

Bing Zhang

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Biography:

Dr. Bing Zhang received his bachelor's degree from Shandong University and his Ph.D. from Case Western Reserve University, followed by postdoctoral training in the Department of Stem Cell and Regenerative Biology at Harvard University. He joined Westlake University as a Principal Investigator in September 2020. His laboratory employs interdisciplinary approaches to define fundamental principles of tissue regeneration, immune defense, and adaptation, with the long-term goal of developing innovative strategies to counteract aging-related tissue decline, treat autoimmune disease, and enhance adaptation to extreme environments.

Representative Publications:

1. Peng Zhang*, Juju Miao*, Haoyue Yu, Hualin Yu, Chao Liu, Luming Zhao, Ping Yang, Ting Zhou#, and **Bing Zhang#** (#Co-corresponding authors). Sympathetic-epithelial crosstalk governs tissue-resident memory T cell immunosurveillance in the skin. **Cell**, 2026, 189(5): 1323-1340.e25, doi.org/10.1016/j.cell.2025.12.043.
2. Han Chen*, Chao Liu*, Shiyao Cui*, Yingqian Xia, Ke Zhang, Hanxiao Cheng, Jingyu Peng, Xiaoling Yu, Luyang Li, Hualin Yu, Jufang Zhang, Ju-Sheng Zheng, and **Bing Zhang**. Intermittent fasting triggers interorgan communication to suppress hair follicle regeneration. **Cell**, 2025, 188(1): 157-174.e22, doi.org/10.1016/j.cell.2024.11.004.
3. **Bing Zhang**, Sai Ma, Inbal Rachmin, Megan He, Pankaj Baral, Sekyu Choi, William A. Gonçalves, Yulia Shwartz, Eva M. Fast, Yiqun Su, Leonard I. Zon, Aviv Regev, Jason D. Buenrostro, Thiago M. Cunha, Isaac M. Chiu, David E. Fisher, and Ya-Chieh Hsu (2020). Hyperactivation of Sympathetic Nerves Drives Melanocyte Stem Cell Depletion. **Nature**, 2020, 577(7792): 676-681, doi.org/10.1038/s41586-020-1935-3.
4. **Bing Zhang***, Pai-Chi Tsai*, Meryem Gonzalez-Celeiro, Oliver Chung, Benjamin Boumard, Carolina N. Perdigoto, Elena Ezhkova, and Ya-Chieh Hsu. Hair Follicles' Transit Amplifying Cells Govern Concurrent Dermal Adipocyte Production through Sonic Hedgehog. **Genes and Development**, 2016, 30(20): 2325-2338, doi.org/10.1101/gad.285429.116.
5. **Bing Zhang#** and Ting Chen# (#Co-corresponding authors). Local and systemic mechanisms that control the hair follicle stem cell niche. **Nature Reviews Molecular Cell Biology**, 2024, 25(2): 87-100, doi.org/10.1038/s41580-023-00662-3.