

CURRICULUM VITAE



YANSHI HU, PhD, MPhil

Department of Bioinformatics, State Key Laboratory of Plant Physiology and Biochemistry

College of Life Sciences, Zhejiang University

866 Yuhangtang Road, Hangzhou 310058, P. R. China

Email: yanshihu@zju.edu.cn

Phone: (86) 188-8895-0980

Website: yanshihu.github.io

EDUCATION

- 2017-2023 **Doctor of Philosophy in Bioinformatics**
Zhejiang University, Hangzhou, China
- 2013-2016 **Master of Philosophy in Biomedical Engineering**
Tianjin Medical University, Tianjin, China
- 2009-2013 **Bachelor of Science in Biomedical Engineering**
Shandong First Medical University (Shandong Academy of Medical Sciences), Taian, China

EXPERIENCE

- 2016-2017 **Research Assistant**
School of Biomedical Engineering, Tianjin Medical University, Tianjin, China

ACADEMIC HONORS & AWARDS

- 2017- Bioinformatics Society of Zhejiang Province of China, membership
- 2019 Zhejiang University Award of Honor for Graduate
- 2018 Zhejiang University First-Class Scholarship for Doctoral Mid-term Examination (¥20,000)
- 2018 Zhejiang University Award of Honor for Graduate
- 2017 Zhejiang University Excellent Doctoral Freshman Scholarship (¥10,000)
- 2017 Certificate of Reviewing for *Computational Biology and Chemistry*
- 2014 The Sixth National Conference on Bioinformatics & Systems Biology of China,
Second-Class Prize for Excellent Poster
- 2011 Shandong First Medical University & Shandong Academy of Medical Sciences,
Second-Class Scholarship
- 2010 Shandong First Medical University & Shandong Academy of Medical Sciences,
Third-Class Scholarship

JOURNAL PEER REVIEW

- | | |
|--|--|
| Science China-Life Sciences (IF = 10.372) | Bioinformatics (IF = 8.778) |
| Molecular Neurobiology (IF = 5.682) | Frontiers in Neuroscience (IF = 5.582) |
| Current Bioinformatics (IF = 4.850) | Frontiers in Neurology (IF = 4.321) |
| Computational Biology and Chemistry (IF = 3.737) | |
| IEEE/ACM Transactions on Computational Biology and Bioinformatics (IF = 3.702) | |

JOURNAL PUBLICATIONS

1. C Feng[#], RX Tie[#], SG Xin[#], Y Chen, S Li, X Hu, Y Zhou, Y Liu, Y Hu, **YS Hu**, H Pan, Z Wu, H Chao, S Zhang, Q Ni, J Huang, W Luo*, H Huang*, M Chen*. Systematic single-cell analysis reveals dynamic control of transposable element activity orchestrating the endothelial-to-hematopoietic transition. *bioRxiv*, 2023.06.19.545461.
DOI: [10.1101/2023.06.19.545461](https://doi.org/10.1101/2023.06.19.545461)
2. Y Chen[#], **YS Hu**[#], X Hu, C Feng, M Chen*. CoGO: a contrastive learning framework to predict disease similarity based on gene network and ontology structure. *Bioinformatics*, 2022, 38(18):4380-4386. (IF = **8.778**)
DOI: [10.1093/bioinformatics/btac520](https://doi.org/10.1093/bioinformatics/btac520)
3. H Chen, X Hu, **YS Hu**, J Zhou, M Chen*. CoVM²: Molecular Biological Data Integration of SARS-CoV-2 Proteins in a Macro-to-Micro Method. *Biomolecules*, 2022, 12(8):1067. (IF = **6.191**)
DOI: [10.3390/biom12081067](https://doi.org/10.3390/biom12081067)
4. B Tan, S Xin, **YS Hu**, C Feng*, M Chen*. LBD: a manually curated database of experimentally validated lymphoma biomarkers. *Database*, 2022, Volume 2022, baac051. (IF = **4.776**)
DOI: [10.1093/database/baac051](https://doi.org/10.1093/database/baac051)
5. WY Wu, Y Wu, DH Hu, YC Zhou, **YS Hu**, YJ Chen, M Chen*. PncStress: a manually curated database of experimentally validated stress-responsive non-coding RNAs in plants. *Database*, 2020, Volume 2020, baaa001. (IF = **4.776**)
DOI: [10.1093/database/baaa001](https://doi.org/10.1093/database/baaa001)
6. TY Wang, P Song, TT Zhong, XJ Wang, XP Xiang, Q Liu, HY Chen, T Xia, H Liu, YM Niu, **YS Hu**, L Xu, YK Shao, LJ Zhu, HY Qi, J Shen, TJ Hou, R Fodde*, JM Shao*. The inflammatory cytokine IL-6 induces FRA1 deacetylation promoting colorectal cancer stemness and malignancy. *Oncogene*, 2019, 38:4932-4947. (IF = **9.273**)
DOI: [10.1038/s41388-019-0763-0](https://doi.org/10.1038/s41388-019-0763-0)
7. **YS Hu**, J Xin, Y Hu, L Zhang*, J Wang*. Analyzing the genes related to Alzheimer's disease via a network and pathway-based approach. *Alzheimer's Research & Therapy*, 2017, 9(1):29. (IF = **9.037**)
DOI: [10.1186/s13195-017-0252-z](https://doi.org/10.1186/s13195-017-0252-z)
8. **YS Hu**, Z Pan, Y Hu, L Zhang*, J Wang*. Network and Pathway-Based Analyses of Genes Associated with Parkinson's Disease. *Molecular Neurobiology*, 2017, 54(6):4452-4465. (IF = **5.682**)
DOI: [10.1007/s12035-016-9998-8](https://doi.org/10.1007/s12035-016-9998-8)
9. Y Hu, Y Yang, Z Fang, **YS Hu**, L Zhang*, J Wang*. Detecting pathway relationship in the context of human protein-protein interaction network and its application to Parkinson's disease. *Methods*, 2017, 131:93-103. (IF = **4.957**)
DOI: [10.1016/j.ymeth.2017.08.001](https://doi.org/10.1016/j.ymeth.2017.08.001)
10. ZH Fang, YC Yang, **YS Hu**, MD Li*, J Wang*. GRONS: a comprehensive genetic resource of nicotine and smoking. *Database*, 2017, Volume 2017, bax097. (IF = **4.776**)
DOI: [10.1093/database/bax097](https://doi.org/10.1093/database/bax097)
11. Z Wu, C Feng, **YS Hu**, Y Zhou, S Li, S Zhang, Y Hu, Y Chen, H Chao, Q Ni, M Chen* (*Under Review*). HALD, a human aging and longevity knowledge graph for precision gerontology and geroscience analyses. *Scientific Data*, 2023 (IF = **11.211**)
12. TY Ling, YC Zhou, CF Xu, XT Shao, **YS Hu**, KF Ding*, M Chen* (*In Preparation*). Colorectal cancer computer-aided image analysis: the teenager in the new era of deep learning.
13. YC Zhou, **YS Hu**, DH Hu, C Feng, MA Ahsan, YJ Liu, TY Ling, SD Li, XC Yang, R Hofestädt, M Chen* (*In Preparation*). DaTo: a repertoire dedicated to biological online resources.
14. **YS Hu**[#], YH Chen[#], M Chen* (*In Preparation*). CoPaCra: a contrastive learning model empowering

biochemical pathway crosstalk identification with protein interaction and gene ontology network structure.

15. **YS Hu***, BT She, YM Hu, ZN Yin, XJ Yu, W Wu, M Chen* (*In Preparation*). Systems biology framework unravels molecular substrates underlying comorbidity between Parkinson's and Crohn's disease.
16. YC Zhou, JT Xue, MA Ahsan, DH Hu, **YS Hu**, Y Liu, Y Jiang, W Ni, M Chen* (*In Preparation*). CytoSEE: a web-based toolkit for automatic computation and evaluation of cytometry data.
17. **YS Hu***, ZH Fang, J Wang*, M Chen* (*In Preparation*). A systems biology framework identifies latent molecular relationships between Alzheimer's and Parkinson's disease.

CONFERENCE PAPERS OR ABSTRACTS

1. **Y Hu***, J Wang*, M Chen. Analyzing the genes related to Alzheimer's disease via a network and pathway-based approach. *First Sino-Russian Workshop on Integrative Bioinformatics and Systems Biology (WIBSB-2018)* @ Novosibirsk, Russia
DOI: [10.18699/WIBSB-2018-28](https://doi.org/10.18699/WIBSB-2018-28)
2. **Y Hu**, Z Pan, Y Hu, J Wang*. Network and pathway based analyses of genes associated with Parkinson's disease. *The Seventh National Conference on Bioinformatics and Systems Biology* @ Chengdu, China
Availability: [ResearchGate Link](#)
3. Y Hu, **Y Hu**, Y Yang, Z Fang, J Wang*. Uncovering the common pathogenesis in neurodegenerative and psychiatric disorder via network approaches. *The Seventh National Conference on Bioinformatics and Systems Biology* @ Chengdu, China
Availability: [ResearchGate Link](#)
4. Z Fang, Y Yang, Y Hu, **Y Hu**, J Wang*. Identifying the enriched biological pathways in genes related to nicotine dependence via a network-based gene-weighting algorithm. *The Seventh National Conference on Bioinformatics and Systems Biology* @ Chengdu, China
Availability: [ResearchGate Link](#)
5. **Y Hu**, R Fan, X Li, M Liu, X Liu, X Yi, T Zhang, J Wang*. Common characteristics of Alzheimer's disease and Parkinson's disease based on AlzGene and PDGene databases. *The Sixth National Conference on Bioinformatics and Systems Biology* @ Nanjing, China
Availability: [ResearchGate Link](#)
6. X Liu, X Li, M Liu, R Fan, **Y Hu**, Y Hu, X Yi, T Zhang, J Wang*. Computing the phenotype similarity based on OMIM database and MESH vocabulary. *The Sixth National Conference on Bioinformatics and Systems Biology* @ Nanjing, China
Availability: [ResearchGate Link](#)
7. X Li, M Liu, X Liu, R Fan, **Y Hu**, Y Hu, X Yi, T Zhang, J Wang*. TarPriGO: a new method to prioritize miRNA targets based on Gene Ontology. *The Sixth National Conference on Bioinformatics and Systems Biology* @ Nanjing, China
Availability: [ResearchGate Link](#)
8. M Liu, X Liu, X Li, R Fan, **Y Hu**, Y Hu, X Yi, T Zhang, J Wang*. A comprehensive pathway and network analysis of candidate genes associated with nicotine addiction. *The Sixth National Conference on Bioinformatics and Systems Biology* @ Nanjing, China
Availability: [ResearchGate Link](#)
9. R Fan, M Liu, X Li, X Liu, **Y Hu**, Y Hu, X Yi, T Zhang, J Wang*. The functional divergence analysis of neuronal nicotinic acetylcholine receptor subunits. *The Sixth National Conference on Bioinformatics and Systems Biology* @ Nanjing, China
Availability: [ResearchGate Link](#)

ACADEMIC TALKS

- 09/2019 Zhejiang University-Bielefeld University Joint Symposium @ Bielefeld, Germany
- 08/2018 First Sino-Russian Workshop on Integrative Bioinformatics and Systems Biology (WIBSB-2018)
 @ Novosibirsk, Russia

POSTERS

1. **Y Hu**, Z Pan, Y Hu, and J Wang. Network and pathway based analyses of genes associated with Parkinson's disease. *The Seventh National Conference on Bioinformatics and Systems Biology* @ Chengdu, China
DOI: [10.13140/RG.2.2.20162.27844](https://doi.org/10.13140/RG.2.2.20162.27844)
2. **Y Hu**, R Fan, X Li, M Liu, X Liu, X Yi, T Zhang and J Wang. Common characteristics of Alzheimer's disease and Parkinson's disease based on AlzGene and PDGene databases. *The Sixth National Conference on Bioinformatics and Systems Biology* @ Nanjing, China
DOI: [10.13140/RG.2.2.14971.82725](https://doi.org/10.13140/RG.2.2.14971.82725)