

Curriculum Vitae

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Education:

1978-1982	Bachelor Fujian Agriculture & Forestry University, Fujian, China
1986-1988	Ad hoc student Research School of Biological Sciences Australian National University, Canberra, Australia
1989-1992	Ph. D Department of Biology Peking University Beijing, China

Working Experience:

1992-1994	Post-doctoral researcher Institute of Botany, Chinese Academy of Sciences (CAS), Beijing, China
1994-1995	Associate professor Institute of Botany, Chinese Academy of Sciences (CAS)
1995-2011	Professor, PI, Director Research Center of Molecular Physiology Institute of Botany, Chinese Academy of Sciences (CAS)
2011-2014	PI, Assistant Director Institute of Botany, Chinese Academy of Sciences (CAS)

2014-Now Dean
College of Biological Sciences
Beijing Forestry University
Beijing, China

Working Experience Abroad:

1996.03-1998.03 Max-Planck Institute in Koeln, Germany
2000.05-2000.12 Department of Biology, University of Antwerpen, Belgium
2001.06-2001.12 Department of Plant Science, University of Cambridge, UK
2004.03-2004.07 Department of Plant Science, University of Bonn, Germany

Research Fields:

Plant Cell Biology, Tree Biology

Honors:

- 1996, China Youth Science and Technology Award
- 2002, China National Fund for Distinguished Young Scientists
- 2002, Hundred Talents Program of CAS
- 2008—Now, Member of National Committee of CPPCC
- 2008—Now, President, Beijing Botanical Society
- 2012—Now, Vice president, China Society of Microscopy

Main Publications

- Li Wang, Jiawen Cui, Biao Jin, Jianguo Zhao, Huimin Xu, Zhaogeng Lu, Weixing Li, Xiaoxia Li, Linling Li, Eryuan Liang, Xiaolan Rao, Shufang Wang, Chunxiang Fu, Fuliang Cai, Richard A. Dixon*, **Jinxing Lin***. 2020. Multifeature analyses of vascular cambial cells reveal longevity mechanisms in old *Ginkgo biloba* trees. [Proceedings of the National Academy of Sciences USA](#) 117: 2201–2210.
- Jingjing Xing, Xiaojuan Li, Xiaohua Wang, Xueqin Lv, Li Wang, Liang Zhang, Yingfang Zhu, Qianhua Shen, František Baluška, Jozef Šamaj, Jinxing Lin. 2019. [Plant Cell](#) 31: 3015–3032.
- Liang Zhang, Jingjing Xing and **Jinxing Lin**. 2019. At the intersection of exocytosis and endocytosis in plants. [New Phytologist](#) 224: 1479–1489.
- Xi Zhang, Yaning Cui, Meng Yu, Bodan Su, Wei Gong, František Baluška, George Komis, Jozef Šamaj, **Xiaoyi Shan***, Jinxing Lin. 2019.

Phosphorylation-mediated dynamics of nitrate transceptor NRT1.1 regulate auxin flux and nitrate signaling in lateral root growth. [Plant Physiology](#) 181: 480-498.

- Yaning Cui, Xi Zhang, Meng Yu, Yingfang Zhu, Jingjing Xing, **Jinxing Lin***. 2019. Techniques for detecting protein-protein interactions in living cells: principles, limitations, and recent progress. [Science China Life Science](#) 62: 619–632.
- Yaning Cui, Meng Yu, **Jinxing Lin***, Xiaojuan Li*. 2018. Single-particle tracking for the quantification of membrane protein dynamics in living plant cells. [Molecular Plant](#) 11: 1315-1327
- Yaning Cui, Xiaojuan Li, Meng Yu, Ruili Li, Lusheng Fan, Yingfang Zhu, **Jinxing Lin***. 2018. Sterols regulate endocytic pathways during flg22-induced defense in Arabidopsis. [Development](#) 145: 1-12.
- Yuanyuan Zhao, Yi Man, Jialong Wen, Yayu Guo, **Jinxing Lin***. 2019. Advances in imaging plant cell walls. [Trends in Plant Science](#) 24: 867-878.
- Xi Zhang, Yaning Cui, Meng Yu, **Jinxing Lin***. 2019. Single-molecule techniques for imaging exo-endocytosis coupling in cells. [Trends in Plant Science](#) 24: 879-880.
- Li Wang, Yiqun Xue, Jingjing Xing, Kai Song, **Jinxing Lin***. 2018. Exploring the spatiotemporal organization of membrane proteins in living plant cells. [Annual Review of Plant Biology](#) 69: 525-551.
- Zhenzhen Hao, Pichang Gong, Chaoying He*, **Jinxing Lin***. 2018. Peptide aptamers to inhibit protein function in plants. [Trends in Plant Science](#) 23: 281-284.
- Yiqun Xue, Jingjing Xing, Yinglang Wan, Xueqin Lv, Lusheng Fan, Yongdeng Zhang, Kai Song, Li Wang, Xiaohua Wang, Xin Deng, František Baluška, John M. Christie, **Jinxing Lin***. 2018. *Arabidopsis* blue light receptor phototropin 1 undergoes blue light-induced activation in membrane microdomains. [Molecular Plant](#) 11, 846–859.
- Xueqin Lv, Yanping Jing, Jianwei Xiao, Yongdeng Zhang, Yingfang Zhu, Russell Julian, **Jinxing Lin***. 2017. Membrane microdomains and the cytoskeleton constrain AtHIR1 dynamics and facilitate the formation of an AtHIR1-associated immune complex. [Plant Journal](#) 90: 3-16.

- Xueqin Lv, Yanping Jing, Hongyang Wu, **Jinxing Lin***. 2017. Tracking tonoplast protein behaviors in intact vacuoles isolated from Arabidopsis leaves. [Molecular Plant](#) 10: 349-352.
- Meng Yu, Haijiao Liu, Ziyi Dong, Jianwei Xiao, Bodan Su, Lusheng Fan, George Komis, Jozef Šamaj, **Jinxing Lin***, **Ruili Li***. 2017. The dynamics and endocytosis of flot1 protein in response to flg22 in arabidopsis. [Journal of Plant Physiology](#) 215: S017616171730130X.
- Haiyan Zhang, Pengli Yu, Jiu hai Zhao, Hongling Jiang, Haiyang Wang, Yingfang Zhu, Miguel A. Botella, Jozef Samaj, Chuanyou Li, **Jinxing Lin***. 2017. Expression of tomato prosystemin gene in *Arabidopsis* reveals systemic translocation of its mRNA and confers necrotrophic fungal resistance. [New Phytologist](#) 217:799-812.
- Kai Song, Yiqun Xue, Xiaohua Wang, Yinglang Wan, Xing Deng, **Jinxing Lin***. 2017. A modified GFP facilitates counting membrane protein subunits by step-wise photobleaching in *Arabidopsis*. [Journal of Plant Physiology](#) 213, 129-133.
- Xiaojuan Li, Jingjing Xing, Zongbo Qiu, Xinqiang He, **Jinxing Lin***. 2016. Quantification of membrane protein dynamics and interactions in plant cells by fluorescence correlation spectroscopy. [Molecular Plant](#) 9: 1229-1239.
- Sen Lin, Yuanyuan Zhao, Yingfang Zhu, Michael Gosney, Xin Deng, Xiaohua Wang, **Jinxing Lin***. 2016. An effective and inducible system of TAL effector-mediated transcriptional repression in *Arabidopsis*. [Molecular Plant](#) 9: 1546-1549
- Xiaohua Wang, Xiaojuan Li, Xin Deng, Doan-Trung Luu, Maurel Christophe, **Jinxing Lin***. 2015. Single-molecule fluorescence imaging to quantify membrane protein dynamics and oligomerization in living plant cells. [Nature Protocols](#). doi:10.1038/nprot.2015.132.
- Li Wang, Hong Li, Xueqin Lv, Tong Chen, Ruili Li, Yiqun Xue, Jianjun Jiang, Biao Jin, František Baluška, Jozef Šamaj, Xuelu Wang, **Jinxing Lin***. 2015. Spatiotemporal dynamics of BRI1 receptor and its regulation by membrane microdomains in living Arabidopsis cells. [Molecular Plant](#) 8: 1334-1349.
- Lusheng Fan, Ruili Li, Jianwei Pan, Zhaojun Ding, **Jinxing Lin***. 2015. Endocytosis and its regulation in plants. [Trends in Plant Science](#) 20: 388-397.
- Huaiqing Hao, Lusheng Fan, Tong Chen, Ruili Li, Xiaojuan Li, Qihua He, Miguel A. Botella, **Jinxing Lin***. 2014. Clathrin and membrane microdomains

cooperatively regulate RbohD dynamics and activity in *Arabidopsis*. [Plant Cell](#) 26: 1729-1745.

- Xiaojuan Li, Doan-Trung Luu, Christophe Maurel, **Jinxing Lin***. 2013. Probing plasma membrane dynamics at the single-molecule level. [Trends in Plant Science](#) 18: 617-624.
- Qinli Wang, Yuanyuan Zhao, Wangxi Luo, Ruili Li, QiHua He, Xiaohong Fang, Roberto De Michele, Cindy Ast, Nicolaus von Wieren, **Jinxing Lin***. 2013. Single particle analysis reveals shutoff control of the *Arabidopsis* ammonium transporter AMT1;3 by clustering and internalization. [Proceedings of the National Academy of Sciences USA](#) 110: 13204-13209.
- Lusheng Fan, Huaiqing Hao, Yiqun Xue, Liang Zhang, Kai Song, Zhaojun Ding, Miguel A. Botella, Haiyang Wang, **Jinxing Lin***. 2013. Dynamic analysis of *Arabidopsis* AP2 σ reveals its key role in clathrin-mediated endocytosis and plant development. [Development](#) 140: 3826-38374.
- Ruili Li, Peng Liu, Yinglang Wan, Tong Chen, Qinli Wang, Ursula Mettbach, František Baluška, Jozef Šamaj, Xiaohong Fang, William J. Lucas, **Jinxing Lin***. 2012. A membrane microdomain-associated protein, AtFlot1, is involved in a clathrin-independent endocytic pathway and is required for seedling development in *Arabidopsis*. [Plant Cell](#) 24: 2105-2122.
- Yinglang Wan, Jan Jasik, Li Wang, Huaiqing Hao, Dieter Volkmann, Diedrik Menzel, Stefano Mancuso, František Baluška, **Jinxing Lin***. 2012. The Signal Transducer NPH3 Integrates the Phototropin1 Photosensor with PIN2-Based Polar Auxin Transport in *Arabidopsis* Root Phototropism. [Plant Cell](#) 24: 551-565.
- Xiaojuan Li, Xiaohua Wang, Yong Yang, Ruili Li, Qihua He, Xiaohong Fang, Doan-Trung Luu, Christophe Maurel, **Jinxing Lin***. 2011. Single-molecule analysis of PIP2;1 dynamics and partitioning reveals multiple modes of *Arabidopsis* plasma membrane aquaporin regulation. [Plant Cell](#) 23: 1-19.
- Feng Wang, Peng Liu, Quan Zhang, Jian Zhu, Tong Chen, Shin-ichi Arimura, Nobuhiro Tsutsumi, **Jinxing Lin***. 2012. Phosphorylation and ubiquitination of Dynamin related proteins (AtDRP3A/3B) synergically regulate mitochondrial proliferation during mitosis. [Plant Journal](#) 72:43-56
- Yinglang Wan, William M Ash, Lusheng Fan, Huaiqin Hao, Myung K Kim, **Jinxing Lin***. 2011. Variable-angle total internal reflection fluorescence microscopy of intact cells of *Arabidopsis thaliana*. [Plant Methods](#) 7:27.

- Qiaoling Liu, Yuanyuan Zhao, Yinglang Wan, Junpeng Zheng, Xuejie Zhang, Chunru Wang, Xiaohong Fang*, **Jinxing Lin***. 2010. Study of the inhibitory effect of water-soluble fullerenes on plant growth at the cellular level. [ACS NANO](#) DOI: 10.1021/nn101430g.
- Yingfang Zhu, yuqing Wang, Ruili Li, Xiufen Song, Qinli Wang, Shanjin Huang, Jingbo Jin, Chunming Liu, **Jinxing Lin***. 2010. Analysis of interactions among the CLAVATA3 receptors reveals a direct interaction between CLAVATA2 and CORYNE in *Arabidopsis*. [Plant Journal](#) 61: 223–233.
- Liu Q, Zhao Y, Wan Y, Zheng J, Zhang X, Wang C, **Fang X***, **Jinxing Lin*** (2010) Study of the inhibitory effect of water-soluble fullerenes on plant growth at the cellular level. [ACS Nano](#).4, 5743-5748.
- Qinli Wang, Bo Chen, Peng Liu, Maozhong Zheng, Yuqing Wang, Sujuan Cui, Daye Sun, Xiaohong Fang, Chun-Ming Liu, William J. Lucas, **Jinxing Lin***. 2009. Calmodulin binds to extracellular sites on the plasma membrane of plant cells and elicits a rise in intracellular calcium concentration. [Journal of Biological Chemistry](#) 284: 12000–12007.
- Qiaoling Liu, Bo Chen, Qinli Wang, Xiaoli Shi, Zeyu Xiao, **Jinxing Lin**, Xiaohong Fang*. 2009. Carbon nanotubes as molecular transporters for walled plant cells. [Nano Letters](#) 9: 1007–1010.

■ Publications using woody plants as materials

- Weiwei Shen, Lingyu Ma, Xi Zhang, Xixia Li, Yuanyuan Zhao, Yanping Jing, Yun Feng, Xueke Tan, Fei Sun, **Jinxing Lin***. 2019. Serial section-based 3D reconstruction of *Picea wilsonii* Mast pollen using AutoCUTS-SEM. [Science China Life Science](#) (accepted).
- Dechang Cao, Huimin Xu, Yuanyuan Zhao, Xin Deng, Yongxiu Liu, Wim J.J. Soppe, and **Jinxing Lin***. Transcriptome and degradome sequencing reveals dormancy mechanisms of *Cunninghamia Lanceolata* seeds. [Plant Physiology](#) 2016. 172: 2347-2362.
- Huimin Xu, Dechang Cao, Yanmei Chen, Dongmei Wei, Yanwei Wang, Rebecca Ann Stevenson, Yingfang Zhu, **Jinxing Lin***. Gene expression and proteome analysis during dormancy-activity cycle in the shoot apical meristem of *Cunninghamia lanceolata*. [Scientific Reports](#) 2016. 6:19938.

- Zongbo Qiu, Xiaojuan Li, Yuanyuan Zhao, Manman Zhang, Yinglang Wan, Dechang Cao, Shanfa Lu, and Jinxing Lin*. Genome-wide analysis reveals dynamic changes in expression of microRNAs during vascular cambium development in Chinese fir (*Cunninghamia lanceolata*). [Journal of Experimental Botany](#) 2015. 66: 3041-3054.
- 许会敏, 王莉, 曹德昌, 薛娴, 贺新强*, 林金星*. 维管形成层活动周期调控的研究进展. [科学通报](#) 2015. 7:619-629.
- Zongbo Qiu, Lichuan Wan, Tong Chen, Yinglang Wan, Xinqiang He, Shanfa Lu, Yanwei Wang, **Jinxing Lin***. The regulation of cambial activity in Chinese fir (*Cunninghamia lanceolata*) involves extensive transcriptome remodeling. [New Phytologist](#) 2013.199: 708-719.
- Lichuan Wan, Feng Wang, Xiangqian Guo, Shanfa Lu, Zongbo Qiu, Yuanyuan Zhao, Haiyan Zhang, **Jinxing Lin***. Identification and characterization of small non-coding RNAs from Chinese fir by high throughput sequencing. [BMC Plant Biology](#) 2012.12: 146.
- Lichuan Wan, Haiyan Zhang, Shanfa Lu, Liang Zhang, Zongbo Qiu, Yuanyuan Zhao, Qingyin Zeng, Jinxing Lin*. Transcriptome-wide identification and characterization of miRNAs from *Pinus densata*. [BMC Genomics](#) 2012. 13: 132.
- Peng Liu, Ruili Li, Liang Zhang, Qinli Wang, Karsten Niehaus, Jozef Šamaj, František Baluška, **Jinxing Lin***. Lipid microdomain polarization is required for NADPH oxidase-dependent ROS signaling in *Picea meyeri* pollen tube tip growth. [Plant Journal](#) 2009. 60(2):303-313.
- Tong Chen, Xiaoqin Wu, Yanmei Chen, Xiaojuan Li, Mei Huang, Maozhong Zheng, František Baluška, Jozef Šamaj, **Jinxing Lin***. Combined proteomic and cytological analysis of Ca²⁺-calmodulin regulation in *Picea meyeri* pollen tube growth. [Plant Physiology](#) 2009. 149(2):1111-1126.
- Yuhua Wang, Tong Chen, Chunyang Zhang, Huaiqing Hao, Peng Liu, Maozhong Zheng, František Baluška, Jozef Šamaj, **Jinxing Lin***. Nitric oxide modulates the influx of extracellular Ca²⁺ and actin filament organization during cell wall construction in *Pinus bungeana* pollen tubes. [New Phytologist](#) 2009.182(4):851-862.
- Xiaoqin Wu, Tong Chen, Maozhong Zheng, Yanmei Chen, Nianjun Teng, Jozef Šamaj, František Baluška, **Jinxing Lin***. Integrative proteomic and cytological analysis of the effects of extracellular Ca²⁺ influx on *Pinus bungeana* pollen tube development. [Journal of Proteome Research](#) 2008. 7(10): 4299-4312.

- Tong Chen, Nianjun Teng, Xiaoqin Wu, Yuhua Wang, Wei Tang, Jozef Šamaj, František Baluška, **Jinxing Lin***. Disruption of actin filaments by latrunculin B affects cell wall construction in *Picea meyeri* pollen tube by disturbing vesicle trafficking. [Plant & Cell Physiology](#) 2007. 48(1): 19-30.
- Yanmei Chen, Tong Chen, Shihua Shen, Maozhong Zheng, Yiming Guo, **Jinxing Lin***, František Baluška, Jozef Šamaj. Differential display proteomic analysis of *Picea meyeri* pollen germination and pollen-tube growth after inhibition of actin polymerization by latrunculin B. [Plant Journal](#) 2006. 47(2): 174-195.
- Xianyong Sheng, Zhenghai Hu, Hongfei Lü, Xiaohua Wang, Jozef Šamaj, František Baluška, **Jinxing Lin***. Roles of the ubiquitin/proteasome pathway in pollen tube growth with emphasis on MG132-induced alterations in ultrastructure, cytoskeleton, and cell wall components. [Plant Physiology](#) 2006. 141(4): 1578-1590.
- Xiaohua Wang, Yan Teng, Qinli Wang, Xiaojuan Li, Xianyong Sheng, Maozhong Zheng, Jozef Šamaj, František Baluška, **Jinxing Lin***. Imaging of dynamic secretory vesicles in living pollen tubes of *Picea meyeri* using evanescent wave microscopy. [Plant Physiology](#) 2006. 141(4): 1591-1603.
- Lingan Kong, Mao Wang, Qinli Wang, Xiaohua Wang, Jinxing Lin*. Protein phosphatases 1 and 2A and the regulation of calcium uptake and pollen tube development in *Picea wilsonii*. [Tree Physiology](#) 2006. 26(8): 1001-1012.
- Qinli Wang, Lingan Kong, Huaiqing Hao, Xiaohua Wang, **Jinxing Lin***, Jozef Šamaj, František Baluška. Effects of brefeldin A on pollen germination and tube growth. Antagonistic effects on endocytosis and secretion. [Plant Physiology](#) 2005. 139(4): 1692-1703.
- Huaiqing Hao, Yiqin Li, Yuxi Hu, **Jinxing Lin***. Inhibition of RNA and protein synthesis in pollen tube development of *Pinus bungeana* by actinomycin D and cycloheximide. [New Phytologist](#) 2005. 165(3): 721-729.
- Xiaoqin Wu, **Jinxing Lin***, Qingqing Lin, Jian Wang, Lukas Schreiber. Casparian strips in needles are more solutepermeable than endodermal transport barriers in roots of *Pinus bungeana*. [Plant & Cell Physiology](#) 2005. 46(11): 1799-1808.
- Jinxing Lin, M. E. Jash, R.Ceulemans*. Stomatal density and needle anatomy of Scots pine (*Pinus sylvestris*) are affected by elevated CO₂. [New Phytologist](#) 2001. 150(3): 665-674.