

Tao Yue, PhD

Assistant Professor
Center for Organogenesis and Trauma
Departments of Surgery and Immunology
Simmons Comprehensive Cancer Center
UT Southwestern Medical Center
6000 Harry Hines Blvd., NL8
Dallas, TX 75390, USA
Phone Number: 214-727-6847
Email: Tao.Yue@utsouthwestern.edu

Employment

Assistant Professor , Departments of Surgery and Immunology UT Southwestern Medical Center, Dallas TX	Present
Senior Scientist , Aetio Biotherapy, Inc. /UT Southwestern Medical Center, Dallas, TX Advisor: Dr. Yang-Xin Fu	2020-2022
Postdoctoral Research Fellow and Instructor Center for the Genetics of Host Defense and Department of Immunology University of Texas Southwestern Medical Center at Dallas Advisor: Dr. Bruce Alan Beutler	2012-2020

Education

Ph.D. of Genetics , University of Texas Southwestern Medical Center Advisor: Dr. Jin Jiang
Ph.D. Student of Molecular Biology , Sun Yat-Sen University, School of Medicine Advisor: Dr. Zhengyu Zhu
BS in Biology , South China Normal University

Research Support

Rally Foundation Childhood Cancer Career Development Award Role: PI <i>Leveraging the Immune System for the Treatment of Metastatic Osteosarcoma</i>	7/01/24-6/30/2027
NIH NCI-R01CA289258 (PI, Jinming Gao) Role: Co-Investigator <i>Tumor-activatable Interleukin-2 Superkine Nanoparticle Therapy</i>	4/1/2024-3/31/2029
NIH NCI-KCP SPORE (P50CA196516) (PI, James Brugarolas)	8/1/2023-7/31/2024

Role: Co-Investigator

Develop low pH resistant IL-2-based immunocytokines for Kidney cancer treatment

Honors and Awards

Rally Foundation Childhood Cancer Career Development Award

2024

Activities

Editor, *Frontiers in Immunology*,

2024-present

Patent

2021 U.S. Patent, WO2021222762, “Activatable IL2 Composition and Methods of Use” (**Main Inventor**)

Memberships and Services

American Association for Cancer Research

Society for Immunotherapy of Cancer

Orthopaedic Research Society

American Society for Bone and Mineral Research

Invited Talks

10/2023 New Faculty Research Forum, UT Southwestern Medical Center, Dallas, TX.

08/2023 Faculty Research Forum, Simmons Comprehensive Cancer Center, Dallas, TX.

03/2023 Research Forum, Department of Surgery, UT Southwestern Medical Center, Dallas, TX.

01/2012 54th Annual Drosophila Conference, Washington, DC.

Selected Peer Reviewed Publications

- 1 **Yue, T.**, Zhan, X., Zhang, D., Jain, R., Wang, K., Su, L., Choi, J., Quan, J., Hildebrand, S., Xu, D., Li, X., Turer, E., Sun, L., Moresco, E., Beutler, B. SLFN2 protection of tRNAs from stress-induced cleavage is essential for T cell-mediated immunity. *Science*. 2021 May 14;372(6543): eaba4220.
- 2 Xue Wang, Long Liu, **Tao Yue**, Zhichen Sun, Joonbeom Bae, Kuofu Tseng, Jian Qiao, Yang-Xin Fu. Targeting tumor microenvironment with antibody-guided IL-2 pro-cytokine promotes and rejuvenates dysfunctional CD8+ T cells.. *Signal Transduction and Targeted Therapy*. 8, 268 (2023). PubMed Central PMCID: PMC10336100.

- 3 Zhang, D., **Yue, T.**, Choi, J., Nair-Gill, E., Zhong, X., Wang, K., Zhan, X., Li, X., Choi, J., Tang, M., Quan, J., Hildebrand, S., Moresco, E., Beutler, B. Syndromic immune disorder caused by a viable hypomorphic allele of spliceosome component Snrnp40. *Nature Immunology*. 2019; 20(10):1322-1334.
- 4 Misawa, T., SoRelle, J., Choi, J., **Yue, T.**, Wang, K., McAlpine W., Wang, J., Liu, A., Tabeta K., Turer, E., Evers, B., Nair-Gill, E., Poddar, S., Su, L., Ou, F., Yu, L., Russell, J., Ludwig, S., Zhan, X., Hildebrand, S., Li, X., Tang, M., Murray, A., Moresco, E., Beutler B. Mutual inhibition between Prkd2 and Bcl6 controls T follicular helper cell differentiation. *Science Immunology*. 2020 24; 5(43)
- 5 **Yue, T.**, Tian, A., Jiang, J. The cell adhesion molecule Echinoid functions as a tumor suppressor and upstream regulator of the Hippo signaling pathway. *Developmental Cell*. 2012; 22:255-267.
- 6 **Yue, T.**, Xian, K., Hurlock, E., Xin, M., Kernie, S., Parada, L., Lu, QR. A critical role for dorsal progenitors in cortical myelination. *J Neurosci*. 2006; 26(4):1275-1280.
- 7 ***Yue, T.**, *Mei, X., Ma, Z., Wu, F., Lu, QR. Myelinogenesis and axonal recognition by oligodendrocytes in brain are uncoupled in Olig1-null mice. *J Neurosci*. 2005; 25(6):1354-1365 (*co-first author).
- 8 Wang, K., Zhan, X., McAlpine, W., Zhang, Z., Choi, JH., Shi, H., Misawa, T., **Yue, T.**, Zhang, D., Wang, Y., Ludwig, S., Russell, J., Tang, M., Li, X., Murray, AR., Moresco, EMY., Turer, EE., Beutler, B.. Enhanced susceptibility to chemically induced colitis caused by excessive endosomal TLR signaling in LRBA-deficient mice. *PNAS*. 2019; 116(23):11380-11389.
- 9 Ma, G., Li, S., Han, Y., Li, S., **Yue, T.**, Wang, B., Jiang, J.. Regulation of Smoothed Trafficking and Hedgehog Signaling by the SUMO Pathway. *Developmental Cell*. 2016 21;438-451.
- 10 Li, S., Cho, Y., **Yue, T.**, Ip, Y, Jiang J. Overlapping functions of the MAP4K family kinases Hppy and Msn in Hippo signaling. *Cell Discovery*. 2015; 1:15038.
- 11 Wang, T., Zhan, X., Bu, C., Lyon, S., Pratt, D., Hildebrand, S., Choi, J., Zhang, Z., Zeng, M., Wang, K., Turer, E., Chen, Z., Zhang, D., **Yue T.**, Wang, Y., Shi, H., Wang, J., Sun, L., SoRelle, J., McAlpine, W., Hutchins, N., Zhan, X., Fina, M., Gobert, R., Quan, J., Kreutzer, M., Arnett, S., Hawkins, K., Leach, A., Tate, C., Daniel, C., Reyna, C., Prince, L., Davis, S., Purrington, J., Bearden, R., Weatherly J., D. White, Russell, J., Sun, Q., Tang, M., Li, X., Scott, L., Moresco, E., McInerney, G., Karlsson, Hedestam, G., Xie, Y., Beutler, B., Real-time resolution of point mutations that cause phenovariance in mice. *PNAS*. 2015; 112(5):E440-9.
- 12 Li, S., Chen, Y., Shi, Q., **Yue, T.**, Wang, B., Jiang, J. Hedgehog-Regulated Ubiquitination Controls Smoothed Trafficking and Cell Surface Expression in *Drosophila*. *PLoS Biol*. 2012 Jan; 10(1).e1001239.
- 13 Chen, Y., Sasai, N., Ma, G., **Yue, T.**, Jia, J., Briscoe, J., Jiang, J. Sonic Hedgehog dependent phosphorylation by CK1 α and GRK2 is required for ciliary accumulation and activation of smoothed. *PLoS Biol*. 2011; Jun; 9(6).e1001083.

- 14 Ren, F., Wang, B., **Yue, T.**, Yun, EY., Ip. YT., Jiang, J. Hippo signaling regulates Drosophila intestine stem cell proliferation through multiple pathways. *PNAS* . 2010; 107(49):21064-9.
- 15 Jia, H., Liu, Y., Xia, R., Tong, C., **Yue, T.**, Jiang, J., Jia, J. Casein kinase 2 promotes Hedgehog signaling by regulating both Smoothed and Cubitus interruptus. *J. Biol. Chem.* 2010; 285 (48):37218-26.
- 16 Zhang, Q., Shi, Q., Chen, Y., **Yue, T.**, Li, S., Wang, B., Jiang, J. Multiple Ser/Thr-rich degrons mediate the degradation of Ci/Gli by the Cul3-HIB/SPOP E3 ubiquitin ligase. *PNAS*. 2009; 106 (50):21191-6.
- 17 Zhang, L., **Yue, T.**, Jiang, J. Hippo signaling pathway and organ size control. *Fly*. 2009; 3 (1):68-73.
- 18 **Yue, T.**, Zhang, P., Liu, P., Deng, Q., Ji, Q., Li, X., Zhu, Z. Effect of transfection of hEndostatin gene on CNE2 cell xenograft growth in nude mice. *Ai Zheng*. 2003; 22(2):148-151.
- 19 **Yue, T.**, Liu, P., Deng, Q., Zhang P., Ji Q., Zhang, H., Zhu, Z. Signal peptide sequence of human interleukin-2 influenced hEndostatin gene expression and protein secretion in HepG2 cells. *Chinese Journal of Pathophysiology*. 2003; 19(9):1242-1245.