

姜博晨

上海交通大学长聘教轨副教授

E-mail: bochenj@uchicago.edu

出生年月: 1991 年 2 月

教育经历:

2014.09-2019.06 中国农业大学 植物学博士 (导师: 杨淑华教授)

2010.09-2014.07 安徽农业大学 农学学士

工作经历:

2019.07-2022.10 加州大学洛杉矶分校博士后 (导师: 林辰涛教授)

2022.10-2024.07 芝加哥大学博士后 (导师: 何川教授)

2024.07-至今 上海交通大学长聘教轨副教授

研究方向:

2023 年海外高层次青年人才入选者, 先后在杨淑华教授 (中国农业大学)、林辰涛教授 (加州大学洛杉矶分校) 和何川教授 (芝加哥大学) 主要从事植物光温信号转导和 RNA 表观修饰的研究, 2024 年 7 月入职上海交大生命科学学院。近年来研究成果以第一作者或通讯作者 (含共同) 发表在 *Nature Plants* (2021 封面文章, ESI 高被引论文; 2023)、*Science Advances* (2023), *Molecular Plant* (2020, ESI 高被引论文) 和 PNAS (2017, ESI 高被引论文) 等期刊, 被 *Nature Plants*、*Trends in Plant Science* 和 *Faculty Opinion* 等专评 7 次。

课题组长期从事光温互作调控植物生长发育和逆境响应相关研究, 以拟南芥、大豆和玉米等为对象进行光温协同调控 RNA 表观修饰对植物产量的影响。

发表文章及专利 (#同等贡献和 *通讯作者):

Jiang, B. #*, Zhong Z.#, Gu, L.#, Zhang X., Wei, J., Ye, C., Lin, G., Qu, G., Xiang, X., Chen, W., Hummel, M., Bailey-Serres, J., He C., Wang X.* and Lin, C.* (2023). Light-induced LLPS of the CRY2/SPA1/FIO1 complex regulating mRNA methylation and chlorophyll homeostasis in *Arabidopsis*. *Nature Plants* 9, 2042–2058 (2023) (Invited with Research Briefing)

Jiang, B. and Lin, C. Light-induced protein condensation regulates chlorophyll homeostasis. *Nature Plants* 9, 1952–1953 (2023). (Research Briefing)

Jiang, B. #*, Zhong, Z.#, Su, J.#, Zhu, T., Yueh, T., Bragasin, J., Bu, V., Zhou, C., Lin, C., and Wang, X*. (2023). Co-condensation with photoexcited cryptochromes facilitates MAC3A to positively control hypocotyl growth in *Arabidopsis*. *Science Advances* 9, eadh4048.

Jiang, B.*. Light-induced Cryptochrome 2 Liquid-Liquid Phase Separation and mRNA methylation. *New Phytologist* (2024, Under review) (Invited Tansley insight)

Wang, X.#, **Jiang, B.** #, Gu, L.#, Chen, Y., Mora, M., Zhu, M., Noory, E., Wang, Q*., and Lin C.* (2021). A photoregulatory mechanism of the circadian clock in *Arabidopsis*. *Nature Plants* 7, 1397–1408 (2021). (Cover story and Highlighted with

a News & Views in *Nature Plants*) (**Highly cited and hot paper**, recommended by *Faculty opinions*)

Jiang, B.[#], Shi, Y.[#], Peng, Y., Jia, Y., Yan, Y., Dong, X., Li, H., Dong, J., Li, J., Gong, Z., and Yang, S.* (2020). Cold-induced CBF-PIF3 interaction enhances freezing tolerance by stabilizing the phyB thermosensor in *Arabidopsis*. ***Molecular Plant*** 13, 894-906. (Highlighted with a Spotlight article in *Trends in Plant Science*) (**Highly cited paper**)

Jiang, B.[#], Shi, Y.[#], Zhang, X., Xin, X., Qi, L., Guo, H., Li, J.* and Yang, S.* (2017). PIF3 is a negative regulator of the CBF pathway and freezing tolerance in *Arabidopsis*. ***Proc. Natl. Acad. Sci. USA*** 114, E6695-E6702. (Highlighted with a News & Views in *Nature Plants* and a Spotlight article in *Trends in Plant Science*) (**Highly cited paper**)

Qu G., **Jiang, B.**, and Lin, C.* The dual-action mechanism of *Arabidopsis* cryptochromes. (2023). ***Journal of Integrative Plant Biology*** 66(5): 883-896.

Wang G, Li H, Ye C, He K, Liu S, **Jiang B.**, Ge R, Gao B, Wei J, Zhao Y, et al. (2024) Quantitative profiling of m(6)A at single base resolution across the life cycle of rice and *Arabidopsis*. ***Nat Communications*** 15(1): 4881.

Zhang, L.* , Ju, C., **Jiang, B.**, and He, C. (2023). Base-resolution quantitative DAMM-seq for mapping RNA methylations in tRNA and mitochondrial polycistronic RNA. *Enzymes in RNA Science and Biotechnology: Part B*, pp. 39-54. 10.1016/bs.mie.2023.08.001. (**Book chapter**)

Dong, X., Yan, Y., **Jiang, B.**, Shi, Y., Jia, Y., Cheng, J., Shi, Y., Kang, J., Li, H., Zhang, D., et al. (2020). The cold response regulator CBF1 promotes *Arabidopsis* hypocotyl growth at ambient temperatures. ***EMBO Journal***. 39, e103630.

Yan, Y., Li, C., Dong, X.J., Li, H., Zhang, D., Zhou, Y.Y., **Jiang, B.C.**, Peng, J., Qin, X.Y., Cheng, J.K., et al. (2020). MYB30 is a key negative regulator of *Arabidopsis* photomorphogenic development that promotes PIF4 and PIF5 protein accumulation in the Light. ***Plant Cell*** 32, 2196-2215.

CN108624567A_植物 EBF1 蛋白及其编码基因在构建耐低温植物中的应用, 发明人: 杨淑华; 施怡婷; **姜博晨**; 张晓燕; 郭红卫

CN108623664A_植物 EBF2 蛋白及其编码基因在构建耐低温植物中的应用, 发明人: 杨淑华; 施怡婷; **姜博晨**; 张晓燕; 郭红卫

获奖情况

2024 New Phytologist Tansley Medal (已入围和Tansley insight邀请)

2019 北京市优秀研究生

2018 中国农业大学一等博士奖学金

2017 研究生国家奖学金

2017 中国农业大学校长奖学金

2017 先正达奖学金

2014 安徽省优秀毕业生

期刊审稿人

Plant Communications; Plant, Cell & Environment; Horticulture Research; Plant Science; Plant cell reports; BMC plant biology; Frontiers in Plant Science; Journal of Plant Physiology; Guest editor for Frontiers in Genome Editing