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Education

2006.9-2011.7	Ph.D. in Biochemistry and Molecular Biology Institute of Biochemistry and Cell Biology, CAS, Shanghai, China
2002.9-2006.7	B.S. in Biology Xiamen University, Xiamen, China

Research Experience

2018.4-Present	Associate Professor School of Life Sciences, Xiamen University, Xiamen, China
2011.9-2018.3	Postdoctoral Research Xiamen University, Xiamen, China
2008.9-2008.10	Visiting Scholar Institut de Biologie Moléculaire et Cellulaire du CNRS, Strasbourg, France

Teaching Experience

2020-2023	*Molecular Cell Biology: Cell Death and Ageing*
2017-2023	*Advanced Optical Microscopy: Techniques and Applications*
2019-2023	*General Biology*

Awards

2023	"Top 10 Socially Influential Events in China's Optics Field (Light10)" Nomination Award
2022	MCE Award for Scientists Promoting Biology and Medicine Research

Grants

2021.01-2024.12	National Science General Foundation (32070736)
2019.01-2022.12	National Science General Foundation (31871386)
2016.01-2018.12	National Science Foundation for Young Scholars (31501115)
2017.01-2018.12	China Postdoctoral Science Foundation (2016T90598)

Publications

(* Corresponding Author; # equal contribution)

1. Zhuang R#, Zhou Y#, Wang Z, Cao Y, Chen J, Xu L, Ren Y, Zheng Y, Wei Z, Qiu H, Li L, Han Y,

Yun Y, **Chen X***, Hong W*, Wang T*. Rab26 restricts insulin secretion via sequestering Synaptotagmin-1. ***PLoS Biol***. 2023 Jun 8;21(6):e3002142.

2. Peng GX, Mao XL, Cao Y, Yao SY, Li QR, **Chen X**, Wang ED, Zhou XL. RNA granule-clustered mitochondrial aminoacyl-tRNA synthetases form multiple complexes with the potential to fine-tune tRNA aminoacylation. ***Nucleic Acids Res***. 2022 Dec 9;50(22):12951-12968.

3. Jiang B, Zhang J, Zhao G, Liu M, Hu J, Lin F, Wang J, Zhao W, Ma H, Zhang C, Wu C, Yao L, Liu Q, **Chen X**, Cao Y, Zheng Y, Zhang C, Han A, Lin D, Li Q. Filamentous GLS1 promotes ROS-induced apoptosis upon glutamine deprivation via insufficient asparagine synthesis. ***Mol Cell***. 2022 May 19;82(10):1821-1835.e6.

4. **Chen X***, Zhu R, Zhong J, Ying Y, Wang W, Cao Y, Cai H, Li X, Shuai J, Han J*. Mosaic composition of RIP1-RIP3 signalling hub and its role in regulating cell death. ***Nat Cell Biol***. 2022 Apr;24(4):471-482. highlighted by Nature Cell Biology: “RIPK1 and RIPK3 form mosaic necrosomes”.

5. Zhou X#, Ma F#, Xie J#, Yuan M#, Li Y#, Shaabani N#, Zhao F, Huang D, Wu NC, Lee CD, Liu H, Li J, Chen Z, Hong Y, Liu WH, Xiao N, Burton DR, Tu H, Li H, **Chen X**, Teijaro JR, Wilson IA*, Xiao C*, Huang Z*. Diverse immunoglobulin gene usage and convergent epitope targeting in neutralizing antibody responses to SARS-CoV-2. ***Cell Rep***. 2021 May 11;35(6):109109.

6. Li X#, Zhong CQ#, Wu R#, Xu X, Yang ZH, Cai S, Wu X, **Chen X**, Yin Z, He Q, Li D, Xu F, Yan Y, Qi H, Xie C, Shuai J*, Han J*. RIP1-dependent linear and nonlinear recruitments of caspase-8 and RIP3 respectively to necrosome specify distinct cell death outcomes. ***Protein & Cell***. 2021 Nov;12(11):858-876.

7. Li M#, Zhang CS#, Zong Y#, Feng JW, Ma T, Hu M, Lin Z, Li X, Xie C, Wu Y, Jiang D, Li Y, Zhang C, Tian X, Wang W, Yang Y, Chen J, Cui J, Wu YQ, **Chen X**, Liu QF, Wu J, Lin SY, Ye Z, Liu Y, Piao HL, Yu L, Zhou Z, Xie XS, Hardie DG, Lin SC*. Transient Receptor Potential V Channels Are Essential for Glucose Sensing by Aldolase and AMPK. ***Cell Metab***. 2019;30(3):508-524.e12.

8. Wang P#, Geng J#, Gao J, Zhao H, Li J, Shi Y, Yang B, Xiao C, Linghu Y, Sun X, **Chen X**, Hong L, Qin F, Li X, Yu JS, You H, Yuan Z, Zhou D, Johnson RL, Chen L*. Macrophage achieves self-protection against oxidative stress-induced ageing through the Mst-Nrf2 axis. ***Nat Commun***. 2019 Feb 14;10(1):755.

9. Xue Z, Wang S, Li J, **Chen X***, Han J, Han S*. Bifunctional Super-resolution Imaging Probe with Acidity-independent Lysosome-retention Mechanism. ***Anal Chem***. 2018 Oct 2;90(19):11393-11400.

10. Gao H#, Yang Z#, Wang X#, Qian P, Hong R, **Chen X**, Su XZ, Cui H, Yuan J*. ISP1-Anchored Polarization of GCβ/CDC50A Complex Initiates Malaria Ookinete Gliding Motility. ***Curr Biol***. 2018;28(17):2763–2776.e6.

11. Yang Z, Wang Y, Zhang Y, He X, Zhong CQ, Ni H, **Chen X**, Liang Y, Wu J, Zhao S, Zhou D, Han J*. RIP3 targets pyruvate dehydrogenase complex to increase aerobic respiration in TNF-induced necroptosis. ***Nat Cell Biol***. 2018 Feb;20(2):186-197.

12. Zhang Y, **Chen X**, Gueydan C, Han J*. Plasma membrane changes during programmed cell deaths. ***Cell Res***. 2018 Jan;28(1):9-21. PMID: 29076500. Review.

13. Zhang Y#, Su SS#, Zhao S, Yang Z, Zhong CQ, **Chen X**, Cai Q, Yang ZH, Huang D, Wu R, Han J*. RIP1 autophosphorylation is promoted by mitochondrial ROS and is essential for RIP3 recruitment into necrosome. ***Nat Commun***. 2017 Feb 8;8:14329.

14. Huang D#, Zheng X#, Wang ZA#, **Chen X**, He WT, Zhang Y, Xu JG, Zhao H, Shi W, Wang X, Zhu Y, Han J*. MLKL channel in necroptosis is octamer formed by tetramers in a dyadic process. ***Mol Cell Biol***. 2017;37(5):e00497-16.

15. **Chen X#**, He WT#, Hu L, Li J, Fang Y, Wang X, Xu X, Wang Z, Huang K, Han J*. Pyroptosis is driven by non-selective gasdermin-D pore and its morphology is different from MLKL channel-mediated necroptosis. ***Cell Res***. 2016 Sep;26(9):1007-20. highly cited (top 1% of the academic field of Molecular Biology & Genetics paper by Web of Science).

16. Wu XN#, Yang ZH#, Wang XK, Zhang Y, Wan H, Song Y, **Chen X**, Shao J, Han J*. Distinct roles of RIP1-RIP3 hetero- and RIP3-RIP3 homo-interaction in mediating necroptosis. ***Cell Death Differ***. 2014 Nov;21(11):1709-20.

17. **Chen X#**, Li W#, Ren J#, Huang D, He WT, Song Y, Yang C, Li W, Zheng X, Chen P, Han J*. Translocation of mixed lineage kinase domain-like protein to plasma membrane leads to necrotic cell death. ***Cell Res***. 2014 Jan;24(1):105-21. highlighted by Cell Research: “MLKL regulates necrotic plasma membrane permeabilization”; highly cited (top 1% of the academic field of Molecular Biology & Genetics paper by Web of Science).

18. **Chen X#**, Ma JJ#, Tan M, Yao P, Hu QH, Eriani G, Wang ED*. Modular pathways for editing non-cognate amino acids by human cytoplasmic leucyl-tRNA synthetase. ***Nucleic Acids Res***. 2011 Jan;39(1):235-47.