



NAME Ying Liu
INSTITUTE College of Future Technology,
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Peking University
POSITION Professor & Associate Dean
YEAR OF BIRTH 1984
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1. CURRICULUM VITAE

EDUCATION (In reverse chronological order from latest to earliest including postdoctoral training)

Degree	Year	Major	Institution	Mentor
Postdoc	2011-2013	Genetics	Massachusetts General Hospital & Harvard Medical School	Gary Ruvkun
Ph.D.	2006-2011	Biochemistry	UT Southwestern Medical Center	Qinghua Liu
B.S.	2002-2006	Biochemistry	Nanjing University, China	

PROFESSIONAL APPOINTMENTS

Year	Position	Institution
2023-present	New Cornerstone Investigator	New Cornerstone Science Laboratory
2021-present	Professor and Associate Dean	College of Future Technology, Peking University
2019-2021	Associate Professor	Institute of Molecular Medicine, Peking University
2017-2022	HHMI International Research Scholar	Howard Hughes Medical Institute
2013-2019	Assistant Professor	Institute of Molecular Medicine, Peking University

HONORS AND AWARDS

Year	Honors and Awards
2023	New Cornerstone Investigator
2021	C.C. Tan Life Science Innovation Award
2021	Peking Mao Yi-Sheng Science and Technology Award
2020	Promega Innovation Award
2019	Xplorer Prize
2019	National Science Fund for Distinguished Young Scholars
2019	15 th China Young Female Scientist Award

2018	“Innovators under 35, CHINA”, MIT Technology Review
2017	HHMI International Research Scholar
2012-2014	Helen Hay Whitney Research Fellowship
2011	Nominata Award, UT Southwestern Medical Center
2010	Stanford Biochemistry Founders’ Award for Doctoral Excellence

FULL LIST OF PUBLICATIONS (# equal contribution, *corresponding author)

Research Article:

1. Xu C[#], Pan X[#], Wang D, Guan Y, Yang W, Chen X* and **Liu Y***. O-GlcNAcylation of Raptor transduces glucose signals to mTORC1. *Molecular Cell* (accepted)
2. Ma C[#], Xue T[#], Peng Q[#], Zhang J, Guan J, Ding W, Li Y, Xia P, Zhou L, Zhao T, Wang S, Quan L, Li C-Y*, **Liu Y***; A novel N⁶-Deoxyadenine methyltransferase METL-9 modulates *C. elegans* immunity via dichotomous mechanisms (2023) doi: 10.1038/s41422-023-00826-y.
3. Yan G, Yang J, Li W, Guo A, Guan J, **Liu Y***; Genome-wide CRISPR screens identify ILF3 as a mediator of mTORC1-dependent amino acid sensing, *Nature Cell Biology* (2023) 25(5):754-764.
4. Wang D[#], Xu C[#], Yang W, Chen J, Ou Y, Guan Y, Guan J, **Liu Y***; E3 ligase RNF167 and deubiquitinase STAMBPL1 modulate mTOR and cancer progression, *Molecular Cell* (2022) 82(4):770-784.
5. Xia P, Zhou L, Guan J, Ding W, **Liu Y***; Splicing factor PRP-19 regulates mitochondrial stress response. *Life Metabolism* (2022) doi.org/10.1093/lifemeta/loac009
6. Chen J[#]*, Ou Y[#], Luo R, Wang J, Wang D, Guan J, Li Y, Xia P, Chen P, **Liu Y***; SAR1B senses leucine levels to regulate mTORC1 signalling, *Nature* (2021) 596(7871):281-284.
7. Li Y, Ding W, Li C-Y and **Liu Y***. HLH-11 modulates lipid metabolism in response to nutrient availability. *Nature Communications* (2020) 11:5959.
8. Shao L[#], Peng Q[#], Dong M, Gao K, Li YM, Li Y, Li C-Y* and **Liu Y***. Histone deacetylase HDA-1 modulates mitochondrial stress response and longevity. *Nature Communications* (2020) 11:4639.
9. Li M, Zhang C-S, Zong Y, Feng J-W, 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 Y-Q, Chen X, Liu Q-F, Wu J, Lin S-Y, Ye Z, **Liu Y**, Piao H-L, Yu L, Zhou Z, Xie X-S, Hardie G and Lin S-C. Transient Receptor Potential V Channels Are Essential for Glucose Sensing by Aldolase and AMPK. *Cell Metabolism* 30 (2019) 508-524.
10. Gao K, Li Y, Hu S and **Liu Y***. SUMO peptidase ULP-4 regulates mitochondrial UPR-mediated innate immunity and lifespan extension. *eLife* (2019) e41792.

11. Ma C, Niu R, Huang T, Shao LW, Peng Y, Ding W, Wang Y, Jia G, He C, Li CY, He A and **Liu Y***. N6-methyldeoxyadenine is a transgenerational epigenetic signal for mitochondrial stress adaptation. *Nature Cell Biology* 21 (2019) 319-327.
12. Chen J, Ou Y, Yang Y, Li W, Xu Y, Xie Y and **Liu Y***. KLHL22 activates amino-acid-dependent mTORC1 signaling to promote tumorigenesis and ageing. *Nature* 557(2018) 585-589.
13. Chen J[#], Ou Y[#], Li Y, Hu S, Shao LW and **Liu Y***. Metformin Extends *C. elegans* Lifespan through Lysosomal Pathway. *eLife* 6 (2017) e31268.
14. Shao LW, Niu R and **Liu Y***. Neuropeptide signals cell non-autonomous mitochondrial unfolded protein response. *Cell Research* 11 (2016) 1182-1196. (cover story)
15. Berendzen K, Durieux J, Shao L, Tian Y, Kim H, Wolff S, **Liu Y** and Dillin A*. Neuroendocrine coordination of mitochondrial stress signaling and proteostasis. *Cell* 166 (2016) 1553-1563.
16. **Liu Y**, Samuel B, Breen P, and Ruvkun G*. *Caenorhabditis elegans* pathways that surveil and defend mitochondria. *Nature* 508 (2014) 406-410.
17. **Liu Y**, Tan H, Tian H, Liang C, Chen S and Liu Q*. Autoantigen La promotes efficient RNAi, antiviral response and transposon silencing by facilitating multiple-turnover RISC catalysis. *Mol. Cell* 44 (2011) 502-508.
18. Ye X[#], Huang N[#], **Liu Y**, Paroo Z, Huerta C, Li P, Chen S, Liu Q* and Zhang H*. Structure of C3PO and mechanism of Human RISC activation. *Nat. Struct. Mol. Biol.* 18 (2011) 650-657.
19. Okamura K, Robine N, **Liu Y**, Liu Q, and Lai EC*. R2D2 organizes small regulatory RNA pathways in *Drosophila*. *Mol. Cell Biol.* 31 (2011) 884-896.
20. **Liu Y**, Ye X, Jiang F, Liang C, Chen D, Peng J, Kinch L, Grishin N, Liu Q*. C3PO, an endoribonuclease that promotes RNAi by facilitating RISC activation. *Science* 5941 (2009) 750-753.
21. Liu X, Park JK, Jiang F, **Liu Y**, McKearin D, Liu Q*. Dicer-1, but not loquacious, is critical for assembly of miRNA-induced silencing complex. *RNA* 12 (2007) 2324-9.

Invited Review:

1. **Liu Y***. Epigenetic codes of mitochondrial homeostasis. *Nature Aging* 1 (2021) 153-154.
2. Wang S, Gao K and **Liu Y***. UPR^{mt} coordinates immunity to maintain mitochondrial homeostasis and animal fitness. *Mitochondrion* 41 (2017) 9-13.
3. **Liu Y** and Liu Q*. ATM signals miRNA biogenesis through KSRP. *Mol. Cell* 41 (2011) 367-368.