

MENGXIA GAO

Cognitive neuroscience / Prediction / Machine learning

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EDUCATION

Ph.D. Candidate, The University of Hong Kong, Hong Kong 09/2017 – 08/2021

Cognitive neuroscience, Department of Psychology

- **Supervisor:** Prof. Tatia Mei-Chun Lee
- **Research interests:** machine learning, brain imaging prediction, cognitive function, aging

M.E., South China Normal University, Guangzhou 09/2014 – 06/2017

Developmental and Educational Psychology, School of Psychology

- **Supervisors:** Prof. Ming Liu, Prof. Ruiwang Huang
- **Research interests:** visual mental imagery, resting-state fMRI, task-fMRI

B.S., South China Normal University, Guangzhou 09/2010 – 06/2014

Applied Psychology, School of Psychology

- **Supervisor:** Prof. Xifu Zheng
- **Research interests:** fear emotion, conditioned fear acquisition

RESEARCH

Research Assistant, The Chinese University of Hong Kong, Hong Kong 12/2016 – 06/2017

Department of Psychology

- **Supervisor:** Prof. Chun-Yu Tse
- **Research interests:** visual mismatch negativity, EEG

PEER-REVIEWED PUBLICATIONS

- [1] Bielczyk NZ, Ando A, Badhwar A, Caldinelli C, **Gao M**, Haugg A, Hernandez LM, Ito KL, Kessler D, ..., Lurie D. (2020). Effective self-management for early career researchers in the natural and life sciences. *Neuron*, 106(2), 212-217.
- [2] Shao R, Liu H-L, Huang C-M, Chen Y-L, **Gao M**, Lee S-H, Lin C, Lee TM. (2019). Loneliness and depression dissociated on parietal-centered networks in cognitive and resting states. *Psychological Medicine*, 1-11.
- [3] Zhang D, Gao Z, Liang B, Li J, Cai Y, Wang Z, **Gao M**, Jiao B, Huang R, Liu M. (2019). Eyes Closed Elevates Brain Intrinsic Activity of Sensory Dominance Networks: A Classifier Discrimination Analysis. *Brain connectivity*, 9(2), 221-230.
- [4] Cai Y, Zhang D, Liang B, Wang Z, Li J, Gao Z, **Gao M**, Chang S, Jiao B, Huang R. (2018). Relation of visual creative imagery manipulation to resting-state brain oscillations. *Brain imaging and behavior*, 12(1), 258-273.
- [5] **Gao M**, Zhang D, Wang Z, Liang B, Cai Y, Gao Z, Li J, Chang S, Jiao B, Huang R. (2017). Mental rotation task specifically modulates functional connectivity strength of intrinsic brain activity in low frequency domains: a maximum uncertainty linear discriminant analysis. *Behavioural brain research*, 320, 233-243.
- [6] Gao Z, Zhang D, Liang A, Liang B, Wang Z, Cai Y, Li J, **Gao M**, Liu X, Chang S. (2017). Exploring the associations between intrinsic brain connectivity and creative ability using functional connectivity strength and connectome analysis. *Brain connectivity*, 7(9), 590-601.
- [7] Jiao B, Zhang D, Liang A, Liang B, Wang Z, Li J, Cai Y, **Gao M**, Gao Z, Chang S. (2017). Association between resting-state brain network topological organization and creative ability: Evidence from a multiple linear regression model. *Biological psychology*, 129, 165-177.
- [8] Li J, Zhang D, Liang A, Liang B, Wang Z, Cai Y, **Gao M**, Gao Z, Chang S, Jiao B. (2017). High transition frequencies of dynamic functional connectivity states in the creative brain. *Scientific reports*, 7, 46072.
- [9] Sun H, Sun H, **Gao M**, Li X, Guo Z, Zhang Z, Fan X, Zhang C. (2016). Simulation investigation of dual-wavelength tuning of light emitting diodes with single QW structure. *Optical and Quantum Electronics*, 48(3), 177.

CONFERENCE *(selected; first author only)*

- 2020 **Gao M**, Wong CH, Lee TM. Connectome-based predictions of processing speed in aging population. Annual Meeting of the Organization for Human Brain Mapping, Online Virtual Meeting (Poster)
- 2019 **Gao M**, Shao R, Lee TM. The dorsal cingulum white-matter integrity predicts both loneliness and resilience in older adults. Annual Meeting of the Organization for Human Brain Mapping, Rome, Italy (Poster)
- 2018 **Gao M**, Lee TM. Interaction between sensorimotor and dorsal attention network is positively associated with processing speed in healthy aging people. Sixth Biennial Conference on Resting State and Brain Connectivity, Montreal, Canada (Abstract accepted)
- 2016 **Gao M**, Huang R, Liu M. Mental rotation task modulates degree centrality of rest brain network using MLDA method. Annual Meeting of the Organization for Human Brain Mapping, Geneva, Switzerland (Abstract accepted)
- 2015 **Gao M**, Huang R, Liu M. Mental rotation increases efficiency of brain networks: an fMRI study. Annual Meeting of the Organization for Human Brain Mapping, Honolulu, HI, USA (Abstract accepted)

AD HOC MANUSCRIPT REVIEW

Brain Connectivity

TEACHING

- | | |
|-------------------|---|
| 01/2019 – 05/2019 | Teaching Assistant, PSYC2051, Perception |
| 09/2018 – 12/2018 | Teaching Assistant, PSYC2022, Biological Psychology |
| 01/2018 – 05/2018 | Teaching Assistant, PSYC2022, Biological Psychology |

AWARDS AND SCHOLARSHIPS

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| 2017 – 2021 | Postgraduate Scholarship |
| 2014 – 2017 | Graduate Academic Scholarship |
| 2013 | Second-class Scholarship for Outstanding Students |
| 2011 – 2014 | Outstanding Student Leader Awards |
| 2011 | Excellent Volunteer of the Guangzhou 2010 Asian Paralympic Games |

LEADERSHIP

- 2019 – 2020 Chair of the [Organization for Human Brain Mapping](#) (OHBM), [Student and Postdoc Special Interest Group](#)
- 2018 – 2019 Chair-elect of the Organization for Human Brain Mapping (OHBM), Student

and Postdoc Special Interest Group

2018 – 2020 Team leader of the HKU Graduate House Children Social Service Program

2012 – 2013 Team leader of the Guangzhou New Oriental Summer Camp

2011 – 2012 Vice-Minister of Human Resources in South China Normal University Associations

SKILLS

Technical Skills: Brain functional and structural imaging analyses

Programming: MATLAB (proficient), R (intermediate), Python (intermediate)

Languages: Mandarin (proficient), English (proficient), Cantonese (fluent)