Research Initiative Pursuits (Not awarded)

2023 '*The Individual-level Brain Mapping Project* ' << from Project 4
TMS Starting Grant, Trond Mohn Foundation

2023 '*Unveiling Brain Coupling during Social Interaction'*. << from Project 3
Young Talents, Research Council of Norway (NFR)

2022 '*The outcome of long COVID exerting on the brain'*.
Young Talents, Research Council of Norway (NFR)

2022 '*Neurofeedback guided Music Therapy for Parkinson's Patients',*
UiB idé, University of Bergen (UiB)

Honors/Awards/Scholarship

02. 2023 Credibility in Neuroscience Team Award
The British Neuroscience Association

2016-2019 Ph.D. Assistantship, University of Macau

2013-2014 Honor of Excellent Graduate Student of Southwest University

2012-2013 Honor of Excellent Graduate Student of Southwest University

2009-2010 University first-class scholarship, Qiqihar University

2008-2009 University second-class scholarship, Qiqihar University

TEACHING/SUPERVISION

Lectures

2023- External examiner for course RAD230, Medisinsk bildebehandling, kunstig intelligens og innovasjon i radiografi, HVL, Norway

2023 IGSIN911 23H / Functional Neuroimaging, IBMP, UiB, Norway

2023 PSYK250 23V Bacheloroppgåve i generell psykologi, UiB, Norway

2022 IGSIN911 22H / Functional Neuroimaging, IBMP, UiB, Norway

2019 HSCI3000 Cognitive Neuroscience, Faculty of Health Sciences, UM
Introduction to EEG (ERPs) and hands-on: how to record and analyze EEG data

2024 Certificate for University Teaching, UiB

2022-23 I have completed the following courses (UPED600, UPED601, UPED602; UPED652, UPED675, UPED683, UPED691) of the Program for University Pedagogy, UiB

Invited Talks (selected)

05.2023 fNIRS workshop, OsloMet, Oslo, Norway

03.2023 MMIV seminar, Haukeland University Hospital, Bergen, Norway

02.2023 Forskningsmøte, IBMP, University of Bergen, Bergen, Norway

11.2021 Fakultetets forskningsdag, University of Bergen, Bergen, Norway

08.2021 Centre for Cognitive and Brain Sciences, University of Macau, China

02.2021 MMIV seminar, Haukeland University Hospital, Bergen, Norway

Co/Supervision

Ada Kårem Vestengen	Undergraduate Student	University of Bergen	2023
Tone Alise Dagsvik	Undergraduate Student	University of Bergen	2023
Yin Zhuang	Undergraduate student	University of Macau	2019
Keng-Fong Lam	Undergraduate student	University of Macau	2018

Sisi Hu	Master student	Southwest University	2015
Ling Xiong	Master student	Southwest University	2015

PROFESSIONAL SERVICE

Editorial Service

Review Editor Frontiers in Human Neuroscience

Ad hoc Reviewer Behavior Brain Research; Biological Psychology; Behavior Research Therapy; Brain and Behavior; Neuroscience; Imaging Neuroscience; Neural Plasticity; Frontiers in Psychiatry

Guest Associate Editor *Variability and Reproducibility of Brain Imaging* Frontiers in Psychology

Affiliations and memberships

2023- The Society for fNIRS Norway

2022- Digital Life Norway

2021- ALBA Network (towards diversity and equity in brain sciences)

2018- Organization for Human Brain Mapping (OHBM)

Open Science

2022- #EEGManyLabs Project

2021- EEGManyPipelines Project

Meeting Organization

2024 Abstract Reviewer 2024 OHBM Meeting, Seoul, Korea

2023 Local Organizer 2023 ExploreDTI workshop, Bergen, Norway

2023 Abstract Reviewer 2023 OHBM Meeting, Montreal, Canada

2022 Abstract Reviewer 2022 fNIRS Meeting, Boston, USA

2020 Poster Committee The 3rd MMIV Conference, Bergen, Norway

Conference/Seminar

The 6th MMIV Conference, Dec. 2023, Bergen, Norway

MMIV Research School in Artificial Intelligence Methods in Medical Imaging, Sep. 2023, Tromsø, Norway

The 7th Conference of Digital Life Norway Research School, Sep. 2023, Os, Norway

fNIRS technical workshop, May 2023, OsloMet, Oslo, Norway

OHBM 2022 Annual Meeting, Jun. 2022, Glasgow, UK

The 4th MMIV Conference, Dec. 2021, Bergen, Norway

Faculty Research Day, Faculty of Psychology, Nov. 2021, Bergen, Norway

OHBM 2021 Annual Meeting, Jun. 2021, Online

Brain Connectivity Workshop (BCW), May 2021, Online

BNA Festive Symposium 2020, Dec. 2020, London(online), UK

The 3rd MMIV Conference, Dec. 2020, Bergen, Norway

The 6th Macau Symposium on Biomedical Sciences, Jun. 2019, Macau, China

The 1st Macau-Mainland Symposium on Biophotonics, May 2018, Macau, China

The 5th Macau Symposium on Biomedical Sciences, Jun. 2018, Macau, China

OHBM 2018 Annual Meeting, Jun. 2018, Singapore

The 4th Macau Symposium on Biomedical Sciences, Jun. 2017, Macau, China

The 10th International Conference on Computational Physics, Jan. 2017, Macau, China

The 3rd Macau Symposium on Biomedical Sciences, May. 2016, Macau, China

References

Professor Karsten Specht
Position: Deputy Dean (Research)
Relation: Postdoc Supervisor
Tel: (047) 5558-6279
Email: karsten.specht[at]uib.no
Affiliation: Faculty of Psychology, University of Bergen

Professor Zhen Yuan
Position: Head of Centre for Cognitive and Brain Sciences
Relation: PhD Main Supervisor
Tel: (853) 8822-4989
Email: zhenyuan[at]um.edu.mo
Affiliation: Faculty of Health Sciences, University of Macau