



ZHU Qiankun

Associate professor
School of Life Science and Engineering
Southwest Jiaotong University
Email: zhuqk@swjtu.edu.cn
Office: Room #3625, Building #3, Jiuli Campus

BIO

Education

- **PhD**, Zhejiang University, Biochemistry and Molecular Biology (2017)
- **M.A.**, Southwest Jiaotong University, Biotechnology (2014)
- **B.S.**, Southwest Jiaotong University, Bioinformatics (2011)

Employment

Academic Appointments

- Associate Professor, School of Life Science and Engineering, Southwest Jiaotong University, China (2020-present)
- Postdoctoral Fellow, College of Plant Protection, Nanjing Agricultural University, Nanjing (2017-2020)

RESEARCH INTERESTS

- Research Interest 1: Cell Signal Transduction and Gene Regulation of Plant Growth-Development and Secondary Metabolism
- Research Interest 2: Biosynthesis and functions of the application components such as medicine components from plants

SELECTED PUBLICATIONS

Principal Publications of the Last Five Years

Zhu, Q., Shao, Y., Ge, S., Zhang, M., Zhang, T., Hu, X., ..., Zhang, S.*, & Xu, J.* (2019). A MAPK cascade downstream of IDA-HAE/ HSL2 ligand-receptor pair in lateral root emergence. *Nature Plants*, 5(4), 414-423.

About the above paper: Professor Xiangzong Meng (expert in the field of protein kinase signaling, Shanghai Normal University) made a Spotlight Review of this article in *Trends in Plant Science* (He & Meng, *Trends in Plant Science*, 2019). This article was recommended to academic evaluation system F1000 (Faculty of 1000) by Professor Jiri Friml (expert in the field of hormone signaling, Austrian Institute of Science and Technology) ([f1000.com/ prime/ 735447658 #eval 793559805](https://f1000.com/prime/735447658#eval793559805)).

Zhu Q., Zhang S.* (2019) A MAPK CASCADE SIGNAL IN LATERAL ROOT DEVELOPMENT. The 2019 Interdisciplinary Plant Group Symposium on "Plant Signaling in Biotic and Abiotic Stress", 90.

-
- Zhu Q., Xu J., Zhang S.* (2019) A MAPK cascade integrates plant developmental and stress signaling pathways to control casparian strip formation. The 2019 Interdisciplinary Plant Group Symposium on "Plant Signaling in Biotic and Abiotic Stress", 37.
- Zhu Q., Xu J., Zhang S.* (2017) A MAPK Cascade Functions Downstream of HAE/HSL2 Receptor-like Kinases and Their Putative IDA Ligand in Regulating Lateral Root Emergence in Arabidopsis. *ASPB Plant Biology* 2017, 24.
- Liu, Z.#, Zhu, Q.#, Li, Y., Yu, J., Wang, W., ... & Liao, H.* (2015). Isolation and in silico characterization of a shikimate kinase from *Cassia obtusifolia*. *Acta Physiologiae Plantarum*, 37(4), 85-91.
- Liu, Z.#, Zhu, Q.#, Li, J., Zhang, G., Jiamahate, A., ... & Liao, H.* (2015). Isolation, structure modeling and function characterization of a trypsin inhibitor from *Cassia obtusifolia*. *Biotechnology Letters*, 37(4), 863-869.
- Liu, Z.#, Zhu, Q.#, Li, J., Yu, J., Li, Y., Huang, X., ... & Liao, H.* (2015). Selection and evaluation of reference genes for expression analysis of *Cassia*. *Bioscience Biotechnology & Biochemistry*, 79(11), 1818-1826.
- Zhu, Q., Zou, J., Zhu, M., Liu, Z., Feng, P., ... & Wang, W.* (2014). In silico analysis on structure and DNA binding mode of AtNAC1, a NAC transcription factor from *Arabidopsis thaliana*. *Journal of Molecular Modeling*, 20(3), 2117-2127.
- Zhu, Q., Zhu, M., Zou, J., Feng, P., Fan, G., ... & Wang, W.* (2013). Molecular modeling and docking of mannose-binding lectin from *Lycoris radiata*. *Chemical Research in Chinese Universities*, 29(6), 1153-1158.

PROFESSIONAL ACTIVITIES

- Member from Council of Society of Cell Biology, Sichuan, China

RESEARCH

Current Research

- National Natural Science Foundation of China (No.31900164), The molecular mechanism of MAPK cascade signals regulating endodermis development.

Research Group

- Dr. Zhu is a member of Medicinal Plant Research Team.

TEACHING

Primary Teaching areas

- Biology

Current Courses

- Cell Biology (Undergraduate)
- Biochemistry and Molecular Biology (Postgraduate)

GRADUATE SUPERVISION

I am available for supervision for Master Candidates.