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EDUCATION

9/2012-6/2016 Ph.D. Northeast Forestry University, Harbin, China
Supervisor: Dr. Jianzhang Ma, Ph.D. (马建章院士)

9/2008-6/2012 B.S. Northeast Forestry University, Harbin, China
Supervisor: Dr. Jianzhang Ma, Ph.D. (马建章院士)

RESEARCH EXPERIENCE

4/2021-present Investigator,
Center for Developmental Biology
Institute of Genetics and Developmental Biology

7/2016-4/2021 Postdoctoral scholar,
National Institute of Biological Sciences, Beijing,
Tsinghua University,
Supervisor: Dr. Xiaodong Wang (王晓东院士)

8/2014-6/2016 Visiting scholar,
National Institute of Biological Sciences, Beijing,
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AWARDS AND HONORS

2018 National Postdoctoral Innovative Talent Support Program
(博新计划, ¥600,000)

PUBLICATION (#equal contribution; *co-correspondence)

Buhao Deng#, Jingyi Wang#, Tingyun Yang#, Zhao Deng#, Jiafan Yuan, Bohan Zhang, Zhen Zhou, Fang Chen, Lu Fang, Chengzhi Liang, Bo Yan*, **Youwei Ai***. TNF and IFN γ -induced cell death requires IRF1 and ELAVL1 to promote CASP8 expression. (2024), **Journal of Cell Biology**, 223 (3), e202305026. (**lead contact**)

Youwei Ai, Yutong Meng, Bo Yan, Qinyi Zhou, Xiaodong Wang*. The biochemical pathways of apoptotic, necroptotic, pyroptotic, and ferroptotic cell death. (2024), **Molecular Cell**, 84 (1), 170-179.

Bo Yan#, Zhangcheng Ding, Wenbin Zhang, Gaihong Cai, Hui Han, Yan Ma, Yang Cao, Jiawen Wang, She Chen, **Youwei Ai***. Multiple PDE3A modulators act as molecular glues promoting PDE3A-SLFN12 interaction and induce SLFN12 dephosphorylation and cell death. (2022), **Cell Chemical Biology** 29 (6), 958-969.e5 (**lead contact**)

Bo Yan#*, **Youwei Ai#***, Qi Sun, Yan Ma, Yang Cao, Jiawen Wang, Zhiyuan Zhang, Xiaodong Wang. Membrane damage during ferroptosis is caused by oxidation of phospholipids catalyzed by the oxidoreductases POR and CYB5R1. (2021). **Molecular Cell** 81 (2), 355-369. e10 (**lead contact**)

Bo Yan, **Youwei Ai***, Zhiyuan Zhang, Xiaodong Wang*. Assessing POR and CYB5R1 oxidoreductase-mediated oxidative rupture of PUFA in liposomes. (2021). **STAR protocols** 2 (1), 100360

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Dianrong Li#, **Youwei Ai#**, Jia Guo, Baijun Dong, Lin Li, Gaihong Cai, She Chen, Dan Xu, Fengchao Wang, Xiaodong Wang*. Casein kinase 1G2 suppresses necroptosis-promoted testis aging by inhibiting receptor-Interacting kinase 3.(2020). **Elife** 9, e61564

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stabilizing Schlafen-12 protein turnover.(2019). **Molecular cell** 75 (6), 1103-1116. e9

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Youwei Ai*, Jianzhang Ma*. Multiple lysines combined in HIV-1 Vif determines the responsiveness to CBF- β . (2015). **Biochemical and biophysical research communications** 457 (3), 385-390

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