

Chenchen Zhu

Basic Life Research Scientist, Genetics

Bio

INSTITUTE AFFILIATIONS

- Member (Postdoc), Cardiovascular Institute

Publications

PUBLICATIONS

- **Single-cell polygenic risk scores dissect cellular and molecular heterogeneity of complex human diseases.** *Nature biotechnology*
Zhang, S., Shu, H., Zhou, J., Rubin-Sigler, J., Yang, X., Liu, Y., Cooper-Knock, J., Monte, E., Zhu, C., Tu, S., Li, H., Tong, M., Ecker, et al
2025
- **Integrative multi-omics profiling in human decedents receiving pig heart xenografts.** *Nature medicine*
Schmauch, E., Piening, B., Mohebnasab, M., Xia, B., Zhu, C., Stern, J., Zhang, W., Dowdell, A. K., Kim, J. I., Andrijevic, D., Khalil, K., Jaffe, I. S., Loza, et al
2024
- **Longitudinal profiling of the microbiome at four body sites reveals core stability and individualized dynamics during health and disease.** *Cell host & microbe*
Zhou, X., Shen, X., Johnson, J. S., Spakowicz, D. J., Agnello, M., Zhou, W., Avina, M., Honkala, A., Chleilat, F., Chen, S. J., Cha, K., Leopold, S., Zhu, et al
2024
- **Identification and quantification of small exon-containing isoforms in long-read RNA sequencing data.** *Nucleic acids research*
Liu, Z., Zhu, C., Steinmetz, L. M., Wei, W.
2023
- **Integrative omic profiling and analyses in two pig heart to human xenotransplants**
Keating, B., Schmauch, E., Piening, B., Xia, B., Zhu, C., Chang, B., Khalil, K., Kim, J., Weldon, E., Pass, H., Ayares, D., Griesemer, A., Mangiola, et al
LIPPINCOTT WILLIAMS & WILKINS.2023: 137
- **Advances and prospects for the Human BioMolecular Atlas Program (HuBMAP).** *Nature cell biology*
Jain, S., Pei, L., Spraggins, J. M., Angelo, M., Carson, J. P., Gehlenborg, N., Ginty, F., Gonçalves, J. P., Hagood, J. S., Hickey, J. W., Kelleher, N. L., Laurent, L. C., Lin, et al
2023
- **Organization of the human intestine at single-cell resolution.** *Nature*
Hickey, J. W., Becker, W. R., Nevins, S. A., Horning, A., Perez, A. E., Zhu, C., Zhu, B., Wei, B., Chiu, R., Chen, D. C., Cotter, D. L., Esplin, E. D., Weimer, et al
2023; 619 (7970): 572-584
- **Genotype Complements the Phenotype: Identification of the Pathogenicity of an LMNA Splice Variant by Nanopore Long-Read Sequencing in a Large DCM Family.** *International journal of molecular sciences*
Sedaghat-Hamedani, F., Rebs, S., Kayvanpour, E., Zhu, C., Amr, A., Müller, M., Haas, J., Wu, J., Steinmetz, L. M., Ehlermann, P., Streckfuss-Bömeke, K., Frey, N., Meder, et al
2022; 23 (20)

- **Transcription Factor GATA4 Regulates Cell Type-Specific Splicing Through Direct Interaction With RNA in Human Induced Pluripotent Stem Cell-Derived Cardiac Progenitors.** *Circulation*
Zhu, L., Choudhary, K., Gonzalez-Teran, B., Ang, Y., Thomas, R., Stone, N. R., Liu, L., Zhou, P., Zhu, C., Ruan, H., Huang, Y., Jin, S., Pelonero, et al
2022: CIRCULATIONAHA121057620
- **Single-molecule, full-length transcript isoform sequencing reveals disease-associated RNA isoforms in cardiomyocytes.** *Nature communications*
Zhu, C., Wu, J., Sun, H., Briganti, F., Meder, B., Wei, W., Steinmetz, L. M.
2021; 12 (1): 4203
- **iPSC Modeling of RBM20-Deficient DCM Identifies Upregulation of RBM20 as a Therapeutic Strategy.** *Cell reports*
Briganti, F. n., Sun, H. n., Wei, W. n., Wu, J. n., Zhu, C. n., Liss, M. n., Karakikes, I. n., Rego, S. n., Cipriano, A. n., Snyder, M. n., Meder, B. n., Xu, Z. n., Millat, et al
2020; 32 (10): 108117
- **NAD(P)HX repair deficiency causes central metabolic perturbations in yeast and human cells** *FEBS JOURNAL*
Becker-Kettern, J., Paczia, N., Conrotte, J., Zhu, C., Fiehn, O., Jung, P. P., Steinmetz, L. M., Linster, C. L.
2018; 285 (18): 3376–3401
- **Modulation of mRNA and lncRNA expression dynamics by the Set2-Rpd3S pathway** *NATURE COMMUNICATIONS*
Kim, J. H., Lee, B. B., Oh, Y. M., Zhu, C., Steinmetz, L. M., Lee, Y., Kim, W. K., Lee, S. B., Buratowski, S., Kim, T.
2016; 7
- **Chromatin Dynamics and the RNA Exosome Function in Concert to Regulate Transcriptional Homeostasis** *CELL REPORTS*
Rege, M., Subramanian, V., Zhu, C., Hsieh, T. S., Weiner, A., Friedman, N., Clauder-Muenster, S., Steinmetz, L. M., Rando, O. J., Boyer, L. A., Peterson, C. L.
2015; 13 (8): 1610-1622
- **Roadblock Termination by Reb1p Restricts Cryptic and Readthrough Transcription** *MOLECULAR CELL*
Colin, J., Candelli, T., Porrua, O., Boulay, J., Zhu, C., Lacroute, F., Steinmetz, L. M., Libri, D.
2014; 56 (5): 667-680
- **Yeast Growth Plasticity Is Regulated by Environment-Specific Multi-QTL Interactions** *G3-GENES GENOMES GENETICS*
Bhatia, A., Yadav, A., Zhu, C., Gagneur, J., Radhakrishnan, A., Steinmetz, L. M., Bhanot, G., Sinha, H.
2014; 4 (5): 769-777
- **Genotype-environment interactions reveal causal pathways that mediate genetic effects on phenotype.** *PLoS genetics*
Gagneur, J., Stegle, O., Zhu, C., Jakob, P., Tekkedil, M. M., Aiyar, R. S., Schuon, A., Pe'er, D., Steinmetz, L. M.
2013; 9 (9)