

# CURRICULUM VITAE

## YANG ZHANG

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### Employment

Postdoctoral Research Associate, Department of Agronomy and Horticulture, University of Nebraska-Lincoln 2014-present

Visiting Scholar Supported by Institute of Tropical Bioscience and Biotechnology (ITBB), Chinese Academy of Tropical Agricultural Sciences (CATAS), Donald Danforth Plant Science Center, 2013

Postdoctoral Research Associate, Institute of Tropical Bioscience and Biotechnology (ITBB), Chinese Academy of Tropical Agricultural Sciences (CATAS) (With Pinghua Li), 2012-2014

### Education

PhD Germplasm of Agriculture (with WenQuan Wang of Institute of Tropical Bioscience and Biotechnology (ITBB), Chinese Academy of Tropical Agricultural Sciences (CATAS)), University of Hainan, 2009-2012

BA Biotechnology, Hebei University, 2002-2006

### Publications

H-Index: 4 [Google Scholar](https://scholar.google.com/citations?user=yzhang91)

*Lab members in bold, \*equal contribution, †cover article, ‡undergraduate, §corresponding*

#### *Preprints*

#### *Other Manuscripts*

**Yang Zhang**, Daniel W. Ngu, Daniel Carvalho, Zhikai Liang, Yumou Qiu, Rebecca L. Roston, James C. Schnable<sup>§</sup>. Early transcriptional responses of conserved genes to cold diverge more slowly than downstream changes in panicoid grasses (*In Prep*)

Washburn D. Jacob, **James C. Schnable**, Thomas P. Brutnell, Ying Shao, **Yang Zhang**, Martha Ludwig, Gerrit Davidse, Chris J. Pires<sup>§</sup>. Genome-Guided Phylo-Transcriptomics of the Paniceae Grasses (*In Review*)

Pinghua Li<sup>§</sup>, Thomas P. Brutnell, Yuling Zhang, Rita Giuliani, Youjun Zhang, **Yang Zhang**, Wagner Ara-Åžjo, Bai-Chen Wang, Peng Liu, Qi Sun, Asaph Cousins, Gerald Edwards, Alisdair Fernie. Characterization of Maize Leaf Pyruvate Orthophosphate Dikinase Using High Throughput Sequencing. (*In Review*)

### Postdoctoral Publications

7. Zehong Ding\*, **Yang Zhang\***, Yi Xiao, Fangfang Liu, Minghui Wang, Xin-Guang Zhu, Peng Liu, Qi Sun, Wenquan Wang, Ming Peng, Thomas Brutnell, and pinghua Li<sup>§</sup>.(2016) Transcriptome response of cassava leaves under natural shade. SCIENTIFIC REPORTS doi: [10.1038/srep31673](https://doi.org/10.1038/srep31673)
6. **Yang Zhang\***, Zehong Ding\*, Fangfang Ma, Raj Deepika Chauhan, Doug K Allen, Thomas P Brutnell, Wenquan Wang, Ming Peng, Pinghua Li<sup>§</sup>. (2015) Transcriptional response to petiole heat girdling in cassava. SCIENTIFIC REPORTS doi: [10.1038/srep08414](https://doi.org/10.1038/srep08414)
5. Wenquan Wang, Bin Xiao Feng, Jingfa Xiao, Zhiqiang Xia, Xincheng Zhou, Pinghua Li, Weixiong Zhang, Ying Wang, Birger Lindberg Moller, Peng Zhang, Ming-Cheng Luo, Gong Xiao, Jingxing Liu, Jun Yang, Songbi Chen, Pablo D Rabinowicz, Xin Chen, Hong-Bin Zhang, Henan Ceballos, Qunfeng Lou, Meiling Zou, Luiz JCB Carvalho, Changying Zeng, Jing Xia, Shixiang Sun, Yuhua Fu, Haiyan Wang, Cheng Lu, Mengbin Ruan, Shuigeng Zhou, Zhicheng Wu, Hui Liu, Rubini Maya Kannagara, Kirsten Jorgensen, Rebecca Louise Neale, Maya Bonde, Nanna Heinz, Wenli Zhu, Shujuan Wang, **Yang Zhang**, Kun Pan, Mingfu Wen, Ping-An Ma, Zhengxu Li, Meizhen Hu, Wenbin Liao, Wenbin Hu, Shengkui Zhang, Jinli Pei, Anping Guo, Jianchun Guo, Jiaming Zhang, Zhengwen Zhang, Jianqiu Ye, Wenjun Ou, Yaqin Ma, Xinyue Liu, Luke J Tallon, Kevin Galens, Sandra Ott, Jie Huang, Jingjing Xue, Feifei An, Qingqun Yao, Xiaojing Lu, Martin Fregene, L Augusto Becerra Lopez-Lavalle, Jiajie Wu, Frank M You, Meili Chen, Songnian Hu, Guojiang Wu, Silin Zhong, Peng Ling, Yeyuan Chen, Qinghuang Wang, Guodao Liu, Bin Liu, Kaimian Li, Ming Peng<sup>§</sup>, (2014) Cassava genome from a wild ancestor to cultivated varieties. NATURE COMMUNICATIONS doi:[10.1038/ncomms6110](https://doi.org/10.1038/ncomms6110)

### Graduate Publications

4. **Yang Zhang\***, Xin Chen\*, Haiyan Wang\*, Zhiqiang Xia, Peng Ling, Wenquan Wang.(2016) Annotation and validation of genes involved in photosynthesis and starch synthesis from a Manihot full-length cDNA library. FRONT. AGR. SCI. ENG. doi: [10.15302/JFASE-2016113](https://doi.org/10.15302/JFASE-2016113)
3. **Yang Zhang**, Xin Chen, Chen Lu, Wenquan Wang<sup>§</sup>. (2012) Cloning and Expression Analysis of Phosphoenolpyruvate Carboxylase Gene pepc from Cassava *Manihot esculenta* Crantz. JOURNAL OF TROPICAL AND SUBTROPICAL BOTANY doi: [10.3969/j.issn.1005-3395.2012.04.008](https://doi.org/10.3969/j.issn.1005-3395.2012.04.008)
2. **Yang Zhang**, Cheng Lu, Wenquan Wang<sup>§</sup>. (2012) Differences in Anatomical Photosynthetic Structure and Enzyme Activity of Leaves Between Cultivar and Wild Species in Cassava. CHINESE AGRICULTURAL SCIENCE BULLETIN
1. Meiling Zou, Zhiqiang Xia, Peng Ling, **Yang Zhang**, Xin Chen, Zusheng Wei, Weiping Bo, Wenquan Wang<sup>§</sup>. (2011) Mining EST-Derived SSR Markers to Assess Genetic Diversity in Cassava *Manihot esculenta* Crantz. PLANT MOLECULAR BIOLOGY REPORTER doi:[10.1007/s11105-011-0299-0](https://doi.org/10.1007/s11105-011-0299-0)

## Presentations

### Oral Presentations

1. **Yang Zhang**, James C. Schnable.(2016) Conservation and divergence of syntenic gene regulation in response to stress in maize and relatives. Center for Plant Science Innovation Research Group Meeting. University of Nebraska-Lincoln.

### Poster Presentations

7. **Yang Zhang**, Yumou Qiu, James C. Schnable. (2016) Statistical approaches to identifying differentially regulated orthologs (DROs) across related grass species 59th Maize Genetics Conference. St.Louis, Missouri.

6. Samira Mahboub, **Yang Zhang**, Daniel Ngu, James C. Schnable, Rebecca L. Roston.(2016) Membrane Remodeling Events Correlated with Low-temperature Tolerance in Maize, Sorghum and Relatives. American Society of Plant Biologists (ASPB). Texas, Austin
5. Daniel Carvalho, **Yang Zhang**, James C. Schnable. (2016) Comparative analysis of C<sub>4</sub> photosynthesis genes in two independent origins of C<sub>4</sub> in grasses. Spring Research Fair - University of Nebraska-Lincoln. Lincoln,Nebraska
4. Daniel Carvalho, **Yang Zhang**, James C. Schnable. (2016) Comparative analysis of C<sub>4</sub> photosynthesis genes in two independent origins of C<sub>4</sub> in grasses. 58th Maize Genetics Conference. Jacksonville, Florida
3. **Yang Zhang**, Daniel W. Ngu,Samira Mahboub, Yumou Qiu, Rebecca L. Roston, James C. Schnable. (2016) Conservation and divergence of synthetic gene regulation in response to stress in maize and relatives. 58th Maize Genetics Conference. Jacksonville, Florida
2. Daniel Carvalho, **Yang Zhang**, James C. Schnable. (2015) Comparative transcriptomic analysis of *Danthoniopsis dinteri*, a novel C<sub>4</sub> grass species. Plant Phenomics Symposium. Lincoln, Nebraska
1. **Yang Zhang**, Daniel W. Ngu, Rebecca L. Roston, James C. Schnable. (2015) Core cold responsive genes in the panicoid grasses. Plant Science Symposium "Plant Phenomics: from pixels to traits". Lincoln, Nebraska

### *Teaching Experience*

2011, CATAS, taught plant molecular biology experiments classes for undergraduates.

### *Service and Outreach*

3. "Sunday with a scientist" Educated children on measuring plant phenotypes from computer vision.(May15, 2016)
2. "ACM programming contest" Examiner.(October25, 2014)
1. "Construction and Manipulation of Bacteria-Baese Large-insert DNA Libraries" work shop, served as lab assistant.(June, 2008)