

## Zhen Qi

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### Bio

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#### HONORS AND AWARDS

- National Scholarship for Graduate Student, Ministry of Education of the People's Republic of China (2015)
- Excellent New Student Award, Tsinghua University (2011)
- National Encouragement Scholarship, Ministry of Education of the People's Republic of China (2010)

### Publications

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#### PUBLICATIONS

- **Improved reconstruction of single-cell developmental potential with CytoTRACE 2.** *Nature methods*  
Kang, M., Gulati, G. S., Brown, E. L., Qi, Z., Avagyan, S., Armenteros, J. J., Gleyzer, R., Zhang, W., Steen, C. B., D'Silva, J. P., Schwab, J., Clarke, M. F., Chaudhuri, et al  
2025
- **BMP restricts stemness of intestinal Lgr5+ stem cells by directly suppressing their signature genes.** *Nature communications*  
Qi, Z., Li, Y., Zhao, B., Xu, C., Liu, Y., Li, H., Zhang, B., Wang, X., Yang, X., Xie, W., Li, B., Han, J. J., Chen, et al  
2017; 8: 13824
- **The non-muscle-myosin-II heavy chain Myh9 mediates colitis-induced epithelium injury by restricting Lgr5+ stem cells.** *Nature communications*  
Zhao, B., Qi, Z., Li, Y., Wang, C., Fu, W., Chen, Y. G.  
2015; 6: 7166
- **Mouse lemur cell atlas informs primate genes, physiology and disease.** *Nature*  
Ezran, C., Liu, S., Chang, S., Ming, J., Guethlein, L. A., Wang, M. F., Dehghannasiri, R., Olivieri, J., Frank, H. K., Tarashansky, A., Koh, W., Jing, Q., Botvinnik, et al  
2025
- **A molecular cell atlas of mouse lemur, an emerging model primate.** *Nature*  
Ezran, C., Liu, S., Chang, S., Ming, J., Botvinnik, O., Penland, L., Tarashansky, A., de Morree, A., Travaglini, K. J., Zhao, J., Wang, G., Hasegawa, K., Sin, et al  
2025
- **An organism-wide atlas of hormonal signaling based on the mouse lemur single-cell transcriptome.** *Nature communications*  
Liu, S., Ezran, C., Wang, M. F., Li, Z., Awayan, K., Long, J. Z., De Vlaminc, I., Wang, S., Epelbaum, J., Kuo, C. S., Terrien, J., Krasnow, M. A., Ferrell, et al  
2024; 15 (1): 2188
- **The Tabula Sapiens: A multiple-organ, single-cell transcriptomic atlas of humans.** *Science (New York, N.Y.)*  
Jones, R. C., Karkanias, J., Krasnow, M. A., Pisco, A. O., Quake, S. R., Salzman, J., Yosef, N., Bulthaupt, B., Brown, P., Harper, W., Hemenez, M., Ponnusamy, R., Salehi, et al  
2022; 376 (6594): eabl4896
- **Molecular hallmarks of heterochronic parabiosis at single-cell resolution.** *Nature*  
Palovics, R., Keller, A., Schaum, N., Tan, W., Fehlmann, T., Borja, M., Kern, F., Bonanno, L., Calcuttawala, K., Webber, J., McGeever, A., Tabula Muris Consortium, Luo, J., et al

2022

- **Single-cell transcriptome analysis reveals differential nutrient absorption functions in human intestine** *JOURNAL OF EXPERIMENTAL MEDICINE*

Wang, Y., Song, W., Wang, J., Wang, T., Xiong, X., Qi, Z., Fu, W., Yang, X., Chen, Y.  
2020; 217 (2)

- **A single-cell transcriptomic atlas characterizes ageing tissues in the mouse.** *Nature*

2020

- **Ageing hallmarks exhibit organ-specific temporal signatures.** *Nature*

Schaum, N. n., Lehallier, B. n., Hahn, O. n., Pálovics, R. n., Hosseinzadeh, S. n., Lee, S. E., Sit, R. n., Lee, D. P., Losada, P. M., Zardeneta, M. E., Fehlmann, T. n., Webber, J. T., McGeever, et al  
2020

- **A growth factor-free culture system underscores the coordination between Wnt and BMP signaling in Lgr5+ intestinal stem cell maintenance.** *Cell discovery*

Li, Y., Liu, Y., Liu, B., Wang, J., Wei, S., Qi, Z., Wang, S., Fu, W., Chen, Y. G.  
2018; 4: 49

- **Tankyrases maintain homeostasis of intestinal epithelium by preventing cell death.** *PLoS genetics*

Ye, P., Chiang, Y. J., Qi, Z., Li, Y., Wang, S., Liu, Y., Li, X., Chen, Y. G.  
2018; 14 (9): e1007697

- **Monolayer culture of intestinal epithelium sustains Lgr5+ intestinal stem cells.** *Cell discovery*

Liu, Y., Qi, Z., Li, X., Du, Y., Chen, Y. G.  
2018; 4: 32

- **TGFβ induced factor homeobox 1 promotes colorectal cancer development through activating Wnt/β-catenin signaling.** *Oncotarget*

Wang, J. L., Qi, Z., Li, Y. H., Zhao, H. M., Chen, Y. G., Fu, W.  
2017; 8 (41): 70214-70225

- **Regulation of intestinal stem cell fate specification.** *Science China. Life sciences*

Qi, Z., Chen, Y. G.  
2015; 58 (6): 570-8

- **The Wnt Signaling Antagonist Dapper1 Accelerates Dishevelled2 Degradation via Promoting Its Ubiquitination and Aggregate-induced Autophagy.** *The Journal of biological chemistry*

Ma, B., Liu, B., Cao, W., Gao, C., Qi, Z., Ning, Y., Chen, Y. G.  
2015; 290 (19): 12346-54

- **Dapper1 promotes autophagy by enhancing the Beclin1-Vps34-Atg14L complex formation.** *Cell research*

Ma, B., Cao, W., Li, W., Gao, C., Qi, Z., Zhao, Y., Du, J., Xue, H., Peng, J., Wen, J., Chen, H., Ning, Y., Huang, et al  
2014; 24 (8): 912-24