

# Jialu Wei

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## ❖ Education

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- August 2017      **Ph.D. in Plant Breeding, Iowa State University (ISU), Ames, Iowa, USA**  
- Present      - GPA: 3.92/4.00      - Minor: Statistics  
                 - Advisor: Dr. Jianming Yu
- August 2013      **B.S. in Agronomy, China Agricultural University (CAU), Beijing, China**  
- June 2017      - GPA: 3.94/4.00, ranking 1/63  
                 - Academic Exchange Program with National Taiwan University, February - June, 2015

## ❖ Research Experience

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- August 2017      **Graduate Research Assistant, Quantitative Genetics and Maize Breeding Lab, ISU**  
- Present
  - Investigating maize heat stress response mechanisms from cellular, biochemical and whole-plant levels, with a focus on transcriptome analyses
  - Conducting phenotypic plasticity analyses on a sorghum association panel through the integration of genomic and environmental profiling
  - Contributed to a project of designing sorghum CRISPR/Cas9 targeted mutagenesis system
- February 2016      **Undergraduate Research Assistant, Key Laboratory of Crop Heterosis and Utilization, CAU**  
- June 2017
  - Performed hydroponic experiments with a cotton RIL population and conducted QTL mappings on salt-resistance related trait

## ❖ Teaching Experience

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- Spring 2021      **Graduate Teaching Assistant, Department of Agronomy, ISU**  
                 *Introduction to Crop Science: Dr. Mary Wiedenhoft (106 students)*  
  - Developed communication skills including articulating complex topics to students in an understandable way, and responding to students' impromptu questions
  - Guided students on tackling assignments through strategic analyses of questions and implementing knowledge from lectures; graded and provided feedback on assignments
- Fall 2016      **Teaching Assistant, Department of Agronomy, CAU**  
                 *Experiments of Trial Design and Biostatistics: Dr. Jinping Hua (50 students)*  
  - Graded homework and exams, followed by in-class reviews to clarify complex topics as reflected by students' answers
  - Designed weekly quizzes to reinforce students' comprehension on key concept

## ❖ Honors & Awards

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- February 2022      Brown Graduate Fellowship Award
- October 2021      Francis and Beatriz (Castro) Mar Graduate Scholarship for professional development
- 2017 - 2021      Scholarship to support Ph.D. study: Chinese Scholarship Council
- April 2020      Bayer Travel Award for professional meetings
- March 2020      Second Place in Poster Competition, 7<sup>th</sup> ISU R.F. Baker Plant Breeding Symposium
- September 2019      Peter J. Loesch Jr. Memorial Fund Travel Award for worldwide scientific meetings
- 2013 - 2017      National Scholarship, Dean Scholarship, Jinlongyu Scholarship, Excellent Student Award, Outstanding Graduate Award

## ❖ Leadership Activities & Professional Contributions

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2019 - Present	Department of Agronomy Senator, Graduate and Professional Student Senate, ISU
2019 - 2021	Executive and Editorial Committee Member, Chinese Genomics Online Meet-up
2020	Media Committee Chair, 7 <sup>th</sup> ISU R.F. Baker Plant Breeding Symposium, ISU
2019	Speaker Committee Member, 6 <sup>th</sup> ISU R.F. Baker Plant Breeding Symposium, ISU
2020 - Present	Member of National Association of Plant Breeders (NAPB)
2018 - Present	Member of the American Society of Agronomy, the Crop Science Society of America, and the Soil Science Society of America (ASA-CSSA-SSSA)

## ❖ Professional Development & Trainings

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Aug - Dec, 2021	Preparing Future Faculty Program: <i>Panel discussion series on faculty hiring and promotion process at different institutions; mentor-mentee relationship building; job materials polishing</i>
Nov. 10, 2020	Workshop in 2020 ASA-CSSA-SSSA International Annual Meeting: <i>Phenotypic Plasticity and Genotype by Environment Interaction: Dissection and Prediction (Dr. Jianming Yu group from ISU)</i>
Jun. 9 - 12, 2019	Plant and Animal Breeding Short Course: <i>Genotype to Phenotype Models for Traditional and New Phenotyping Data in Plant Breeding (Dr. Fred van Eeuwijk group from Wageningen University)</i>
Jun. 11 - 13, 2018	The Agricultural Production Systems sIMulator Training Course: <i>Evaluating Production and Environmental Performance of Cropping Systems with APSIM (Dr. Archontoulis group from ISU)</i>
May. 10 - 11, 2018	Plant and Animal Breeding Short Course: <i>Plant and Animal Breeding - Exploiting New Technologies in Different Ways and at Different Scales (Dr. John Hickey group from Roslin Institute)</i>

## ❖ Publication & Presentations

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### Publications

Char, S. N., **Wei, J.**, Mu, Q., Li, X., Zhang, Z. J., Yu, J., Yang, B. 2019. An *Agrobacterium*-delivered CRISPR/Cas9 system for targeted mutagenesis in sorghum. *Plant Biotechnology J.* 18:319-321.

**Wei, J.**, Guo, T., Mu, Q., Alladassi, M., Mural, R., Boyles, R., Hoffmann, L., Salas-Fernandez, M., Hays, C., Thompson, A., Rooney, W., Kresovich, S., Schnable, J., Li, X., Yu, J. 2022. Phenotypic plasticity of flowering time and plant height in the Sorghum Association Panel. (Manuscript in preparation)

**Wei, J.**, McNellie, J., Mu, Q., Chen, J., O'Rourke, J., Graham, M., Clark, N., Walley, J., Li, X., Yu, J. 2022. Insights into maize heat stress response mechanisms through transcriptome analyses. (Manuscript in preparation)

Guo, T., Li, X., **Wei, J.**, Yu, J. 2022. Environment sampling in natural field conditions provides insights into the changing patterns of phenotypic plasticity. (Manuscript in progress)

Mu, Q., Longest, H., Char, S. N., **Wei, J.**, Tibbs-Cortes, L., Yang, B., Li, X., Yu, J. 2022. The cloning and characterization of *qHT7.1* and its homolog in sorghum and maize. (Manuscript in progress)

### Presentations

Jan. 9, 2022	Plant & Animal Genome XXIX Conference, CA <i>Invited Oral Talk: Investigating Dynamic Heat Stress Responses with Diverse Maize Inbreds: Embrace Complexity to Find Simplicity</i>
Jan. 10, 2022	Plant & Animal Genome XXIX Conference, CA <i>Poster: Phenotypic Plasticity Analysis Provides Insights into Sorghum Adaptation</i>
Feb. 18, 2021	Corn Breeding Research Meeting 2021, virtual <i>Oral Talk: How does Maize Respond to Heat Stress? An old question with an expanded study scope</i>

Aug. 17 - 20, 2020	National Association of Plant Breeders 2020 Annual Meeting, virtual <i>Poster: Advancing Understanding of Maize Heat Stress Response Mechanisms by Integrated Molecular, Biochemical, and Whole-Plant Analysis</i>
Jun. 25-16, 2020	62nd Annual Maize Genetics Conference, virtual <i>Poster: Advancing Understanding of Maize Heat Stress Response Mechanisms by Integrated Molecular, Biochemical, and Whole-Plant Analysis</i>
Mar. 6, 2020	7 <sup>th</sup> Iowa State University R.F. Baker Plant Breeding Symposium, Ames, IA <i>Poster: Advancing Understanding of Maize Heat Stress Response Mechanisms by Integrated Molecular, Biochemical, and Whole-Plant Analysis</i>
Feb. 26, 2020	Iowa State University Plant Breeding Seminar, Ames, IA <i>Oral Talk: Insights into maize heat stress response mechanisms through transcriptome analyses</i>
Mar. 27, 2019	Iowa State University Plant Breeding Seminar, Ames, IA <i>Oral Talk: Agrobacterium-delivered CRISPR/Cas9 system for targeted mutagenesis in sorghum</i>
Mar. 14 - 17, 2019	61st Annual Maize Genetics Conference, St. Louis, MO <i>Poster: Agrobacterium-delivered CRISPR/Cas9 system for targeted mutagenesis in sorghum</i>
Mar. 6, 2019	6 <sup>th</sup> Iowa State University R.F. Baker Plant Breeding Symposium, Ames, IA <i>Poster: Agrobacterium-delivered CRISPR/Cas9 system for targeted mutagenesis in sorghum</i>
Mar. 2, 2018	5 <sup>th</sup> Iowa State University R.F. Baker Plant Breeding Symposium, Ames, IA <i>Poster: Topics on genomic selection in breeding context</i>
Jan. 13 - 17, 2018	Plant & Animal Genome XXVI Conference, San Diego, CA <i>Poster: Topics on genomic selection in breeding context</i>