

EDUCATION

- **Ph.D. in Bioinformatics** at **The University of Hong Kong**, Hong Kong S.A.R Sep-2023 — now
 - Department: School of Biomedical Sciences, Li Ka Shing Faculty of Medicine
 - Supervisor: Dr. Jason Wing Hon Wong and Dr. David Jen Hao Shih
- **M.Sc. in Biology** at **Shanghai Jiao Tong University**, Shanghai, China Sep-2019 — Jun-2022
 - Department: Shanghai Institute of Hematology, State Key Laboratory of Medical Genomics
 - Supervisor: Prof. Lin Cheng
 - GPA: 3.90/4.0
- **B.Sc. in Bioinformatics** (five-year) at **Harbin Medical University**, Harbin, Heilongjiang Province, China Sep-2014 — Jul-2019
 - College: College of Bioinformatics Science and Technology
 - Average score: 81.41/100

RESEARCH INTERESTS

Bioinformatics | Computational biology | Tumor biology | Epigenetics | RNA biology | Genome organization

RESEARCH EXPERIENCE

1. Identified dysregulated sub-pathways in cancers by integrating gene expressions, CNVs, and DNA methylations.
2. Identified cell-cell communications associated with prognosis of patients with B-cell acute lymphoblastic leukemia (B-ALL).
3. Revealed TCF12 acted as a co-factor of DUX4/IGH to enhance the transactivation via a positive feedback in B-ALL.
4. Benchmarked 21 differential splicing tools for RNA-seq analysis at the event level to propose a tool-selection protocol for users.
5. Predicted the spreading of the COVID-19 epidemic in China using a novel time-delay differential equation model.
6. Performed analysis of RNA-seq, CHIP-seq, scRNA-seq, and CyTOF data.

PUBLICATIONS ¹

Junna Ye[†], Fan Wang[†], Zhuochao Zhou[†], **Minghao Jiang**[†], Yijun You, Yutong Su, Qiongyi Hu, Huihui Chi, Honglei Liu, Xiaobing Cheng, Jinchao Jia, Hui Shi, Chengde Yang, Jinyan Huang[✉], Jialin Teng[✉], Qiongyi Hu[✉], Yue Sun[✉]. "Itaconate promoted monocyte migration by increasing chemokine CCL12 expression in autoinflammatory cytokine storm." *Clin Immunol.* (Under review)

Zhihui Li[†], **Minghao Jiang**[†], Junfei Wang[†], Wenyu Wu, Zhiyi Zhuo, Wenyu Wu, Hao Zhang[✉], Guoyu Meng[✉]. "Transcription factor 12 mediated self-feedback regulatory mechanism is required in DUX4 fusion leukemia." *Clinical and Translational Medicine.* (Under review; Revising)

Hongxin Yin[†], Junfei Wang[†], Yangxia Tan[†], **Minghao Jiang**[†], Hao Zhang[✉], Guoyu Meng[✉]. "Transcription factor abnormalities in B-ALL leukemogenesis and treatment." *Trends Cancer.* 2023 Oct;9(10):855-870. doi:[10.1016/j.trecan.2023.06.004](https://doi.org/10.1016/j.trecan.2023.06.004).

Wenyu Wu[†], Yangxia Tan[†], Hongxin Yin[†], **Minghao Jiang**[†], Yanling Jiang, Xiaodan Ma, Tong Yin, Yuwen Li[✉], Hao Zhang[✉], Xun Cai[✉], Guoyu Meng[✉]. "Phase separation is required for PML nuclear body biogenesis and function." *FASEB J.* 2023 Jun;37(6):e22986. doi: [10.1096/fj.202300216R](https://doi.org/10.1096/fj.202300216R).

Minghao Jiang^{†, ✉}, Shiyang Zhang[†], Hongxin Yin[†], Zhiyi Zhuo[†], Guoyu Meng[✉]. "A comprehensive benchmarking of differential alternative splicing tools at the event level." *Brief Bioinform.* 2023 Apr 5;bbad121. doi: [10.1093/bib/bbad121](https://doi.org/10.1093/bib/bbad121).

Gang Lu[†], Yun Ling[†], **Minghao Jiang**[†], Yun Tan[†], Dong Wei[†], Lu Jiang, Shuting Yu, Fangying Jiang, Shuai Wang, Yao Dai, Jinzeng Wang, Geng Wu, Xinxin Zhang, Guoyu Meng[✉], Shengyue Wang[✉], Feng Liu[✉], Xiaohong Fan[✉], Saijuan Chen[✉]. "Primary assessment of the diversity of Omicron sublineages and the epidemiologic features of autumn/winter 2022 COVID-19 wave in Chinese mainland." *Front Med*. 2023 Mar 31;1-10. doi: [10.1007/s11684-022-0981-7](https://doi.org/10.1007/s11684-022-0981-7).

Minghao Jiang[†], Hongxin Yin[†], Shiyan Zhang[†], Guoyu Meng[✉], Geng Wu[✉]. "Mathematical appraisal of SARS-CoV-2 Omicron epidemic outbreak in unprecedented Shanghai lockdown." *Front Med (Lausanne)*. 2022 Nov 8;9:1021560. doi: [10.3389/fmed.2022.1021560](https://doi.org/10.3389/fmed.2022.1021560).

Ming Zhang[†], Hao Zhang[†], Zhihui Li[†], Ling Bai[†], Qianqian Wang, Jianfeng Li, **Minghao Jiang**, Qing Xue, Nuo Cheng, Weina Zhang, Dongdong Mao, Zhiming Chen, Jinyan Huang, Guoyu Meng[✉], Zhu Chen[✉], Sai-Juan Chen[✉] "Functional, Structural and Molecular Characterizations of Leukemogenic Driver Mef2d-Hnrnpull1 Fusion." *Blood*. 2022 Sep 22;140(12):1390-1407. doi: [10.1182/blood.2022016241](https://doi.org/10.1182/blood.2022016241).

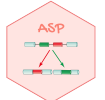
Hao Zhang[†], Nuo Cheng[†], Zhihui Li[†], Ling Bai[†], Chengli Fang, Yuwen Li, Weina Zhang, Xue Dong, **Minghao Jiang**, Yang Liang, Sujiang Zhang, Jianqing Mi, Jiang Zhu, Yu Zhang, Sai-Juan Chen, Yajie Zhao, Xiang-Qin Weng, Weiguo Hu[✉], Zhu Chen[✉], Jinyan Huang[✉], Guoyu Meng[✉]. "DNA Crosslinking and Recombination-Activating Genes 1/2 (Rag1/2) Are Required for Oncogenic Splicing in Acute Lymphoblastic Leukemia." *Cancer Commun (Lond)*. 2021 Nov;41(11):1116-1136. doi: [10.1002/cac2.12234](https://doi.org/10.1002/cac2.12234).

Liang Wu[†], **Minghao Jiang**[†], Ping Yu, Jianfeng Li, Wen Ouyang, Chong Feng, Wei Li Zhao[✉], Yuting Dai[✉], Jinyan Huang[✉]. "Single-Cell Transcriptome Analysis Identifies Ligand-Receptor Pairs Associated with BCP-ALL Prognosis." *Front Oncol*. 2021 Mar 10;11:639013. doi: [10.3389/fonc.2021.639013](https://doi.org/10.3389/fonc.2021.639013).

Junwei Han[†],[✉], Siyao Liu[†], Ying Jiang[†], Chaohan Xu[†], Baotong Zheng, **Minghao Jiang**, Haixiu Yang, Fei Su, Chunquan Li[✉], Yunpeng Zhang[✉]. "Inference of Patient-Specific Subpathway Activities Reveals a Functional Signature Associated with the Prognosis of Patients with Breast Cancer." *J Cell Mol Med*. 2018 Sep;22(9):4304-4316. doi: [10.1111/jcmm.13720](https://doi.org/10.1111/jcmm.13720).

PUBLISHED SOFTWARE

- [RSWP](#)
RNA Sequencing Workflow for Python
- [ASP](#)
Alternative Splicing Package: an R package for performing and visualizing differential splicing
- Membership in the [openbioX](#) community



AWARDS

- First-class scholarship, Shanghai Jiao Tong University School of Medicine 2021
- First-class scholarship, Shanghai Jiao Tong University School of Medicine 2020
- Outstanding graduate, Harbin Medical University 2019
- Outstanding volunteer of The Belt and Road China-Russia Medical University Alliance 2018
- Excellent student leader, Harbin Medical University 2016

OTHER ROLES

- Director of Sports Department, Student Union, Shanghai Jiao Tong University School of Medicine 2019 — 2020
- Director of Publicity Department, Student Union, Harbin Medical University 2014 — 2016

SKILLS

- Proficient in R, Python, Shell, Linux, Slurm (Simple Linux Utility for Resource Management), and Adobe Illustrator
- Familiar with Perl, Java, and Adobe Photoshop