

# Xiaofei Zhang

SENIOR SCIENTIST

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## Profile

- Lead the global breeding team with purpose, trust, consistency, and credibility.
- Have more than 10 years of experience in applied breeding pipeline management.
- Manage multiple projects with approximately \$3 Million every year.
- Master quantitative genetics, statistics and experimental design.
- Advanced ability to program in R to analyze data and develop tools.
- Hands-on experience in processing large and complex breeding data.

## Education

### Shenyang Agricultural University

BS IN AGRONOMY

Liaoning, China

2000-04

### University of Chinese Academy of Sciences

PH.D. IN PLANT BREEDING

Beijing, China

2004-10

## Experience

### Institute of Crop Sciences, Chinese Academy of Agricultural Sciences

POSTDOCTORAL RESEARCHER

Beijing, China

2010-12

### University of Minnesota

RESEARCH ASSOCIATE-BREEDER

Minnesota, USA

2012-17

### North Carolina State University

SWEETPOTATO BREEDER

North Carolina, USA

2017-19

### The Alliance of Bioversity International and CIAT, CGIAR

GLOBAL CASSAVA BREEDING LEAD

Cali, Colombia

2019-Now

## Certificates

### High Performance Leadership

E/CORNELL-CORNELL UNIVERSITY

2020

### Change Management

E/CORNELL-CORNELL UNIVERSITY

2021

### Executive Leadership

E/CORNELL-CORNELL UNIVERSITY

2022

## Publications

1. Hernán Ceballos, Clair Hershey, Carlos Iglesias, **Xiaofei Zhang** (2021) Fifty years of a public cassava breeding program: evolution of breeding objectives, methods, and decision-making processes. *Theoretical and Applied Genetics* (2021) 134:2335–2353.
2. Prabin Bajgain, **Xiaofei Zhang**, Jacob M. Jungers, Lee R. DeHaan, Brett Heim, Craig C. Sheaffer, Donald L. Wyse, James A. Anderson (2020) ‘MN-Clearwater’, the first food-grade intermediate wheatgrass (*Kernza* perennial grain) cultivar. *Journal of Plant Registrations*.
3. Prabin Bajgain, **Xiaofei Zhang**, James A. Anderson (2020) Dominance and G×E interaction effects improve genomic prediction and genetic gain in intermediate wheatgrass (*Thinopyrum intermedium*). *The Plant Genome*.
4. Steve Larson, Lee DeHaan, Jesse Poland, **Xiaofei Zhang**, Kevin Dorn, Traci Kantarski, James Anderson, Jeremy Schmutz, Jane Grimwood, Jerry Jenkins, Shengqiang Shu, Jared Crain, Matthew Robbins & Kevin Jensen.

- (2019) Genome mapping of quantitative trait loci (QTL) controlling domestication traits of intermediate wheatgrass (*Thinopyrum intermedium*). *Theoretical and Applied Genetics* v132, 2325–2351.
5. Nidhi Rawat, Michael O. Pumphrey, Sixin Liu, **Xiaofei Zhang**, Vijay K. Tiwari, Harold N. Trick, William W. Bockus, Eduard Akhunov, James A. Anderson, and Bikram S. Gill. (2017) Wheat Fhb1 encodes a chimeric lectin with agglutinin domains and a pore-forming toxin-like domain conferring resistance to Fusarium head blight. *Nature Genetics*.
  6. Traci Kantarski, Steve Larson, **Xiaofei Zhang** (co-first author), Lee DeHaan, Justin Borevitz, James A. Anderson, Jesse Poland (2017). Development of the first consensus genetic map of intermediate wheatgrass (*Thinopyrum intermedium*) using genotyping-by-sequencing. *Theoretical and Applied Genetics*.
  7. **Xiaofei Zhang**, Ahmad Sallam, Liangliang Gao, Traci Kantarski, Jesse Poland, Donald L. Wyse, Lee DeHaan, James A. Anderson. (2016) Establishment and optimization of genomic selection to accelerate the domestication of intermediate wheatgrass (*Thinopyrum intermedium*). *The Plant Genome*.
  8. Michael Kantar, Catrin Tyl, Kevin Dorn, **Xiaofei Zhang** (co-first author), Jacob Jungers, Joe Kaser, Rachel Schendel, James Eckberg, Bryan Runck, Mirko Bunzel, Nick Jordan, Robert Stupar, David Marks, James Anderson, Gregg Johnson, Craig Sheaffer, Tonya Schoenfuss, Baraem Ismail, George Heimpel, Donald Wyse. (2016) Perennial Grain and Oilseed Crops. *Annual Review of Plant Biology*.
  9. And more on **Google Scholar**

## Grants

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<b>Cassava breeding for CMD resistant, high starch content and erect plant type varieties</b>	1.0M USD
VINFUTURE FOUNDATION	2023-27
<b>Mining useful alleles for climate change adaptation from CGIAR gene banks</b>	2.1M USD
THE BILL & MELINDA GATES FOUNDATION	2022-26
<b>Upgrading infrastructure and facilities for accelerated breeding and genetic gain in cassava</b>	0.85M USD
CROP TO END HUNGER INITIATIVE, CGIAR	2023-24
<b>Develop the molecular markers for cassava ID card</b>	0.2M USD
TROPICAL CROPS GENETIC RESOURCES INSTITUTE, CATAS	2022-24
<b>Accelerate Breeding Initiative-Cassava</b>	2.1M USD
CGIAR	2023
<b>IITA-CIAT Cassava Improvement</b>	1.0M USD
USAID	2021-23
<b>NextGen Cassava</b>	2.0M USD
THE BILL & MELINDA GATES FOUNDATION	2018-23
<b>Breeding roots, tubers and banana products for end user preferences</b>	1.0M USD
THE BILL & MELINDA GATES FOUNDATION	2018-23

## References

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<b>Jim Anderson, Ph.D.</b>	<a href="mailto:ander319@umn.edu">ander319@umn.edu</a>
PROFESSOR, WHEAT BREEDER, UNIVERSITY OF MINNESOTA	
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WILLIAM NEAL REYNOLDS DISTINGUISHED PROFESSOR; PROGRAM LEADER SWEETPOTATO AND POTATO BREEDING AND GENETICS PROGRAMS, NORTH CAROLINA STATE UNIVERSITY	
<b>Lee DeHaan, Ph.D.</b>	<a href="mailto:lrdehaan@gmail.com">lrdehaan@gmail.com</a>
DIRECTOR OF CROP IMPROVEMENT/LEAD SCIENTIST, KERNZA® DOMESTICATION PROGRAM, THE LAND INSTITUTE	
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LEVER DIRECTOR, BREEDING LEAD, ALLIANCE BIOVERSITY-CIAT, CGIAR	