

## 中国科学院遗传与发育生物学研究所

Institute of Genetics and Developmental Biology, Chinese Academy of Sciences

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搜索



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教育经历

1989-1994年,普渡大学园艺系,博士。

1984-1987年,中国科学院遗传研究所,硕士。

1980-1984年,四川大学生物系,学士。

任职经历

2012年-现在,中国科学院遗传与发育生物学研究所,研究员。

2010-2012年, 北京生命科学研究所, 资深研究员。

2004-2010年,北京生命科学研究所,高级研究员。

2002-2005年, 堪萨斯州立大学植物病理系, 副教授。

1997-2002年,堪萨斯州立大学植物病理系,助教授。

1994-1997年, 普渡大学农学系, 博士后。

学术机构任职

2011-现在, Associate Editor, PLoS Pathogen。

2009-现在, Editor, MPMI。

2007-现在, Editor,Molecular Plant。

2004-2007, Member, The Plant Journal Advisory Board.

## 实验室研究内容:

同动物一样,植物能通过免疫受体识别病原生物并激活天然免疫反应。实验室的主要兴趣之一是植物识别不同的病原微生物并激活免疫反应的分子机理。此外,病原微生物能向宿主细胞分泌致病蛋白,使它们得以抑制植物的免疫系统、扰乱细胞活动、最终引起病害。实验室的另一个主要兴趣是阐明这些致病蛋白在宿主细胞内的生化功能。

## 部分发表文章:

Feng Feng and **Jian-Min Zhou\*** (2012). Plant-bacterial pathogen interactions mediated by type III effectors. *Curr. Opin. Plant Biol.* (invited review), doi: 10.1016/j.pbi.2012.03.004.

Feng Feng, Fan Yang, Wei Rong, Xiaogang Wu, Jie Zhang, She Chen, Chaozu He, and **Jian-Min Zhou** (2012). A *Xanthomonas* uridine 5<sup>,</sup> -monophosphate transferase inhibits plant immune kinases. *Nature*, doi: 10.1038/nature10962.

Tingting Xiang, Na Zong, Jie Zhang, Jinfeng Chen, Mingsheng Chen, and **Jian-Min Zhou** (2011). BAK1 is not a target of the *Pseudomonas syringae* effector AvrPto. *MPMI*, 24, 100-107.

Jie Zhang and Jian-Min Zhou (2010). Plant innate immunity triggered by microbial molecular signatures. Molecular Plant (invited review), 5, 783-793.

Yujing Wang, Jifeng Li, Shuguo Hou, Xingwei Wang, Yuan Li, Dongtao Ren, She Chen, Xiaoyan Tang, and **Jian-Min Zhou** (2010). A *Pseudomonas syringae* ADP-Ribosyltransferase inhibits Arabidopsis Mitogen-Activated Protein Kinase Kinases. *Plant Cell*, 22, 2033-2044.

Jie Zhang, Wei Li, Tingting Xiang, Zixu Liu, Kristin Laluk, Xiaojun Ding, Yan Zou, Minghui Gao, Xiaojuan Zhang, She Chen, Tesfaye Mengiste, Yuelin Zhang, and **Jian-Min Zhou**. (2010). Receptor-like cytoplasmic kinases integrate signaling from multiple plant immune receptors and are targeted by a *Pseudomonas syringae* effector. *Cell Host & Microbe*, 7, 290-301.

Yan Li, QingQing Zhang, Jiangguang Zhang, Liang Wu, Yijun Qi, and **Jian-Min Zhou**. (2010). Identification of miRNAs involved in Pathogen-Associated Molecular Pattern-triggered plant innate immunity. *Plant Physiol.*, 152, 2222-231.

Cui, H., Wang, Y., Xue, L., Chu, J., Yan, C., Fu, J., Chen, M., Innes, R.W., and Zhou, J.-M. (2010). *Pseudomonas syringae* effector protein AvrB perturbs *Arabidopsis* hormone signaling by activating MAP KINASE 4. *Cell Host & Microbe*, 7, 164-175.

Huamin Chen, Li Xue, Satya Chintamanani, Hugo Germain, Huiqiong Lin, Haitao Cui, Run Cai, Jianru Zuo, Xiaoyan Tang, Xin Li, Hongwei Guo, and **Jian-Min Zhou** (2009). ETHYLENE INSENSITIVE3 and ETHYLENE INSENSITIVE 3-LIKE1 repress *SALICYLIC ACID INDUCTION DEFICIENT2* expression to negatively regulate plant innate immunity. *Plant Cell*, 25, 2527-2540.

Haitao Cui, Tingting Xiang, and **Jian-Min Zhou** (2009). Plant immunity: A lesson from pathogenic bacterial effector proteins. *Cellular Microbiology* (invited review), 11, 1453-1461.

Huamin Chen, Yan Zou, Yulei Shang, Huiqiong Lin, Yujing Wang, Run Cai, Xiaoyan Tang, and **Jian-Min Zhou** (2008). Firefly luciferase complementation imaging assay for protein-protein interactions in plants. *Plant Physiol*. 146: 368-376.

Jian-Min Zhou and Jijie Chai (2008). Plant pathogenic bacterial type III effectors subdue host responses. Curr Opin Microbiol (invited review), 11, 179-185.

Linjie Chen, Huayi Wang, Jie Zhang, Lichuan Gu, Niu Huang, **Jian-Min Zhou**, and Jijie Chai (2008). Structural basis for the catalytic mechanism of phosphothreonine lyase. *Nat Struct Mol Biol*, 15, 101-102.

Tingting Xiang, Na Zong, Yan Zou, Yong Wu, Jie Zhang, Weiman Xing, Yan Li, Xiaoyan Tang, Lihuang Zhu, Jijie Chai, and **Jian-Min Zhou** (2008). *Pseudomonas syringae* effector AvrPto blocks innate immunity by targeting receptor kinases. *Curr Biol*, 18, 74-80.

Weiman Xing, Yan Zou, Qun Liu, Jianing Liu, Xi Luo, Qingqiu Huang, She Chen, Lihuang Zhu, Ruchang Bi, Quan Hao, Jia-Wei Wu, **Jian-Min Zhou**, and Jijie Chai (2007). Structural basis for activation of plant immunity by bacterial effector protein AvrPto. *Nature*, 449, 243-247.

Jie Zhang, Feng Shao, Yan Li, Haitao Cui, Linjie Chen, Hongtao Li, Yan Zou, Chengzu Long, Lefu Lan, Jijie Chai, She Chen, Xiaoyan Tang, and **Jian-Min Zhou** (2007). A *Pseudomonas syringae* Effector Inactivates MAPKs to Suppress PAMP-Induced Immunity. *Cell Host & Microbe*, 1,175-185.

Hongtao Li, Hao Xu, Yan Zhou, Jie Zhang, Chengzu Long, Shuqin Li, She Chen, **Jian-Min Zhou**, Feng Shao (2007). The phosphothreonine lyase activity of a bacterial type III effector family. **Science** 315, 1000-1003.

Yulei Shang, Xinyan Li, Haitao Cui, Ping He, Roger Thilmony, Satya Chintamanani, Julie Zwiesler-Vollick, Suresh Gopalan, Xiaoyan Tang, and **Jian-Min Zhou** (2006). RAR1, a central player in plant immunity, is targeted by *Pseudomonas syringae* effector AvrB. *PNAS*, 103, 19200-19205.

Xiaoyan Tang and Jian-Min Zhou (2006). Regulation of the type III secretion system in phytopathogenic bacteria. MPMI (review), 19, 1159-1166.

Xinyan Li, Huiqiong Lin, Weiguo Zhang, Yan Zou, Jie Zhang, Xiaoyan Tang, and **Jian-Min Zhou** (2005). Flagellin induces innate immunity in nonhost interactions that is suppressed by *Pseudomonas syringae* effectors. *PNAS*, 102, 12990-12995.

Fangming Xiao, S. Mark Goodwin, Yanmei Xiao, Zhaoyu Sun, Douglas Baker, Xiaoyan Tang, Matthew A. Jenks, and **Jian-Min Zhou** (2004) Arabidopsis *CYP86A2* represses *Pseudomonas syringae* type III genes and is required for cuticle development. *EMBO J.*, 23, 2903-2913.

Ping He, Satya Chintamanani, Zhongying Chen, Lihuang Zhu, Barbara N. Kunkel, James R. Alfano, Xiaoyan Tang, and **Jian-Min Zhou** (2004). Activation of a COII-dependent pathway in Arabidopsis by *Pseudomonas syringae* type III effectors and coronatine. *The Plant Journal*, 37, 589-602.

Li Kang, Jianxiong Li, Tiehan Zhao, Fangming Xiao, Xiaoyan Tang, Roger Thilmony, ShengYang He, and **Jian-Min Zhou** (2003). Interplay of the *Arabidopsis* nonhost resistance gene *NHO1* with bacterial virulence. **PNAS**, 100, 3519-3524.

Ping He, Bernd Friebe, Bikram Gill, and **Jian-Min Zhou** (2003). Allopolyploidy alters gene expression in the highly stable hexaploid wheat. *Plant Molecular Biology*, 52, 401-414.

Thara Venkatappa, John Fellers, and Jian-Min Zhou (2003). In planta induced genes of Puccinia triticina. Molecular Plant Pathology, 4, 51-56.

Fangming Xiao, Ming Lu, Tiehan Zhao, Xiaoyan Tang, and **Jian-Min Zhou** (2003). *Pto* mutants differentially activate *Prf*-dependent, AvrPto-independent resistance and gene-for-gene resistance. *Plant Physiology*, 131, 1239-1249.

Fang-Ming Xiao, Xiaoyan Tang, and **Jian-Min Zhou** (2001). Expression of 35S::*Pto* globally activates defense gene expression in tomato plants. *Plant Physiology*, 126, 1637-1645.

Ming Lu, Xiaoyan Tang, and Jian-Min Zhou. (2001) Arabidopsis NHO1 is required for general resistance against Pseudomonas bacteria. Plant Cell, 13, 437-447.

Libo Shan, Venkatappa Thara, Gregory Martin, **Jian-Min Zhou**, and Xiaoyan Tang (2000). The *Pseudomonas* AvrPto protein is differentially recognized by tomato and tobacco and is localized to the plant plasma membrane. *Plant Cell*, 12, 2323-2338.



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