# Jingyu (Gavin) Li

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#### **EDUCATION & AWARDS**

## Applied Biology, Chu Kochen Honors College, ZheJiang University

2018.09-2022.07

- GPA: 3.83/4Rank: Top 10%
- First Prize of National Mathematics Competition
- ZheJiang University First Class Scholarship
- ZheJiang University Excellence Award of Professional Scholarship

#### **RESEARCH EXPERIENCE**

#### **Babraham Institute**

Research Assistant to Professor Wolf Reik

2021.04-present

- Analysed single cell multi-omics data of mouse gastrulation
- Built gene regulatory networks and performed in silico TF perturbation

# **ZheJiang University School of Medicine**

2020.12-2021.03

Research Intern to Professor Hongqing Liang

- Constructed a single cell transcription map of induced 8C-like cells from human embryonic stem cells
- Explored the expression and regulation of endogenous retrovirus such as MLT2A1

#### Life Sciences Institute of ZheJiang University

Research Intern to Professor Li Shen

2020.09-2020.11

- Developed an R package to analyse scATAC-seq for imputation and scalable dimension reduction
- Designed a new algorithm to find the gene regulation modules from scATAC-seq data

## **ZheJiang University School of Medicine**

Research Intern to Professor Guoji Guo

2019.09-2020.08

- Analysed the scRNA-seq data to map mouse embryonic development landscape
- Applied convolutional neural networks to dissect the relation between gene sequence and lineage specificity

#### **PUBLICATIONS**

- 1. Argelaguet, R., Lohoff, T., Li, J. G., Nakhuda, A., Drage, D., Krueger, F., Velten, L., Clark, S. J., & Reik, W. (2022). Decoding gene regulation in the mouse embryo using single-cell multi-omics (p. 2022.06.15.496239). bioRxiv. https://doi.org/10.1101/2022.06.15.496239
- 2. Li, J., Wang, J., Zhang, P., Wang, R., Mei, Y., Sun, Z., Fei, L., Jiang, M., Ma, L., E, W., Chen, H., Wang, X., Fu, Y., Wu, H., Liu, D., Wang, X., Li, J., Guo, Q., Liao, Y., ... Guo, G. (2022). Deep learning of cross-species single-cell landscapes identifies conserved regulatory programs underlying cell types. Nature Genetics, 54(11), Article 11. https://doi.org/10.1038/s41588-022-01197-7
- 3. Chen, H., Liao, Y., Zhang, G., Sun, Z., Yang, L., Fang, X., Sun, H., Ma, L., Fu, Y., Li, J., Guo, Q., Han, X., & Guo, G. (2021). High-throughput Microwell-seq 2.0 profiles massively multiplexed chemical perturbation. Cell Discovery, 7(1), Article 1. https://doi.org/10.1038/s41421-021-00333-7

#### **ADDITIONAL SKILLS & INTERESTS**

#### Math and CS:

I took more mathematics and computer-related courses than I was required, such as advanced linear algebra, numerical analysis, stochastic process, object-oriented programming (based on JAVA) and so on.

And I learned Linux operation system and programming languages commonly used (R, Python and Matlab) while analysing sequencing data and developing bioinformatics algorithms

## Drama:

I joined drama clubs and participated in several traditional plays nationwide