CURRICULUM VITAE



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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. 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

- 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
- 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
- 4. 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

5. 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: <u>10.1038/s41388-019-0763-0</u>

- 6. 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
- 7. **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
- 8. 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

9. 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

- 10. 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)
- 11. 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.
- 12. 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.
- 13. **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.
- 14. **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.
- 15. 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.

16. **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

- 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
- 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: <u>10.13140/RG.2.2.14971.82725</u>