

CURRICULUM VITAE

Siqi Jiang, MSc

Professional address: Nanjing Agricultural University,
Weigang 1, Nanjing, 210095,
Nanjing, Jiangsu, China
E-mail: 951388047@qq.com
Born on: 04.10.1995, Chizhou, Anhui, China
Web links: www.FungiG.org & [ResearchGate](https://www.researchgate.net/profile/Siqi-Jiang)



Education and trainings:

09/2019 — present	Ph.D. study in Fungal Genomics Group (FungiG), College of Resources and Environmental Sciences, Nanjing Agricultural University, Nanjing, China. Advisor: Prof. Dr. Irina S. Druzhinina
09/2017 — 07/2019	M.Sc. in Plant Nutrition Science, , College of Resources and Environmental Sciences, Nanjing Agricultural University, Nanjing, China
12/2015 — 01/2016	One health winter camp, UC Davis, California, USA
09/2013 — 06/2017	B.S. in Agro-grassland science, College of Resources and Environmental Sciences, Nanjing Agricultural University, Nanjing, China

Research interests and skills:

Keywords: **Biological degradation of synthetic polymers (plastics), fungal cutinases, heterologous protein production, fungal diversity and DNA Barcoding, fungal wars, *Trichoderma* genomics, green mold disease on mushroom farms, *Auricularia*.**

Microbiological techniques:	axenic cultures, microbial diagnostics by DNA barcoding, fungal morphology, microbial cultivations, light, confocal, and scanning electron microscopy
Molecular biological techniques:	qualitative and quantitative nucleic acid manipulation techniques, PEG-mediated protoplast transformation of fungi
Proteomic and analytical techniques:	heterologous protein expression in eukaryotic cell factories, basic proteomic assays such as SDS-PAGE and protein immunoblotting. Basic skills in mass spectrometry.
Fungal ecophysiology:	BIOLOG phenotype microarrays, qualitative assays for enzymatic activity, dual confrontations of fungi, growth profiling.
Microbial metagenomics:	rRNA amplicon deep sequencing for bacteria and fungi; absolute quantification technique, qPCR
Molecular evolution:	MSA, phylogenetics analyses, DNA barcoding of fungi.
Other skills:	plant physiology, plant biochemical assays, soil properties

Publications:

- **Jiang S**, Yu Y, Gao R, Wang H, Zhang J, Li R, Long X, Shen Q, Chen W, & Cai F. **2019**. High-throughput absolute quantification sequencing reveals the effect of different fertilizer applications on bacterial community in a tomato cultivated coastal saline soil. **The Science of the total environment**, 687, 601–609.
- Cai F, Zhao Z, Gao R, Chen P, Ding M, **Jiang S**, Fu Z, Xu P, Chenthamara K, Shen Q, Bayram Akcapinar G, Druzhinina IS **2021** The pleiotropic functions of Intracellular hydrophobins in aerial hyphae and fungal spores. **PLoS Genetics** 17(11): e1009924. <https://doi.org/10.1371/journal.pgen.1009924>
- Daly P, Cai F, Kubicek CP, **Jiang S**, Grujic M, Rahimi MJ, Sheteiwy MS, Giles R, Riaz A, de Vries RP, Bayram Akcapinar G, Wei L, Druzhinina IS **2021** From lignocellulose to plastics: knowledge transfer on the degradation approaches by fungi. **Biotechnology Advances**, DOI: 10.1016/j.biotechadv.2021.107770
- Zhao Z, Cai F, Gao R, Ding M, **Jiang S**, Chen P J, Pang G, Chenthamara K, Shen Q, Bayram-Akcapinar G, Druzhinina S I. **2021** At least three families of hyphosphere small secreted cysteine-rich proteins can optimize surface properties to a moderately hydrophilic state suitable for fungal attachment. **Environmental Microbiology**. doi: 10.1111/1462-2920.15413
- Ding MY, Chen W, Ma XC, Lv BW, **Jiang SQ**, Yu YN, Rahimi MJ, Gao RW, Zhao Z, Cai F, Druzhinina IS **2020** Emerging salt marshes as a source of *Trichoderma arenarium* sp. nov. and other fungal bio effectors for bio saline agriculture. **Journal of Applied Microbiology** 130: 179–195. doi:10.1111/jam.14751
- Gao R, Ding M, **Jiang S**, Zhao Z, Chenthamara K, Shen Q, Cai F, Druzhinina IS **2020** The Evolutionary and Functional Paradox of Cerato-platanins in Fungi. **Applied and Environmental Microbiology** 86 (13):e00696-00620. doi:10.1128/AEM.00696-20
- Cai F, Gao R, Zhao Z, Ding M, **Jiang S**, Yagtu C, Zhu H, Zhang J, Ebner T, Mayrhofer-Reinhartshuber M, Kainz P, Chenthamara K, Akcapinar GB, Shen Q, Druzhinina IS **2020** Evolutionary compromises in fungal fitness: hydrophobins can hinder the adverse dispersal of conidiospores and challenge their survival. **The ISME Journal** 14 (10):2610-2624. doi:10.1038/s41396-020-0709-0