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

2023-2024	**Research Assistant**
	College of Life Sciences, Zhejiang University, Hangzhou, China
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 = *9.1*), Bioinformatics (IF = *8.3*), International Journal of Intelligent Systems (IF = *7.2*), Frontiers in Neuroscience (IF = *5.2*), Molecular Neurobiology (IF = *5.1*), Scientific Reports (IF = *4.9*), IEEE/ACM Transactions on Computational Biology and Bioinformatics (IF = *4.5*), Current Bioinformatics (IF = *4.0*), Frontiers in Neurology (IF = *3.9*), BMC Medical Genomics (IF = *3.2*), Journal of Molecular Neuroscience (IF = *3.1*), Computational Biology and Chemistry (IF = *3.1*)

PUBLICATIONS & PREPRINTS

1. Z Wu#, C Feng#, **YS Hu**, Y Zhou, S Li, S Zhang, Y Hu, Y Chen, H Chao, Q Ni, M Chen*. HALD, a human aging and longevity knowledge graph for precision gerontology and geroscience analyses. *Scientific Data*, 2023, 10(1):851. (IF = *10.8*)
   DOI: 10.1038/s41597-023-02781-0

2. 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. *bioRχiv*, 2023.06.19.545461. (*Under Review in BMC Biology*, IF = *7.1*)
   DOI: 10.1101/2023.06.19.545461

3. 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 = *8.3*)
   DOI: 10.1093/bioinformatics/btac520

4. H Chen, X Hu, **YS Hu**, J Zhou, M Chen*. CoVM^2: Molecular Biological Data Integration of SARS-CoV-2 Proteins in a Macro-to-Micro Method. *Biomolecules*, 2022, 12(8):1067. (IF = *5.8*)
   DOI: 10.3390/biom12081067

5. 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 = *5.8*)
   DOI: 10.1093/database/baac051

6. 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 = *5.8*)
   DOI: 10.1093/database/baaa001

7. 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 = *8.8*)
   DOI: 10.1038/s41388-019-0763-0

8. **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 = *9.2*)
   DOI: 10.1186/s13195-017-0252-z

9. **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 = *5.1*)
   DOI: 10.1007/s12035-016-9998-8

10. 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 = *4.8*)
    DOI: 10.1016/j.ymeth.2017.08.001

11. 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 = *5.8*)
    DOI: 10.1093/database/bax097

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[#], Y Hu, M Chen* (*In Preparation*). DeePAX: Decrypting human biochemical pathway crosstalk landscape in a deep learning architecture.

15. **YS Hu***, YM Hu, M Chen* (*In Preparation*). AWmeta empowers adaptively-weighted meta-analysis for gene expression data.

16. **YS Hu***, BT She, 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.

17. 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.

18. **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 PROCEEDINGS

1. **YS 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

2. **YS 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, **YS 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, **YS 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. **YS 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, **YS 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, **YS 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, **YS 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, **YS 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: <u>ResearchGate Link</u>

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. **YS 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
DOI: <u>10.13140/RG.2.2.20162.27844</u>

2. **YS 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
DOI: <u>10.13140/RG.2.2.14971.82725</u>

PATENTS

1. 一种生化通路串话识别方法 (Chinese Patent)
Inventor: 陈铭，**胡言石（YS Hu）**，陈俞皓
Application number: 2023107816823
Filing date: 2023-06-28
Publication number: CN116959588A
Publication date: 2023-10-27
Link: <u>China National Intellectual Property Administration (CNIPA) Patent Page</u>