Mo Huang

PhD Candidate
Department of Statistics
The Wharton School, University of Pennsylvania
Email: mohuangx@gmail.com
Website: mohuangx.github.io

Website: mohuangx.github.io Last Updated: November 2019

Education

- **Ph.D. Statistics**, The Wharton School, University of Pennsylvania, May 2020 (Expected) Advisor: Nancy R. Zhang
- B.A. Mathematics, Washington University in St. Louis, 2015

Experience

• PhD Candidate

Department of Statistics, The Wharton School, University of Pennsylvania 2015 -- Present

• Biostatistics Summer Intern

Genentech
Summer 2018

• Undergraduate Researcher/Amgen Scholar

McDonnell Genome Institute at Washington University 2013 -- 2015

• Summer Intern

National Institutes of Health Summers 2012 -- 2013

Honors and Awards

- Donald S. Murray Prize for Excellence in Teaching, 2019
- NSF Graduate Fellowship, 2016 -- 2019
- Judith & William Bollinger Fellowship, 2018
- Florence Moog Fellowship in Biological Sciences, 2011 -- 2015

Publications

- Wang, J., Agarwal, D., **Huang, M.**, Hu, G., Zhou, Z., Ye, C., Zhang, N.R. (2019). Data Denoising with transfer learning in single-cell transcriptomics. *Nature Methods*, 16(9), 875-878.
- **Huang, M.**, Wang, J., Torre, E., Dueck, H., Shaffer, S., Bonasio, R., ... Zhang, N. R. (2018). SAVER: Gene expression recovery for single-cell RNA sequencing. *Nature Methods*, 15(7), 539–542.
- Wang, J., Huang, M., Torre, E., Dueck, H., Shaffer, S., Murray, J., ... Zhang, N. R. (2018). Gene

- Expression Distribution Deconvolution in Single Cell RNA Sequencing. *Proceedings of the National Academy of Sciences of the United States of America*, 115(28), E6437-E6446.
- Jayasinghe, R. G., Cao, S., Gao, Q., Wendl, M. C., Vo, N. S., Reynolds, S. M., ... Ding, L. (2018). Systematic Analysis of Splice-Site-Creating Mutations in Cancer. *Cell Reports*, 23(1), 270–281.e3.
- Jin, T., **Huang, M.**, Jiang, J., Smith, P., & Xiao, T. S. (2018). Crystal structure of human NLRP12 PYD domain and implication in homotypic interaction. *PLOS ONE*, *13*(1), e0190547.
- Wyczalkowski, M. A., Wylie, K. M., Cao, S., Mclellan, M. D., Flynn, J., **Huang, M.**, ... Ding, L. (2017). BreakPoint Surveyor: A pipeline for structural variant visualization. *Bioinformatics*, 33(19), 3121–3122.
- Jin, T., Chuenchor, W., Jiang, J., Cheng, J., Li, Y., Fang, K., ... Xiao, T. S. (2017). Design of an expression system to enhance MBP-mediated crystallization. *Scientific Reports*, 7(January), 40991.
- Jin, T., **Huang, M.**, Smith, P., Jiang, J., & Xiao, T. S. (2013). Structure of the caspase-recruitment domain from a zebrafish guanylate-binding protein. *Acta Crystallographica Section F Structural Biology and Crystallization Communications*, 69(8), 855–860.
- Jin, T., **Huang, M.**, Smith, P., Jiang, J., & Xiao, T. S. (2013). The structure of the CARD8 caspase-recruitment domain suggests its association with the FIIND domain and procaspases through adjacent surfaces. *Acta Crystallographica Section F Structural Biology and Crystallization Communications*, 69(5), 482–487.

Presentations

- Joint Statistical Meetings, July 2019
- Joint Statistical Meetings, July 2018
- American Society of Human Genetics Meeting, October 2017

Programming Languages

- R (expert)
- Python, Keras, PyTorch (proficient)
- Bash (proficient)
- SQL (competent)