

## Postdoctoral Fellow in Innate Immunity

A postdoctoral training position is available in the laboratory of [Zhenyu Zhong, Ph.D](#) in the Department of Immunology at UT Southwestern Medical Center to study the fundamental molecular mechanism by which inflammation is initiated, propagated, and terminated when no longer needed. Our laboratory [Zhong Lab](#) has several exciting projects related to uncovering novel mitochondrial factors that regulate innate immune activation. For more information about our research work, please check our recent publications:

1. Wang X, He Q, Zhou C, Xu Y, Liu D, Fujiwara N, Kubota N, Click A, Henderson P, Vancil J, Marquez CA, Gunasekaran G, Schwarz ME, Tabrizian P, Sarpel U, Fiel MI, Diao Y, Sun B, Hoshida Y, Liang S, Zhong Z. Prolonged hypernutrition impairs TREM2-dependent efferocytosis to license chronic liver inflammation and NASH development. *Immunity* 2023 Jan 10;56(1):58-77.e11. doi: 10.1016/j.immuni.2022.11.013. Epub 2022 Dec 14.
2. Zhong F, Liang S, Zhong Z. Emerging role of mitochondrial DNA as a major activator of inflammation and disease progression. *Trends in Immunology*. 2019 Dec;40(12):1120-1133. doi: 10.1016/j.it.2019.10.008. Epub 2019 Nov 16.
3. Zhong Z, Liang S, Sanchez-Lopez E, He F, Shalapour S, Wong J, Ding S, Seki E., Greenburg HB, Kisseleva T, Karin M. New mitochondrial DNA synthesis enables NLRP3 inflammasome activation. *Nature*. 2018 Aug;560(7717):198:203. doi: 10.1038/s41586-018-0372-z
4. Zhong Z, Zhai Y, Bu P, Shah S, Qiao L. Papilloma-pseudovirus eradicates intestinal tumors and triples the lifespan of Apc<sup>Min/+</sup> mice. *Nature Communications* 2017 Apr 11; doi:10.1038/NCOMMS15004
5. Zhong Z, Sanchez-Lopez E, Karin M. Autophagy, inflammation and immunity: a troika governing cancer and its treatment. *Cell*. 2016 Jul 14;166(2):288-98. doi: 10.1016/j.cell.2016.05.051.
6. Zhong Z, Umemura A, Sanchez-Lopez E, Liang S, Shalapour S, Wong J, He F, Boassa D, Perkins G, Ali SR, McGeough MG, Ellisman MH, Seki E, Gustafsson AB, Hoffman HM, Diaz-Meco MT, Moscat J, Karin M. NF-κB restricts inflammasome activation via elimination of damaged mitochondria. *Cell*. 2016 Feb 25;164(5):896-910. doi: 10.1016/j.cell.2015.12.057.

Candidates must hold a Ph.D. and/or M.D./Ph.D. degree. Experience in the field of immunology, cell biology, molecular biology, biochemistry, cancer biology, and/or computational biology leading to publication in peer-reviewed journals is recommended.

Information on our postdoctoral training program, benefits, and a virtual tour can be found at

<http://www.utsouthwestern.edu/postdocs>.

Interested individuals should send a CV, statement of interests, and a list of three references to:

Zhenyu Zhong, Ph.D.  
UT Southwestern Medical Center  
5323 Harry Hines Blvd.  
Dallas, TX 75390-9093

[Zhenyu.Zhong@utsouthwestern.edu](mailto:Zhenyu.Zhong@utsouthwestern.edu)

<https://labs.utsouthwestern.edu/zhong-lab>

<https://profiles.utsouthwestern.edu/profile/178820/zhenyu-zhong.html>

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