ZHOU YING

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 ZhouYing0818   🔗 Blog   🔗 Google Scholar   🔗 ResearchGate

Summary

Curiosity, Independence, Self-growth, Exploration. Details of my story and scientific interest can be found in my PS ⤤ and SOP ⤤

Education

MS Harbin Medical University, Biomedical Engineering (Bioinformatics)   Sep. 2022 to Present
- GPA: Not Final Decision

  Slide decks ⤤
- **Training:** Analysis of RNA-seq, scRNA-seq, ChIP-seq, CUT&RUN, CUT&TAG, Ribo-seq, AS|APA, CRISPR Screens etc.

MS Fudan University, Neurobiology (Neurodevelopment & neural classification)   Sep. 2016 to Jan. 2020
- GPA: 2.99/4.0 (Details of Transcript) ⤤

  Thesis ⤤
- **Coursework:** Advanced Neurobiology, Progress in Brain Function and Diseases, Neural circuit: from gene to function, Optical Image in Neuroscience, Patch-Clamp Techniques, Practical Techniques for Morphology and molecular Biology etc.

  Slide decks ⤤

BS Hunan Agricultural University, Bioengineering   Sep. 2012 to July. 2016
- GPA: 3.59/4.0 (Details of Transcript) ⤤
- **Coursework:** Biochemistry, Molecular Biology, Cell biology, Genetic Engineering, Advanced Mathematics, General Chemistry/Physics, Computer Applications, Scientific Writing, Biological/chemistry/physics experimental technologies, Practical algorithms etc.

Research Experience

Systematic comparison of IDH wild type GBM and neurodevelopmental trajectories   Harbin Medical University, China
- Integrated multiple GBM single-cell/single-nucleus transcriptome datasets   Jan. 2023 to Present
- Aligning these datasets with developmental trajectories observed in fetal to systematically compare and profile dynamically changing molecular expressions in GBM.

  POSTER ⤤
- **Acquired:** scRNA-seq analysis practice, Dry experiment design, Proposal writing and funding application.

Improving variant prioritization in exome analysis by entropy-weighted ensemble of multiple tools (Published)   Xinhua Hospital affiliated to Shanghai Jiaotong University School of Medicine, China
- Evaluated the efficacy of variant prioritization tools in a large rare disease cohort with heterogeneous phenotypic information   May 2020 to Oct. 2022
- Used an entropy-weighted ensemble of multiple tools to improve variant prioritization and accelerate molecular diagnosis in exome/genome sequencing.

  POSTER ⤤
- **Acquired:** Comprehended basic model constructed methods and model evaluation; Understood clinical notes and Mastered information extracted methods; Analysis of WES data; Writing skill.

Sncg, Mybpc1, and Parm1 Classify subpopulations of VIP-expressing interneurons in layers 2/3 of the somatosensory cortex (Published)   Fudan University, China 2017 to May 2020
- Constructed quantification methods to describ features of interneurons from morphology and electrophysiology.

  POSTER ⤤
- Identified distinct subpopulations of neocortical VIP+ interneurons in mouse somatosensory cortex based on their morpho-electrophysiological properties and molecular markers
- **Acquired:** Understood patch-clamp experiment, electric signal data and neural morphological data, mastered varies unsupervised classification methods.

Effects of Cell Cycle and migration on Cortical Folding During Brain Development in ferret   Fudan University, China May 2016 to Aug. 2018
- To study stem cell activity affects cortical folding during development
- Marked different types of stem cells, analyzed their differentiation, cell division

  POSTER ⤤
- **Acquired:** Mastered many wet experiment skills (IHC,WB,virus injection, microscope/time lapse recording, tissue/cell culture etc.) and basic Image analysis skills (ImageJ, matlab, Imaris, PS etc.)

Publications

Improving variant prioritization in exome analysis by entropy-weighted ensemble of multiple tools. Clin Genet.

Fan Y, *Zhou Y*, Liu H, Luo X, Xu T at al.

doi:10.1111/cge.14257. ⬈

Oct. 2022

POSTER ⬈

Sncg, Mybpc1, and parm1 classify subpopulations of VIP-expressing interneurons in layers 2/3 of the somatosensory cortex. Cereb Cortex.

Jiang SN, Cao JW, Liu LY, *Zhou Y*, Liu H, Shan GY, Fu YH, Shao YC, Yu YC.

doi:10.1093/cercor/bhac343. ⬈

Aug. 2022

POSTER ⬈

Effect of post-weaning isolation on anxiety- and depressive-like behaviors of C57BL/6J mice. Experimental Brain Research

Huang Q, *Zhou Y*, Liu LY

doi:10.1007/s00221-017-5021-5 ⬈

2017

Region-specific SPON1 expression regulates cortical folding and brain function.

Lin YN, Chen JY, Yang FW, Huang Q, Xue YP, Tao Y, He N, He M, Yu M, He ZB, Fan K, Tong SY, Xu YQ, Luo YH, Li YX, *Zhou Y*, Peng G, Zhang T, Wu RQ, Shi SH, Liu LY, Yu YC

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Under submission

POSTER ⬈

Working Experience

Clinical data Analyst

May 2020 to Jun. 2022

- Clinical data analyst of GeneDock Corporate, based on Shanghai Institute of Pediatric Research, Xinhua Hospital affiliated to Shanghai Jiaotong University School of Medicine, Shanghai, China
- Attended 2 WES/WGS projects, published paper of 'genetic variant auto-interpretation' projects
- Further practice Python, complicated coding and model building skills

Additional Experience

- The second international conference on single-cell and spatial omics (TICSSO-2), 29th-30th March 2024, Shenzhen, China.
- 2020 conference of Medical Geneticists Branch of Chinese Medical Doctor Association, 16th-17th Oct. 2020, Chengdu, China.
- The 11th FENS Forum of Neuroscience, 7th-11th July 2018, Berlin, German ⬈
- The 12th National Academic Conference of Chinese Society for Neuroscience, 2017, Tianjing, China.
- Volunteer of The national science-popularizing public activity held by Chinese Society for Cell Biology, May 2017, Shanghai, China ⬈

Awards|Scholarships|Funding|Certificates

- **Funding (2023-2024):** Postgraduate Research & Practice Innovation Program of Harbin Medical University(No.YJSCX2023-120HYD)
- **Scholarship (2018&2017):** Neuroscience scholarship at Fudan University ⬈
- **Scholarship (2016 - 2017):** Kwang-Hua Award at Fudan University ⬈
- **Award(2012-2013&2012-2014)** Outstanding Student at Hunan Agricultural University ⬈
- **Certificate:** Certificate of science popularization worker at Chinese society of cell biology ⬈
- **Certificate:** ShangHai Computer Rank Examination three level Data science and artificial intelligence certificate ⬈
- **Certificate:** National Computer Rank Examination two level VB language certificate ⬈
- **Certificate:** Hunan Computer Application Rank Examination two level certificate ⬈

Skills

- Python, R, Matlab, stastics, basic data mining and machine learning skills
- Bulk/Single cell/Single nucleus RNA-seq, ChIP-seq, CUT&RUN/CUT&TAG, Ribo-seq, and other molecular bioinformatics anaylysis skills
- Neuronal morphological and electrophysiological data analysis skills
- Basic Anatomic experiment, frozen section and IHC, WB, virus injection, tissue cell culture and other biological experiments