
Jinglei Lv

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Address: 94 Mallett Street, Camperdown NSW.

Current Position

2020-Present: **Senior Lecturer**, School of Biomedical Engineering & Brain and Mind Centre, The University of Sydney, Sydney.

Mentor: Prof. Fernando Calamante.

Previous Positions

2018-2020: **Senior Research Fellow** (Funded by NHMRC), Melbourne Neuropsychiatry Center, Department of Psychiatry & Department of Biomedical Engineering, The University of Melbourne, Melbourne.

Mentor: Prof. Andrew Zalesky.

2016-2018: **Research Officer** (Funded by NHMRC), Translational Neuroscience Group, QIMR Berghofer Medical Research Institute, Brisbane.

Mentor: Prof. Michael Breakspear & Dr. Christine Guo.

2011-2016: **Research Assistant** (Funded by NSF and NIH), Department of Computer Science, University of Georgia, Georgia, USA (during PhD).

Mentor: Distinguished Research Prof. Tianming Liu.

Academic Qualifications

2016: **PhD in Engineering** (Focusing on neuroimaging), Joint PhD Program from Northwestern Polytechnical University, China & The University of Georgia, USA.

Mentor: Prof. Lei Guo & Distinguished Research Prof. Tianming Liu.

2011: **Master of Philosophy in Engineering** (Focusing on neuroimaging), Northwestern Polytechnical University.

Mentor: Prof. Lei Guo.

2008: **Bachelor of Science** (Majored in control science), Northwestern Polytechnical University.

Honours

2023-Present: Leadership Group Member of Sydney Clinical Imaging Network, University of Sydney

- 2024-Present: Research Committee member of School of Biomedical Engineering, University of Sydney.
- 2020-Present: ICT Director (leadership role) of School of Biomedical Engineering, University of Sydney.
- 2023-Present: Member of Digital Science Initiative, University of Sydney
- 2023-Present: Core member of Brain and Mind Centre Alzheimer's and Neurodegenerative Disease Team
- 2020-Present: Core member of Brain and Mind Centre Computational Neuroimaging team
- 2022-Present: Core member of Brain and Mind Centre Neurotherapeutic Innovation
- 2018-2020: ECR steering committee member of Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne.

Awards

- 2024: Top 10% most downloaded article of *Magnetic Resonance in Medicine*.
- 2022: Best preprint award of Organization of Human Brain Mapping – Australia Chapter.
- 2020: Brain and Mind Centre Impact and Excellence Award, University of Sydney.
- 2018: Outstanding Doctor Degree Dissertation Award (CNY ¥ 5,000) of Shaanxi Province, China.
- 2015: “Holistic Atlases of Functional Networks and Interactions Reveal Reciprocal Organizational Architecture of Human Brain” is selected as a cover page paper, feature story and the monthly highlight of April 2015 by IEEE Transaction on Biomedical Engineering.
- 2013: Trainee Travel Award for the Organization of Human Brain Mapping (OHBM) 2013 Meeting (USD \$800).
- 2012: Outstanding Master of Philosophy Dissertation Award (CNY ¥ 2,000) of Shaanxi Province, China.
- 2009: My “3D virtual campus visualization and interaction system” won the second prize in the competition of science and technology for graduate students at Northwestern Polytechnical University.

Research Funding (In total > AUD \$ 1 million)

- 2024-2026: *Developing novel tractography-guided MRI methods for studying healthy brain ageing.* Australian Research Council Discovery Project (ARC-DP) (CIB, \$469,263).
CIs: Prof. Fernando Calamante, [Dr Jinglei Lv](#), Prof. Sharon Nasmith (FS).
- 2023-2025: *Reliable Measurement of Cortico-subcortical Functional Connectivity of Human Brain with 7T MRI*
USYD-Fudan Brain and Intelligence Science Alliance Flagship Research Program (BISA-FRP) (CIA, \$400,000).
CIs: [Dr Jinglei Lv](#), Dr Zhensen Chen (Fudan Uni).
- 2022-2024: *Advanced neuroimaging techniques to refine the phenotype of Schizophrenia in the early stage.*

Moyira Elizabeth Vine Fund for Research into Schizophrenia Program (CIA, \$100,000).
CIs: Dr Jinglei Lv, A/Prof Mayuresh Korgaonkar (FMH), Prof. Fernando Calamante, Prof Anthony Harris (FMH)

2022-2024: *A novel method to understand the functional role of axonal pathways for the healthy and disordered.*

Brain and Mind Centre Research Development Grant (Sole-CI, \$20,000)

2022-2023: Brain and Mind Centre Early and Mid-Career Research Travel Grant (\$2,500)

2019-2020: *Measure Reliable Cortico-Striatal functional Connectivity for Psychiatry Research*

Early Career Research Grants of University of Melbourne (Sole-CI, \$40,000).

2019-2020: *Modelling the hierarchy of functional connectivity in human brain for psychiatry research*

Dyason Fellowship - University of Melbourne (Sole-CI, \$5000 for global collaboration).

2011-2016: *Understanding the functional architecture of human brain*

Doctorate Foundation of Northwestern Polytechnical University (Sole-CI, RMB100,000).

2012: Academic Award for Excellent PhD Candidates funded by the Ministry of Education of China. (Sole-CI, RMB 50,000 Award for academic research).

Submitted Grant Proposals (Pending announcement)

2024: *Personalised Digital Twin of Human Brain (Brain-PDT) with Non-invasive Neuroimaging: Towards Better Understanding of Brain Disorders*

AI & Val Rosenstrauss Fellowship 2025 (\$1M, 5-Year, Sole CI).

2024: *Towards Precision Medicine in Dementia: Leveraging Advanced Neuroimaging Methods to Address the Neurobiological Heterogeneity.*

NHMRC Investigator Grant 2026 (\$1.6M, 5-Year, Sole CI).

2024: *A randomised controlled trial of repetitive Transcranial Magnetic Stimulation targeting depression for autistic young people*

MRFF International Clinical Trial Collaborations 2024 Round 1 (\$1.2M, 4-Year, CI).

CIs: Prof Adam Guastella (FMH), Dr Kelsie Boulton (FMH), Prof Ian Hickie (FMH), Prof Nicholas Glozier (FMH), Dr Jinglei Lv, Dr Stephanie Ameis (Toronto Uni), Dr Daniel Blumberger (Toronto Uni), Dr Vicki Gibbs, Prof Peter Enticott (Deakin), Asst Prof Colin Hawco (Toronto Uni).

Selected Project Experience and Roles

P1. US NSF IIS-1149260: Discover common human brain architecture (2010-2015)

Role: Exploring functional correspondence of DICCCOL-A joint DTI and fMRI analysis.
Supervisor: Prof Tianming Liu.

P2. US NSF BCS-1439051: Reciprocal Organizational Architecture of Human Brain Function (2014-2016)

Role: Developing sparse-coding based methods to model the functional brain networks with fMRI.

Supervisor: Prof Tianming Liu.

P3. NHMRC APP1095227-Prospective Imaging Study of Ageing (PISA): Genes, Brain, and Behavior (2016-2018)

Role: fMRI Task Paradigm Design; Multiband fMRI protocol design and quality control; Data preprocessing and analysis.

Supervisor: Prof Michael Breakspear & Christine Guo.

P4. Advanced Queensland Innovation Partnerships: Commercialize Multi-modal Imaging and Stimulation for Fractional Epilepsy. (2016-2018)

Role: Developing simultaneous EEG-fMRI protocols and analyzing methods.

Supervisor: Prof Michael Breakspear & Christine Guo.

P5. Exploring the Appetite Change in Motor Neuron Disease with Advanced MRI (2018)

Role: fMRI Task Paradigm Design; Multiband fMRI protocol design and quality control; Data preprocessing and analysis.

Collaborator: A/Prof Frederik Steyn.

P6. Subtyping Schizophrenia with Genetic and Imaging biomarker (2018-2020)

Role: Develop data analyzing methods to model the heterogeneity of brain structure change in Schizophrenia.

Supervisor: Prof Andrew Zalesky.

P7. Personalized TMS for Psychiatric Disorders Based on Functional Connectivity (2018-2020)

Role: Develop advanced imaging method and data analyzing method to guide TMS treatment based on functional connectivity.

Collaborator: Dr Robin Cash.

P8. FOD-Net: DWI Fiber orientation distribution enhancement with deep learning (2020-2021)

Role: Co-supervise postdoc Dr Rui Zeng to develop CNN to enhance DWI data.

Collaborator: Prof. Michael Barnett, Dr Tim Wang.

P9: Develop a tissue unbiased multimodal human brain template (2020-now)

Role: Method development and analysis.

Collaborator: Prof. Fernando Calamante.

P10: Improve the fixel based analysis for motor neuron disease with multimodal brain template (2020-now)

Role: Method development.

Collaborator: Dr Sicong Tu & Prof Fernando Calamante.

P11: Track-weighted dynamic functional connectivity for Frontal Temporal Dementia (2020-now).

Role: Method development and fMRI analysis of the research.

Collaborator: Dr Ramón Landin-Romero & Prof Fernando Calamante.

Selected International Invited Talks

- 2024: “Neuroimaging Research on Brain Structure and Function: Towards Cutting-Edge Neuroscience and Precision Medicine”, China.
- 2024: “Characterize Individual Brain Structure Change of Schizophrenia with Normative Model”, invited talk at Nanjing Medical University, China.
- 2024: “Multimodal Neuroimaging to Understand Brain Function”, Sydney Clinical Imaging Network Summit, Sydney, Australia.
- 2023: “Improving the measurement of subcortical-cortical connectivity with 7T MRI” at Sydney - Fudan Brain and Intelligence Science Alliance Workshop, Sydney.
- 2022: “Characterize Gray and White Matter Changes of Schizophrenia with Normative Model” – International keynote talk - Annual Conference of Radiologists in Hunan Province, China, 2022.
- 2022: “A Tissue Unbiased Multimodal Brain Template Built with the Human Connectome Dataset” at Sydney - Fudan Brain and Intelligence Science Alliance Online Workshop.
- 2021: “Individual deviations from normative models of brain structure in a large cross-sectional schizophrenia cohort” at Sydney - Fudan Brain and Intelligence Science Alliance Online Workshop.
- 2019: “Virtual Nodes for Brain Connectivity” Seminar talk in Department of Psychiatry, University of Melbourne.
- 2018: “Neuroimaging for Mental Health Research”, Invited talk in the Department of Computer Science, Northwestern Polytechnical University, Xi’an, China.
- 2015: “Mapping the human brain”, invited talk in Nankai University, China.

Selected International Conference Presentations

Oral presentation:

- 2023: “Mapping the Functional Role of White Matter”, ISMRM Australia&New Zealand Chapter.
- 2022: “Multimodal Brain Template for Brain Mapping”, OHBM Australian Chapter.
- 2017: “N-way Decomposition: Towards Linking Concurrent EEG and fMRI Analysis During Natural Stimulus”, oral presentation in MICCAI 2017, Quebec City, Ca, September 2017.
- 2014: “Group-wise connection activation detection based on DICCCOL”, oral presentation on International Symposium on Biomedical Imaging (ISBI), Beijing, China, April 2014.
- 2013: “Modeling cognitive processes via multi-stage consistent functional response detection”. Oral presentation in MICCAI, Nagoya, Japan, September 2013.

Poster presentation:

OHBM 2013, 2019-2020, 2023; MICCAI 2011-2017, 2020; ISMRM 2020-2024.

Leadership And Service

Journal Editor

- 2022-Present: Associate Editor in *Frontiers in Neuroscience*.
- 2022-Present: Editorial Board member of *Meta-Radiology*.

Organize and edit special issues on Frontier in Neuroscience:

- 2023-Present: Innovative Machine Learning Methods for Functional Connectivity Networks' Reconstruction
- 2023-Present: Digital Assessment and Intervention for Children and Adolescents with Neurodevelopmental Disorder
- 2022-Present: Multi-Dimensional Characterization of Neuropsychiatric Disorders.
- 2021-Present: Current Advances in Multimodal Human Brain Imaging and Analysis Across the Lifespan: From Mapping to State Prediction.
- 2021-Present: Computational Modeling Methods for Naturalistic Neuroimaging Data.

Conference/Workshop Program Committee (PC) & Organizer:

- 2024: Organizer of the 1st International Workshop on Multimedia Computing for Health and Medicine, ACM Multimedia 2024.
- 2019-Present: PC of International Workshop on Multiscale Multimodal Medical Imaging.
- 2022: Asia-Pacific Chair of Organize and supervise the Organization for Human Brain Mapping Brain Hack.
- 2021: PC of the "Deep generative models for MICCAI Workshop".
- 2021: PC of ML-CDS: Multimodal Learning and Fusion Across Scales for Clinical Decision Support.
- 2020: Supervisor of Organize and supervise the Organization for Human Brain Mapping Brain Hack.
- 2015: PC of The IEEE International Conference on Progress in Informatics and Computing.

Organizing Other Events:

- 2020-Present: Organize the Neuroimage Journal Club at the Brain and Mind Centre, USyd.
- 2021: Organize the NVIDIA-University of Sydney joint workshop.
- 2019: Organize the mini-research day of System Neuroscience Group (University of Melbourne).
- 2017: Teaching session about fMRI preprocessing in Translational Neuroscience Group (QIMR Berghofer Medical Research Institute).

Journal Reviewer:

Biological Psychiatry; Neuroimage; Neuroimage Clinical; Psychological Medicine; Journal of Neuroscience Methods; Brain Imaging and Behavior; Cerebral Cortex; Brain Topography; IEEE TMI; Medical Image Analysis; Frontiers in Neuroscience.

Conference Reviewer:

Organization for Human Brain Mapping, Annual Conference. (2018-2021).
International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI) (2015-2021).
The International Society for Magnetic Resonance in Medicine (ISMRM) (2020-2022)
International Symposium on Biomedical Imaging (ISBI) (2015-2019).

Grant Reviewer:

Australia Research Council, UKRI, Swiss National Science Foundation.

Industry Collaboration:

2024-Present: Kinosis Therapeutics.
2024-Present: The Kolling Institute.
2020-Present: Westmead Institute of Medical Research & Westmead Hospital.
2020-Present: Sydney Neuroimaging Analysis Centre.
2021-Present: Omniscient Neurotechnology.
2022-Present: BrainClinics Foundation.
2023-Present: Siemens.
2018-Present: QIMR Berghofer Medical Research Institute.

International Collaboration:

Harvard Medical School, Cambridge University, University of Georgia, Lausanne University Hospital (CHUV), Fudan University, Nankai University, and etc.

Administration

2020-Present: ICT director of School of Biomedical Engineering, USyd.
2023-Present: Research Committee of School of Biomedical Engineering, USyd.
2020-2022: Server administrator of Sydney Imaging research team.

Teaching

2021-Present: Course and assessment design; guest lecturing in BMET5933: Biomedical Image Analysis (Coordinator: Dr Ashnil Kumar & Dr Sandhya Clement).
2021-Present: Supervision and assessment in BMET4111: Honours Thesis research (Coordinator: Dr Andre Kyme).
2016-2022: Teaching neuroimaging pre-processing in the research groups.
2016-2022: Teaching programming skills to the research team.
2015: Guest lecturing in Uni of Georgia CSCI 8850 Course: Advanced Biomedical Image Analysis (Lead Lecturer: Prof. Tianming Liu)

Supervision and Mentoring

Postdoc Mentoring:

2023-Present: Nathan Cross (Psychology)
2021-Present: Tonima Ali (MR Physics)
2021-20233: Marilena Demayo (Neuroscience)

PhD Mentoring:

2024-on going: Simone Zanoni, Biomedical Engineering, Uni Syd. (Second Supervisor).
 2023-on going: Chenyang Fan, Biomedical Engineering, Uni Syd. (Primary Supervisor).
 2023-on going: Yifei Sun, Biomedical Engineering, Uni Syd. (Primary Supervisor).
 2018-2020: Divyangana Rakesh, Psychiatry, Uni Mel.
 2015-2019: Qinglin Dong, Computer Science, University of Georgia.
 2015-2019: Fangfei Ge, Computer Science, University of Georgia.
 2015-2017: Cutter Lindbergh, Psychology, University of Georgia.
 2014-2018: Yudan Ren, Control Science, QIMR & Northwestern Polytechnical University.

PhD examination chair:

Dr Chritina Maher & Matthew Hadden

Master Supervision:

2021-2022: Chenyang Fan, Computer Science, Uni Syd.
 2018-2020: Saampras Ganesan, Biomedical Engineering, Uni Mel.
 2019-2021: Hua Ye, Biomedical Science, Uni Mel.

Honors Mentoring:

2023-on going: Junior Yang, Biomedical Engineering, Uni Syd.
 2023-2024: Fei Kong, Biomedical Engineering, Uni Syd.
 2022-2023: Shurui Zhu, Biomedical Engineering, Uni Syd.
 2021-2022: Yifei Sun, Biomedical Engineering, Uni Syd. **The winner of University Medal.**
 2021-2022: Mai Ho, Biomedical Engineering, Uni Syd.
 2020-2021: Martin Chai, Biomedical Engineering, Uni Syd.

Capstone Mentoring:

2022: Vivian Ho, School of Electrical and Information Engineering, Uni Syd.

Summer/Winter Vacation Research Program:

2024: Qinghao Wen, Michael Fang, Kerui yang, School of Biomedical Engineering, Uni Syd.
 2023: Andrea Bosia, Ming Zhu, School of Biomedical Engineering, Uni Syd.
 2022: Jiah Lee, Shurui Zhu, School of Biomedical Engineering, Uni Syd.
 2021: Sarah Wachter, School of Biomedical Engineering, Uni Syd.
 2020: Qiting Huang, Zoe Delany, School of Biomedical Engineering, Uni Syd.

Dalyell Academic Mentoring Program:

2022: Lucy Chhuo, Clare Yun, Shiyun Li and Na Lin Lee, School of BME, Uni Syd.

Software/Code Release:

1. A Tissue Unbiased Multimodal Brain Template
https://github.com/Jinglei-Lv/Tissue_Unbiased_FOD_Tractogram_Template
2. Visual Analytics of Brain Networks (Teamwork)
<http://cobweb.cs.uga.edu/~tliu/visualAnalyticTkt/visualAnalyticTkt.htm>
3. HAFNI-enabled largescale platform for neuroimaging informatics (HELPNI) (Teamwork)
<http://bd.hafni.cs.uga.edu/HELPNI/>

4. Multiband fMRI preprocessing pipeline
https://github.com/Jinglei-Lv/PISA_MP2RAGE_MB6_fMRI_Pipeline
5. Group-wise sparse coding for fMRI analysis
https://github.com/Jinglei-Lv/Group_wise_sparse_coding
6. Temporal Concatenated sparse coding for fMRI analysis
https://github.com/Jinglei-Lv/Temporal_Concatenated_sparse_coding
7. Supervised dictionary learning and sparse coding for fMRI analysis
https://github.com/Jinglei-Lv/Supervised_dictionary_learning_and_Sparse_Coding
8. N-way decomposition for simultaneous EEG-fMRI analysis
https://github.com/Jinglei-Lv/Nway_decomposition_EEG_FMRI

Publication List

Total Publication Number: 120+			
Journal & Book Chapter: 70+		Full Conference Papers: 50+	
First Author: 8	Last & Joint Last Author: 11	First & Co-First Author: 15	Last & Joint Last Author: 7
Google scholar citation number: 4260+		h-index: 31	i10-index: 68
https://scholar.google.com/citations?user=jA838pcAAAAJ&hl=en			
<i>Note: I co-supervise a student or a postdoc or play a major role in designing the study in the papers where I was the joint last author.</i>			

Book Chapter:

- [1] Lv, J. and Calamante, F., 2023. The synergy of structural and functional connectivity. In Connectome Analysis (pp. 247-265). Academic Press.

Refereed journal publications as the first author & last (and joint last) author:

- [2] Lv, J., Zeng, R., Ho, M. P., D'Souza, A., & Calamante, F. (2022). Building a Tissue-unbiased Brain Template of Fibre Orientation Distribution and Tractography with Multimodal Registration. *Magn Reson Med.* 2022; 1- 14. doi:10.1002/mrm.29496 (**Impact Factor: 4.7, Citations: 11**).
- [3] Lv, J., Di Biase, M., Cash, R. F., Cocchi, L., Cropley, V. L., Klauser, P., ... & Zalesky, A. (2021). Individual deviations from normative models of brain structure in a large cross-sectional schizophrenia cohort. *Molecular Psychiatry*, 1-12. (**Impact Factor: 14.1, Citations: 106**)

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- [4] Lv, J., Lin, B., Li, Q., Zhang, W., Zhao, Y., Jiang, X., Guo, L., Han, J., Hu, X., Guo, C. and Ye, J., Liu, T., 2017. Task fMRI data analysis based on supervised stochastic coordinate coding. *Medical image analysis*, 38, pp.1-16. **(Impact Factor: 13.8, Citations: 58)**
- [5] Lv, J., Jiang, X., Li, X., Zhu, D., Zhao, S., Zhang, T., Hu, X., Han, J., Guo, L., Li, Z. and Coles, C.,... Liu, T., 2015. Assessing effects of prenatal alcohol exposure using group-wise sparse representation of fMRI data. *Psychiatry Research: Neuroimaging*, 233(2), pp.254-268. **(Impact Factor: 3.0, Citations: 37)**
- [6] Lv, J., Jiang, X., Li, X., Zhu, D., Chen, H., Zhang, T., Zhang, S., Hu, X., Han, J., Huang, H. and Zhang, J.,... Liu, T., 2015. Sparse representation of whole-brain fMRI signals for identification of functional networks. *Medical image analysis*, 20(1), pp.112-134. **(Impact Factor: 13.8, Citations: 207)**
- [7] Lv, J., Jiang, X., Li, X., Zhu, D., Zhang, S., Zhao, S., Chen, H., Zhang, T., Hu, X., Han, J. and Ye, J., Liu, T., 2014. Holistic atlases of functional networks and interactions reveal reciprocal organizational architecture of cortical function. *IEEE Transactions on Biomedical Engineering*, 62(4), pp.1120-1131. **(Impact Factor: 4.8, Citations: 170)**
- [8] Lv, J., Guo, L., Zhu, D., Zhang, T., Hu, X., Han, J. and Liu, T., 2014. Group-wise fMRI activation detection on DICCCOL landmarks. *Neuroinformatics*, 12(4), pp.513-534. **(Impact Factor: 5.8, Citations: 4)**
- [9] Zhang, S., Wang, J., Yu, S., Wang, R., Han, J., Zhao, S., ... & Lv, J. (2022). An Explainable Deep Learning Framework for Characterizing and Interpreting Human Brain States. *Medical Image Analysis*, 102665. **(Impact Factor: 13.8, Citations: 6).**
- [10] Hou, Y., Jia, S., Lun, X., Hao, Z., Shi, Y., Li, Y., Zeng, R. and Lv, J. (2022). GCNs-net: a graph convolutional neural network approach for decoding time-resolved eeg motor imagery signals. *IEEE Transactions on Neural Networks and Learning Systems*. **(Impact Factor: 14.3; Citations: 111).**
- [11] Hou, Y., Jia, S., Lun, X., Zhang, S., Chen, T., Wang, F., & Lv, J. (2022). Deep Feature Mining via the Attention-Based Bidirectional Long Short Term Memory Graph Convolutional Neural Network for Human Motor Imagery Recognition. *Frontiers in Bioengineering and Biotechnology*, 1525. **(Impact Factor: 6.1; Citations: 53).**
- [12] Zhao, S., Cui, Y., Huang, L., Xie, L., Chen, Y., Han, J., Guo, L., Zhang, S., Liu, T., Lv, J. (2020). Supervised brain network learning based on deep recurrent neural networks. *IEEE Access*, 8, pp.69967-69978 **(Impact Factor: 3.4, Citation: 2).**
- [13] Wang, P., Zhao, S., Li, X., & Lv, J. Multi-Dimensional Characterization of Neuropsychiatric Disorders. *Frontiers in Neuroscience*, 2023. doi: 10.3389/fnins.2022.1089886 **(Impact Factor: 5.2)**
- [14] Ren, Y., Liu, H., Zhang, S. and Lv, J., 2023. Computational modeling methods for naturalistic neuroimaging data. *Frontiers in Computational Neuroscience*, 17, p.1117945. **(Impact Factor: 3.2)**

- [15] Li, J.A., Loevaas, M.B., Guan, C., Goh, L., Allen, N.E., Mak, M.K., **Lv, J.** (Joint last author) and Paul, S.S., 2023. Does Exercise Attenuate Disease Progression in People With Parkinson's Disease? A Systematic Review With Meta-Analyses. *Neurorehabilitation and Neural Repair*, 37(5), pp.328-352. (**Impact factor: 4.8, Citations: 23**)
- [16] Dalton, M. A., D'Souza, A., **Lv, J.** (Joint last author) & Calamante, F. (2022). New insights into anatomical connectivity along the anterior–posterior axis of the human hippocampus using in vivo quantitative fibre tracking. *Elife*, 11, e76143 (**Impact factor: 8.7, Citations: 39**).
- [17] Ali, T. S., **Lv, J.** (Joint last author) & Calamante, F. (2022). Gradual changes in microarchitectural properties of cortex and juxtacortical white matter: Observed by anatomical and diffusion MRI. *Magnetic Resonance in Medicine*, 88(6), pp.2485-2503. (**Impact Factor: 4.7, Citations: 6**).
- [18] Yuan, J., Ji, S., Luo, L., **Lv, J.** (Joint last author), & Liu, T. (2022). Control energy assessment of spatial interactions among macro-scale brain networks. *Human Brain Mapping*. (**Impact Factor: 5.0, Citations:3**).
- [19] Ganesan, S., **Lv, J.** (Joint last author), & Zalesky, A. (2022). Multi-timepoint pattern analysis: Influence of personality and behavior on decoding context-dependent brain connectivity dynamics. *Human brain mapping*, 43(4), 1403-1418 (**Impact Factor: 5.4, Citation:6**).

Peer reviewed full-length conference publications as the first/co-first & last/joint last author:

(EI & ISTP indexed; acceptance rate 15%~20%; * indicates co-first author)

- [20] **Lv, J.**, Shine, JM, Kong, F, and Calamante, F, Mapping the Functional Role of White Matter Tracks by fusing Diffusion and Functional MRI. Proceedings of the international society for magnetic resonance in medicine. 2024.
- [21] **Lv, J.**, Zeng, R., & Calamante, F. Towards an Unbiased Brain Template of Fiber Orientation Distribution Using Multimodal Registration. Proceedings of the international society for magnetic resonance in medicine. 2021.
- [22] **Lv, J.**, Nguyen, V.T., van der Meer, J., Breakspear, M. and Guo, C.C., 2017, September. N-way Decomposition: Towards Linking Concurrent EEG and fMRI Analysis During Natural Stimulus. In International Conference on Medical Image Computing and Computer-Assisted Intervention (pp. 382-389)
- [23] **Lv, J.**, Irajii, A., Ge, F., Zhao, S., Hu, X., Zhang, T., Han, J., Guo, L., Kou, Z. and Liu, T., 2016, October. Temporal concatenated sparse coding of resting state fMRI data reveal network interaction changes in mTBI. In International Conference on Medical Image Computing and Computer-Assisted Intervention (pp. 46-54).
- [24] **Lv, J.**, Irajii, A., Chen, H., Ge, F., Guo, L., Zhang, X., ... & Liu, T. (2016, April). Group-wise sparse representation of brain states reveal network abnormalities in mild traumatic brain injury. In *2016 IEEE 13th International Symposium on Biomedical Imaging (ISBI)* (pp. 58-61). IEEE.

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- [25] **Lv, J.**, Lin, B., Zhang, W., Jiang, X., Hu, X., Han, J., ... & Liu, T. (2015, October). Modeling task fMRI data via supervised stochastic coordinate coding. In *International Conference on Medical Image Computing and Computer-Assisted Intervention* (pp. 239-246). Springer, Cham.
- [26] **Lv, J.**, Zhang, T., Hu, X., Zhu, D., Li, K., Guo, L., & Liu, T. (2014, April). Group-wise connection activation detection based on DICCCOL. In *2014 IEEE 11th International Symposium on Biomedical Imaging (ISBI)* (pp. 681-684). IEEE.
- [27] *Lian, Z., ***Lv, J.**, Xing, J., Li, X., Jiang, X., Zhu, D., ... & Zhang, J. (2014, April). Generalized fMRI activation detection via Bayesian magnitude change point model. In *2014 IEEE 11th International Symposium on Biomedical Imaging (ISBI)* (pp. 21-24). IEEE. (* Co-first author)
- [28] **Lv, J.**, Jiang, X., Li, X., Zhu, D., Chen, H., Zhang, T., Zhang, S., Hu, X., Han, J., Huang, H. and Zhang, J., 2013, November. Identifying functional networks via sparse coding of whole brain fMRI signals. In *2013 6th International IEEE/EMBS Conference on Neural Engineering (NER)* (pp. 778-781). IEEE.
- [29] **Lv, J.**, Zhu, D., Jiang, X., Li, K., Hu, X., Han, J., Guo, L. and Liu, T., 2013, September. Modeling Cognitive Processes via Multi-stage Consistent Functional Response Detection. In *International Workshop on Multimodal Brain Image Analysis* (pp. 180-188). Springer, Cham.
- [30] *Xing, J., ***Lv, J.**, Lian, Z., Li, X., Zhu, D., Liu, T. and Zhang, J., 2013, November. Group-wise change point detection in task fMRI data by Bayesian methods. In *2013 6th International IEEE/EMBS Conference on Neural Engineering (NER)* (pp. 597-600). IEEE. (* Co-first author)
- [31] **Lv, J.**, Zhu, D., Hu, X., Zhang, X., Zhang, T., Han, J., Guo, L. and Liu, T., 2013, September. Group-wise fMRI activation detection on corresponding cortical landmarks. In *International Conference on Medical Image Computing and Computer-Assisted Intervention* (pp. 665-673). Springer, Berlin, Heidelberg.
- [32] **Lv, J.**, Li, X., Zhu, D., Jiang, X., Zhang, X., Hu, X., Zhang, T., Guo, L. and Liu, T., 2013, September. Sparse representation of group-wise fMRI signals. In *International Conference on Medical Image Computing and Computer-Assisted Intervention* (pp. 608-616). Springer, Berlin, Heidelberg.
- [33] **Lv, J.**, Guo, L., Li, K., Hu, X., Zhu, D., Han, J. and Liu, T., 2011, July. Activated fibers: fiber-centered activation detection in task-based fMRI. In *Biennial International Conference on Information Processing in Medical Imaging* (pp. 574-587). Springer, Berlin, Heidelberg.
- [34] **Lv, J.**, Guo, L., Hu, X., Zhang, T., Li, K., Zhang, D., Yang, J. and Liu, T., 2010, September. Fiber-centered analysis of brain connectivities using DTI and resting state fMRI data. In *International Conference on Medical Image Computing and Computer-Assisted Intervention* (pp. 143-150). Springer, Berlin, Heidelberg.
- [35] Sun, Y., Calamante, F., & **Lv, J.** Modelling the Brain Functional Difference of Movie Watching and Resting State with Autoencoder. *Proceedings of the international society for magnetic resonance in medicine*. 2022.

- [36] Ho, M. P., Calamante, F., & Lv, J. Characterising the Common Wiring of the Human Brain. Proceedings of the international society for magnetic resonance in medicine. 2022.
- [37] Wachter, S., Lv, J., & Cabezas, M. Understanding Alzheimer's disease through fMRI and deep learning. Proceedings of the international society for magnetic resonance in medicine. 2022.
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