

Hui Shen, Ph.D.

Professor of School of Life Science and
Technology
China Pharmaceutical University
Email: shhui@cpu.edu.cn



中國藥科大學
CHINA PHARMACEUTICAL UNIVERSITY

RESEARCH

Professor

China Pharmaceutical University
School of Life Science and Technology

Nanjing, Jiangsu
2023-Current

Postdoctoral Researcher

University of Pennsylvania Perelman School of Medicine
Department of Biochemistry and Biophysics
Advisor: Prof. Kathy Fange Liu

Philadelphia, PA
2018-2023

Graduate Student

University of Science and Technology of China
Hefei National Laboratory for Physical Sciences at Microscale
Advisor: Prof. Maikun Teng and Prof. Liwen Niu

Hefei, Anhui
2012-2017

PUBLICATIONS

Corresponding and first-author publication (*Equal contributions):

1. Minxiang Zhong*, Shiyuan Chen*, Wengqi Lu, Ting Luo, Ruiya Shi, Jinzhou Li, **Shen H.** Liquid-liquid phase separation of DDX3X: mechanisms, pathological implications, and therapeutic potential. *Int J Biol Macromol* (2025).
2. Owens MC *, **Shen H***, Yanas A, Mendoza-Figueroa MS, Lavorando E, Wei XY, Shweta H, Tang HY, Goldman YE, Liu KF. Specific catalytically impaired DDX3X mutants form sexually dimorphic hollow condensates. *Nat Commun* (2024)
3. Gonskikh Y*, Stoute J*, **Shen H***, Budinich K, Pingul B, Schultz K, Marmorstein R, Shi JW, Liu KF. Identification of an RNA-binding region in 18S dimethyladenosine methyltransferase DIMT1 essential for proliferation of acute myeloid leukemia cells. *Genes & Dev* (2023)
4. **Shen H***, Yanas A*, Owens MC, Zhang C, Fritsch C, Fare CM, Copley KE, Shorter J, Goldman YE, Liu KF. Sexually dimorphic RNA helicases DDX3X and DDX3Y differentially regulate RNA metabolism through phase separation. *Mol Cell* (2022)
5. **Shen H**, Gonskikh Y, Stoute J, Liu KF. Human DIMT1 generates N₂^{6,6}A-dimethylation-containing small RNAs. *J Biol Chem* (2021)

6. **Shen H***, Ontiveros RJ*, Owens MC, Liu MY, Ghanty U, Kohli RM, Liu KF. TET-mediated 5-methylcytosine oxidation in tRNA promotes translation. *J Biol Chem* (2021)
7. **Shen H**, Stoute J, Liu KF. Structural and catalytic roles of the human 18S rRNA methyltransferases DIMT1 in ribosome assembly and translation. *J Biol Chem* (2020)
8. Ontiveros RJ*, **Shen H***, Stoute J, Yanas A, Cui YX, Zhang YY, Liu KF. Coordination of mRNA and tRNA methylations by TRMT10A. *Proc Natl Acad Sci* (2020)
9. Yu SH*, **Shen H***, Cheng YY, Zhu YY, Li X[#], Mu WM[#]. Structural and functional basis of difructose anhydride III hydrolase, which sequentially converts inulin using the same catalytic residue. *ACS Catal* (2018)

PRESENTATIONS

The 7 th National Youth Academic Conference on Ribonucleic Acid	May 2025
The 27 th Annual Meeting of the RNA Society, CU Boulder, CO (poster)	June 2022
Structure Talk, UPENN, PA (oral)	Nov. 2021
Retreat of Dept. of Biochemistry and Biophysics, UPENN, PA (poster)	Dec. 2019
Friday Research Discussion, UPENN, PA (oral)	June 2018
RNA Discussion Group Meeting, UPENN, PA (oral)	Apr. 2018
Global Congress of Chinese Biologists, Hangzhou, Zhejiang (poster)	June 2017
14 th Chinese Biophysics Congress, Kunming, Yunnan (poster)	Nov. 2015
4 th Hubei College student innovation achievement report, SCMZU, Wuhan (oral)	May 2011