Jingyu (Gavin) Li

+44 07536279042 jingyu.gavin.li@outlook.com

EDUCATION & AWARDS

Applied Biology, Chu Kochen Honors College, ZheJiang University 2018.09-2022.07

- GPA: 3.83/4
- Rank: 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

- Developed an algorithm to build gene regulatory networks leveraging the multi-omics gastrulation atlas
- Deciphered the priming mechanism of Brachyury to control the differentiation of NMP

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 decode 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. Guo, J., **Li, J**., Huang, F., Chen, J., & Shen, L. (2023). scART: Recognizing cell clusters and constructing trajectory from single-cell epigenomic data (p. 2023.04.08.536108). bioRxiv. https://doi.org/10.1101/2023.04.08.536108

3. 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

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