

Lijun An

Department of Clinical Sciences, Malmö
Lund University, Sweden
www.anlijun.cn
ORCID: [0000-0003-1030-4625](https://orcid.org/0000-0003-1030-4625)

Phone: (+46) 760 552 385
Email: lijun.an@hotmail.com
[Google Scholar Profile](#)

APPOINTMENTS

Postdoctoral Fellow DeMON Lab, Department of Clinical Sciences, Malmö Lund University, Sweden Supervisor: Jacob W. Vogel	Mar 2024 – Present
Research Assistant Computational Brain Imaging Group, Yong Loo Lin School of Medicine National University of Singapore, Singapore Supervisor: B.T. Thomas Yeo	Dec 2023 – Mar 2024

EDUCATION

National University of Singapore, Singapore Ph.D., Electrical & Computer Engineering Advisor: B.T. Thomas Yeo	Jan 2019 – Jan 2024
Harbin Institute of Technology, China B.Eng., Electrical Engineering Advisors: Bo Zhao & Jiubin Tan	Aug 2014 – Jun 2018
INSA Lyon, France Exchange student, Télécommunications, National Institute of Applied Sciences of Lyon	Sep 2017 – Jan 2018

RESEARCH INTERESTS

Neurodegenerative Diseases · Machine Learning · Proteomics
Brain Imaging · Heterogeneity/Harmonization

GRANTS & ALLOCATIONS

PI, Fast Grants Program, Biswas Family Foundation, US\$50,000	2026
PI, NAISS Small Compute Round (HPC allocation), Sweden	2026
PI, UK Biobank Research Analysis Platform Getting Started Credits, £1,000	2025
PI, NAISS Small Compute Round (HPC allocation), Sweden	2024

AWARDS & HONORS

Junior Faculty Award, AD/PD International Conference	2026
Travel Grant (SEK 14,950), Royal Physiographic Society of Lund	2026
MultiPark Travel Grant (SEK 18,000), MultiPark, Lund University	2026
MultiPark Travel Grant (SEK 18,000), MultiPark, Lund University	2025
AAIC Conference Fellowship, Alzheimer's Association	2025
NUS Research Scholarship, National University of Singapore	2019
Outstanding Graduate of the Class of 2018, Harbin Institute of Technology	2018
National Scholarship, Ministry of Education of China	2017

PUBLICATIONS

23 publications: 17 journal articles and 6 preprints; **4 as first author.**

First author: *Nature Medicine*, *Medical Image Analysis*, *NeuroImage*, *medRxiv*.

Co-author: *Nature*, *Nature Medicine*, *Nature Neuroscience*, *Nature Aging*, *PNAS*, *Science Advances*, and others.

Google Scholar (Oct 2026): 1,147 citations · h-index 13 · i10-index 15.

Titles link to the DOI.

First-author journal articles

1. **An, L.**, Pichet Binette, A., Hristovska, I., Vilkaite, G., Xiao, Y., Zendehdel, R., ... & Vogel, J. W. (2026). [A deep joint-learning proteomics model for diagnosis of six conditions associated with dementia](#). *Nature Medicine*, 32(5), 1852–1864.
2. **An, L.**, Zhang, C., Wulan, N., Zhang, S., Chen, P., Ji, F., ... & Australian Imaging Biomarkers and Lifestyle Study of Aging (2025). [DeepResBat: deep residual batch harmonization accounting for covariate distribution differences](#). *Medical Image Analysis*, 99, 103354.
3. **An, L.**, Chen, J., Chen, P., Zhang, C., He, T., Chen, C., ... & Alzheimer's Disease Neuroimaging Initiative (2022). [Goal-specific brain MRI harmonization](#). *NeuroImage*, 263, 119570.

Preprints

4. Vilkaite, G., Volcov, E., **An, L.**, Xiao, Y., Hristovska, I., Rosat Consiglio, C., ... & Vogel, J. W. (2026). [A coordinated and reproducible multicellular response to AD pathology](#). *bioRxiv*.
5. **An, L.**, Finney, C. A., Shvetcov, A., the Global Neurodegeneration Proteomics Consortium (GNPC), & Vogel, J. W. (2026). [Performance of protein panels is inflated across many biomarker studies](#). *medRxiv*.
6. Zeng, T., Li, H., Zhang, S., Tan, Y. Q., Tian, F., ... **An, L.**, ... & Yeo, B. T. (2026). [Spurious model comparisons are widespread in biomedical artificial intelligence](#). *bioRxiv*.
7. Finney, C. A., **An, L.**, Winchester, L. M., Vogel, J., Wilkins, H. M., Burns, J. M., ... & Shvetcov, A. (2025). [Mapping the circulating proteome across neurodegeneration: a harmonized, consortium-scale framework for uncovering molecular pathophysiology](#). *bioRxiv*.
8. Wei, B., Xu, Z., Zhu, J., ... **An, L.**, Sun, X. L., & Yi, C. (2025). [The geno-biomechanical similarity between functional and idiopathic scoliosis from kinematic, muscle activation, vertebral loading and the pathological gene expression perspectives](#). *medRxiv*.
9. Xiao, Y., Spotorno, N., **An, L.**, Bazinet, V., Hansen, J. Y., Strandberg, O., ... & Vogel, J. W. (2025). [Brain network dynamics determine tau presence while regional vulnerability governs tau load in Alzheimer's disease](#). *bioRxiv*.

Co-author journal articles

10. Lu, L., Pichet Binette, A., Hristovska, I., ... **An, L.**, ... & Mattsson-Carlgren, N. (2026). [Proteomic signatures of the APOE \$\epsilon\$ 4 and APOE \$\epsilon\$ 2 genetic variants and Alzheimer's disease](#). *Nature Aging*, 6(5), 1138–1157.
11. Zhu, J., **An, L.**, Zhu, H., Jiang, F., Liu, S., Wei, B., & Yi, C. (2026). [Self-supervised representation learning for dynamic functional connectivity with subjectwise and temporal contrasts](#). *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, 34, 2870–2882.
12. Jiang, H., Tan, T., **An, L.**, Chen, Z., Cheng, Y., Gui, H., ... & Yi, C. (2026). [Functional interaction pattern from solely circadian rhythm disturbance to circadian rhythm sleep disorder](#). *The Innovation Medicine*, 4(2), 100214.
13. Ooi, L. Q. R., Orban, C., ... **An, L.**, ... & Yeo, B. T. (2025). [Longer scans boost prediction and cut costs in brain-wide association studies](#). *Nature*, 644(8077), 731–740.
14. Imam, F., Saloner, R., Vogel, J. W., Krish, V., Abdel-Azim, G., Ali, M., **An, L.**, ... & Lovestone, S. (2025). [The Global Neurodegeneration Proteomics Consortium: biomarker and drug target discovery for common neurodegenerative diseases and aging](#). *Nature Medicine*, 31(8), 2556–2566.
15. Zhang, C., **An, L.**, Wulan, N., Nguyen, K. N., Orban, C., Chen, P., ... & Australian Imaging Biomarkers and Lifestyle Study of Aging (2025). [Cross-dataset evaluation of dementia longitudinal progression prediction models](#). *Human Brain Mapping*, 46(11), e70280.
16. Orchard, E. R., Chopra, S., Ooi, L. Q. R., Chen, P., **An, L.**, Jamadar, S. D., ... & Holmes, A. J. (2025). [Protective role of parenthood on age-related brain function in mid- to late-life](#). *Proceedings of the National Academy of Sciences*, 122(9), e2411245122.
17. Chopra, S., Dhamala, E., Lawhead, C., Ricard, J., Orchard, E., **An, L.**, ... & Holmes, A. (2024). [Generalizable and replicable brain-based predictions of cognitive functioning across common psychiatric illness](#). *Science Advances*, 10(45), eadn1862.
18. Zhang, S., Larsen, B., Sydnor, V. J., Zeng, T., **An, L.**, Yan, X., ... & Yeo, B. T. (2024). [In vivo whole-cortex marker of excitation-inhibition ratio indexes cortical maturation and cognitive ability in youth](#). *Proceedings of the National Academy of Sciences*, 121(23), e2318641121.
19. Wulan, N., **An, L.**, Zhang, C., Kong, R., Chen, P., Bzdok, D., ... & Yeo, B. T. (2024). [Translating phenotypic prediction models from big to small anatomical MRI data using meta-matching](#). *Imaging Neuroscience*, 2, 1–21.
20. Chen, P., **An, L.**, Wulan, N., Zhang, C., Zhang, S., Ooi, L. Q. R., ... & Yeo, B. T. (2024). [Multilayer meta-matching: translating phenotypic prediction models from multiple datasets to small data](#). *Imaging Neuroscience*, 2, 1–22.
21. Yan, X., Kong, R., Xue, A., Yang, Q., Orban, C., **An, L.**, ... & Yeo, B. T. (2023). [Homotopic local-global parcellation of the human cerebral cortex from resting-state functional connectivity](#). *NeuroImage*, 273, 120010.
22. He, T., **An, L.**, Chen, P., Chen, J., Feng, J., Bzdok, D., ... & Yeo, B. T. (2022). [Meta-matching as a simple framework to translate phenotypic predictive models from big to small data](#). *Nature Neuroscience*, 25(6), 795–804.
23. Nguyen, M., He, T., **An, L.**, Alexander, D. C., Feng, J., Yeo, B. T., & Alzheimer's Disease Neuroimaging Initiative (2020). [Predicting Alzheimer's disease progression using deep recurrent neural networks](#). *NeuroImage*, 222, 117203.

MEDIA COVERAGE

- [medRxiv \(2026\)](#), data leakage in protein-panel biomarker studies: covered by [GenomeWeb](#).
- [Nature Medicine \(2026\)](#), AI-proteomics diagnosis of neurodegenerative diseases: covered by 20+ news outlets.
- [Medical Image Analysis \(2025\)](#), MRI harmonization: covered by [brainnews \(WeChat\)](#).
- [PNAS \(2025\)](#), parenthood and brain-function aging: covered by [New Scientist](#) and a [Nature News Feature](#).
- [Nature Neuroscience \(2022\)](#), phenotype prediction in small MRI datasets: covered by [Sohu News](#) and [Nature Neuroscience News & Views](#).

INVITED TALKS

Using and Combining Imaging Derived Phenotypes for Dementia <i>Proteomic signatures of neurodegeneration with neuroimaging evidence</i>	May 2026 UK (virtual)
Yale University <i>Deep learning for brain MRI harmonization</i>	Jun 2023 US (virtual)
Singapore Longevity Science Symposium <i>Goal-specific brain MRI harmonization</i>	Sep 2022 Singapore
Centre for Sleep and Cognition, National University of Singapore <i>Task-specific brain MRI harmonization</i>	Nov 2021 Singapore (virtual)
Centre for Sleep and Cognition, National University of Singapore <i>Benchmarking brain MRI harmonization</i>	Dec 2020 Singapore (virtual)
TADPOLE-SHARE Symposium <i>Modeling Alzheimer's disease using deep recurrent neural networks</i>	Jul 2020 Netherlands (virtual)

CONFERENCE PRESENTATIONS

AAIC 2026 <i>Performance of protein panels is inflated across many biomarker studies</i>	Jul 2026 UK
OHBM 2026 <i>Benchmarking the AI-based diagnostic potential of plasma proteomics for neurodegenerative disease in 17,187 people</i>	Jun 2026 France
AD/PD 2026 <i>Benchmarking the AI-based diagnostic potential of plasma proteomics for neurodegenerative disease in 17,170 people</i>	Mar 2026 Denmark
AAIC 2025 <i>Benchmarking the AI-based diagnostic potential of plasma proteomics for neurodegenerative disease in 17,170 people</i>	Jul 2025 Canada (virtual)
OHBM 2022 <i>Application-specific brain MRI harmonization</i>	Jun 2022 Glasgow, UK (virtual)

TEACHING & MENTORING

Mentor, Master’s student (R.Z.), Lund University	2025 – 2026
Co-mentor, junior Ph.D. students (C.Z., P.C.), National University of Singapore	2021 – 2024
Teaching Assistant, CG2028, National University of Singapore	2019 – 2022
Mentor, Master’s student (Z.G.), National University of Singapore	2019 – 2020

PROFESSIONAL SERVICE

Ad hoc reviewer (24 manuscripts for 13 journals, 2023–2026)
Science Bulletin; npj Digital Medicine; Nature Communications; Alzheimer’s & Dementia;
Medical Image Analysis; IEEE Journal of Biomedical and Health Informatics (×3);
NeuroImage (×4); npj Aging; PLOS Computational Biology (×2); Human Brain Mapping
(×2); Imaging Neuroscience (×4); Aperture Neuro (×2); Nature Progress Brain Health.

OPEN-SOURCE SOFTWARE

DeMONLab-BioFINDER/An_ProtAIDe-Dx (maintainer) <i>ProtAIDe-Dx, proteomics model for differential diagnosis of dementia</i>	8 stars · 2 forks
ThomasYeoLab/Standalone_An2024_DeepResBat (maintainer) <i>DeepResBat, deep residual batch harmonization</i>	7 stars · 1 fork
ThomasYeoLab/Meta_matching_models (maintainer) <i>Pre-trained meta-matching models for phenotype prediction</i>	27 stars · 13 forks
ThomasYeoLab/CBIG (contributor) <i>Computational Brain Imaging Group toolbox</i>	761 stars · 421 forks
tadpole-share/tadpole-algorithms (contributor) <i>Alzheimer’s disease progression prediction benchmark</i> (GitHub, Oct 2026)	10 stars · 7 forks