

## CURRICULUM VITAE

University of Idaho

**NAME:** Jianli Chen

**DATE:** Dec.12, 2020

**RANK OR TITLE:** Professor and Senior Wheat Breeder

**DEPARTMENT:** Plant Sciences

**OFFICE LOCATION:** University of Idaho Aberdeen Research & Extension Center,  
1693 S 2700 W, Aberdeen, ID 83210

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**DATE OF FIRST EMPLOYMENT AT UI:** June 17, 2007

**DATE OF TENURE:** July 1, 2014

**DATE OF PRESENT RANK OR TITLE:** July 1, 2020

### EDUCATION:

#### Degrees:

Ph.D., 2005 Virginia Polytechnic & State University, Blacksburg, VA - Plant Breeding and Genetics  
M.S., 1988 Northwest Agricultural University, Yangling, Shaanxi, China - Plant Breeding and Genetics  
B.S., 1983 Northwest Agricultural University, Yangling, Shaanxi, China - Agronomy

### EXPERIENCE:

#### Teaching, Extension and Research Appointments:

2020 – present, Professor and Senior Wheat Breeder, Graduate Faculty, Department of Plant Sciences, University of Idaho Aberdeen Research & Extension Center, Aberdeen, ID, USA  
2014 - 2019, Associate Professor and Wheat Breeder, Graduate Faculty, Department of Plant Sciences, University of Idaho Aberdeen Research & Extension Center, Aberdeen, ID, USA  
2007 - 2013, Assistant Professor and Wheat Breeder, Graduate Faculty, Department of Plant Sciences, University of Idaho Aberdeen Research & Extension Center, Aberdeen, ID, USA  
2007 - present, Adjunct Professor, Department of Plants, Soils, and Climate, Utah State University, Logan, UT, USA (Graduate committee)  
2010 - present, Adjunct Professor, Department of Plant and Soil Sciences, Northwest A & F University, Yangling, Shaanxi, P. R. China (Graduate committee)  
2006 - 2007, Research Scientist, Department of Crop and Soil Environmental Sciences (CSES), Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, Virginia, USA  
1997 - 2006, Research Associate, Department of CSES, Virginia Tech, Blacksburg, Virginia, USA  
1996, Visiting Scientist, USDA-ARS Forage and Range Research Laboratory (FRRL), Utah State University, Logan, Utah, USA  
1994 - 1995, Adjunct Associate Professor, Shaanxi Academy of Agricultural Sciences (SAAS), Yangling, Shaanxi, P.R. China  
1993, Visiting Scholar, USDA-ARS FRRL, Utah State University, Logan, Utah, USA  
1990 - 1993, Adjunct Assistant Professor, SAAS, Yangling, Shaanxi, P. R. China  
1988 - 1990, Research Faculty, SAAS, Yangling, Shaanxi, P. R. China  
1983 - 1985, Teacher, Biology, Genetics, and Breeding, Professional High School of Agriculture, Shangnan, Shaanxi, P.R. China

#### Academic Administrative Appointments:

1994 - 1995, Executive Secretary, National Program Office for the United Nation Development Program (UNDP), Shaanxi Academy of Agricultural Sciences, Shaanxi, Yangling, P.R. China

**TEACHING ACCOMPLISHMENTS:** (Academic and Extension teaching)**Areas of Specialization:**

Plant Breeding, Genetics, Genomics, Cytogenetics

**Courses Taught in Classroom at UI:**

PISc502 Advanced Plant Breeding and Genetics, spring 2019  
PISc502 Advanced Plant Breeding and Genetics, fall 2018  
PISc502 Cereal Breeding and Genetics, fall 2017  
PISc502 QTL Mapping in Cereal Crops, spring and fall 2016  
PISc502 Cereal Breeding and Genetics, summer 2015  
PISc501 Graduate seminar, fall 2008, spring and fall 2009, spring 2010  
PISc399 Special study, Mar. 2009

**Guest Lecture Provided**

PISc501 Guest Seminar, Overview of Wheat Breeding Methods, spring 2019  
PISc501 Guest Seminar, Overview of US Wheat Breeding and Genetics Programs, fall 2018  
PISc501 Guest Seminar, Chromosome engineering and breeding, spring 2012  
PISc501 Guest Seminar, Breeding for drought tolerance spring 2011  
PISc501 Guest Seminar, Chromosome engineering and breeding, spring 2010  
PISc501 Guest Seminar, Genome-wide identification of the quantitative trait loci associated with end-use quality and disease resistance in bread wheat, spring 2008

**Scholarly Events Organized/Chaired**

Student symposium, Aberdeen, twice per year, 2009 – 2020

**Students Advised and Being Advised:****Graduate Students as a Major Professor:**

Meng Su, Ph.D, 2018 – present  
Justin Wheeler, Ph.D, 2016 - present  
Jacob Bevan, MS, 2017 - 2020  
Tyler Gordon, Ph.D, 2016 - 2019  
Kyle Isham, MS, 2018 - 2019  
Brian Bowman, Ph.D, 2011 - 2015  
Santosh, Nayak, MS, 2011 - 2014  
Junli Zhang, Ph.D, 2008 - 2013

**Graduate Students as a hosting Professor:**

Ling Qiao, visiting Ph.D, 2019  
Yuxiu Liu, Visiting Ph.D, 2014 - 2016  
Ping Li, Visiting Ph.D, 2010 - 2012

**Graduate Committee:**

Rachel Patterson, Ph.D, 2019 started  
Katrina Johnson, MS, 2018 - 2019  
Kaitlyn Bissonette, MS, 2012

**Undergraduate Students:**

Jaren Woods (Utah Valley University), summer 2019  
Brittany Arielle Mangum (ISU), summer 2019  
Alyssa Sierra Freeman (ISU), summer 2019  
LinTao Lai (High school graduated), fall, 2018  
Brian Zhu (High school graduated), summer, 2017  
Jacob Bevan (Pre-graduate student), summer, 2017  
Kyle Isham (UI), summer, 2016, 2017  
Chantel Inskeep (ISU), summer, 2016

Chantel Inskeep (ISU), summer, 2015  
 Chance Power (UI), summer, 2015  
 Kelly Deobald (UI), summer, 2014  
 Cody O'Brien (BYU), summer, 2013  
 Rachel Asmus (ISU), summer, 2013  
 Sage Goff (BYU), summer, 2012  
 Celina Twitchell (USU), summer, 2010 - 2011  
 Soya Liu (WSU), summer, 2010  
 Curtis Brown (ISU), summer, 2009 - 2012  
 Tyler Mock (BYU), summer, 2009

**SCHOLARSHIP ACCOMPLISHMENTS:** (Including scholarship of teaching and learning, artistic creativity, discovery, and application/integration)

### Refereed/Adjudicated Publications

#### Book chapters

Wang, X., W. Ji, X. Xu, **J. Chen**, H. Zhao, and X. Xue. 1993. Wheat Chromosome Engineering and Breeding (In Chinese). HeBei Science and Technology Press House. P. R. China.

**Refereed Journals** (28 since 2014, 52 papers since 2007, \*Corresponding Author, IF, impact factor)

- Isham, K., R. Wang, W. Zhao, J. Wheeler, N. Klassen, E. Akhunov, and **J. Chen\***. 2021. QTL mapping for grain yield and three yield components in a population derived from two high-yielding spring wheat cultivars. *Theor Appl Genet*. <https://doi.org/10.1007/s00122-021-03806-1>. Conceptualized this study, wrote and revised manuscript. **IF: 4.4.**
- Chen, J., J. Wheeler, N. Klassen, W. Zhao, K. O'Brien, C. Jackson, J.M. Marshall, K. Schroeder, and X.M. Chen. 2020. Registration of 'UI Bronze Jade' hard white winter wheat. *Journal of Plant Registration* DOI:10.1002/plr2.20029. **IF: 0.6**
- Gordon, T., R. Wang, B. Bowman, N. Klassen, J. Wheeler, J. M. Bonman, H. Bockelman, and **J. Chen**. 2020. Agronomic and Genetic Assessment of Terminal Drought Tolerance in Two-Row Spring Barley. *Crop Sci*. DOI:10.1002/csc2.20040. Conceptualized this study, wrote and revised manuscript. **IF: 1.9**
- Gordon, T., R. Wang, D. Hole, H. Bockelman, J. M. Bonman, and **J. Chen\***. 2020. Genetic characterization and genome-wide association mapping for dwarf bunt resistance in bread wheat accessions from the USDA National Small Grains Collection. *Theor Appl Genet*. <https://doi.org/10.1007/s00122-020-03532-0>. Conceptualized this study, wrote and revised manuscript. **IF: 4.4.**
- Wang, R., T. Gordon, D. Hole, W. Zhao, K. Isham, J. M. Bonman, B. Goates, and **J. Chen\***. 2019. Identification and Assessment of Two Major QTL for Dwarf Bunt Resistance in Winter Wheat Line 'IDO835'. *Theor Appl Genet*. <https://doi.org/10.1007/s00122-019-03385-2>. Conceptualized this study, wrote and revised manuscript. **IF: 4.4.**
- Singh, L., J.A Anderson, **J. Chen**, B.S Gill, V.K Tiwari, and N. Rawat. 2019. Development and validation of a perfect KASP marker for Fusarium head blight resistance gene *Fhb1* in wheat. *The Plant Pathology Journal* 35 (3): 200-207. <https://doi.org/10.5423/PPJ.OA.01.2019.0018>. Conceptualized this study and revised manuscript.
- Zheng, X., X. Wen, L. Qiao, J. Zhao, X. Zhang, X. Li, Sh. Zhang, Z. Yang, Zh. Chang, **J. Chen\***, J. Zheng\*. 2019. Genetic dissection of QTrl.saw-2D.2, a major QTL for total seedling root length in wheat. *Planta*. <https://doi.org/10.1007/s00425-019-03154-x>. Conceptualized this study and revised manuscript. **IF: 3.2.**
- Shao, Y., M-H. Tsai, Y. He, **J. Chen**, C. Wilson, A.H. Lin. 2019. Reduction of falling number in soft white spring wheat caused by an increased proportion of spherical B-type starch granules. *Food Chemistry* 284:140–148. Conceptualized this study and revised manuscript. **IF: 4.9.**
- Wang, R., Y. Liu, K. Isham, W. Zhao, J. Wheeler, N. Klassen, Y. Hu, J.M., Bonman, **J. Chen\***. 2018. QTL identification and KASP marker development for productive tiller and fertile spikelet numbers in two high-yielding hard white wheat cultivars. *Molecular Breeding* 38 (135). Open access. IF: 2.1.

- <https://doi.org/10.1007/s11032-018-0894-y>. Conceptualized this study, wrote and revised manuscript.
- Liu, Y., R. Wang, Y. Hu, and **J. Chen\***. 2018. Genome-Wide Linkage Mapping of Quantitative Trait Loci for Late-Season Physiological and Agronomic Traits in Spring Wheat under Irrigated Conditions. *Agronomy*, 60. doi:10.3390/agronomy8050060. Conceptualized this study, wrote and revised manuscript.
- Dong, H., R. Wang, Y. Yuan, J. Anderson, M. Pumphrey, Zh. Zhang, and **J. Chen\***. 2018. Evaluation of the Potential for Genomic Selection to Improve Spring Wheat Resistance to Fusarium Head Blight in the Pacific Northwest. *Frontiers in Plant Science*. <https://doi.org/10.3389/fpls.2018.00911>. Conceptualized this study, wrote and revised manuscript. **IF: 3.7.**
- Bissonnette, K. M., Ph. Wharton, **J. Chen**, J. Marshall. 2018. Survey of *Fusarium* species associated with fusarium head blight of spring wheat (*Triticum aestivum*) in Southeastern Idaho. *Plant Health Progress* 19: 125-127. <https://doi.org/10.1094/php-10-17-0066-S>. Collaborator.
- Liang, X., Y. Liu, **J. Chen**, C. Adams. 2018. Late-season photosynthetic rate and senescence were associated with grain yield in winter wheat of diverse origins. *Journal of Agronomy and Crop Science* 204:1-12 DOI 10.1111/jac.12231. Conceptualized this study and revised manuscript.
- Zheng, X., X. Li, Ch. Ge, J. Chang, M. Shi, **J. Chen**, L. Qiao, Zh. Chang, J. Zheng, J. Zhang. 2017. Characterization of the CCT family and analysis of gene expression in *Aegilops tauschii*. *Dec. 2017. PLoS ONE*. <https://doi.org/10.1371/journal.pone.0189333>. Collaborator. **IF: 2.8.**
- Assanga, S.O., S. Dhakal, C-T., Tan, J.C. Rudd, G. Zhang, A. Ibrahim, Q. Xue, R. Devkota, S. Haley, **J. Chen**, M. P. Fuentealba, S. Baker, J. Baker. S.Y. Liu. 2017. Mapping of quantitative trait loci for grain yield and its components in a US popular winter wheat using 90K SNPs. *PLoS ONE*. Dec. 2017. DOI 10.1371/journal.pone.0189669. Collaborator. **IF: 2.8.**
- Liang, X., D. Strawn, **J. Chen**, J.M. Marshall. 2017. Variation in cadmium accumulation in spring wheat cultivars: uptake and redistribution to grain. *Plant and Soil* 421:219-231 DOI 10.1007/s11104-017-3454-z. Conceptualized this study and revised manuscript. **IF: 3.3.**
- Chen, J\***, J. Wheeler, N. Klassen, W. Zhao, K. O'Brien, C. Jackson, J. M. Marshall, X.M. Chen. 2017. Registration of 'UI Sparrow' wheat. *Journal of Plant Registration*. Open access. DOI: 10.3198/jpr2017.04.0021crc. Conceptualized this study, wrote and revised manuscript.
- Liu, Y., B.C. Bowman, Y. Hu, X. Liang, W. Zhao, J. Wheeler, N. Klassen, H. Bockelman, J. M. Bonman, **J. Chen\***. 2017. Evaluation of agronomic traits and drought tolerance of winter wheat accessions from the National Small Grain Collection. *Agronomy* 7: 51. DOI:10.3390/agronomy7030051. Conceptualized this study, wrote and revised manuscript.
- Wang, R., **J. Chen\***, J. Zhang, W. Zhao, J. Wheeler, N.Klassen, J.A. Anderson, D.R. See and Y. Dong. 2017. Genome-Wide Association Mapping of Resistance QTL to Fusarium Head Blight in Spring Wheat Lines Grown in Pacific Northwest and CIMMYT. *Phytopathology*. DOI: 10.1094/PHYTO-02-17-0073-R. Conceptualized this study, wrote and revised manuscript. **IF: 3.0.**
- K.L. Jernigan, C. F. Morris, R. Zemetra, **J. Chen**, K. Garland-Campbell, A.H. Carter. 2017. Genetic mapping of quantitative trait loci for end-use quality traits in a soft wheat RIL population. *Journal of Cereal Science*. DOI: 10.1016/j.jcs.2017.06.005. Collaborator. **IF: 2.3.**
- Liu, Y., P. Li, J. Zhang, Y. Hu, and **J. Chen\***. 2016. Dwarfing genes *Rht4* and *Rht-B1b* affect plant height, agronomic traits, and kernel quality traits in common wheat under two water regimes. *Field Crops Research* Vol. 204: 242-248. DOI: 10.1016/j.fcr.2017.01.020. Conceptualized this study, wrote and revised manuscript. **IF: 4.0.**
- J. Chen\***, M. J. Guttieri, J. Zhang, D. Hole, E. Souza, B. Goates. 2016. A novel QTL associated with dwarf bunt resistance in Idaho 444 winter wheat. *Theor Appl Genet.* 129(12): 2313-2322. DOI 10.1007/s00122-016-2783-2. Conceptualized this study, wrote and revised manuscript. **IF: 3.9.**
- J. Chen\***, J. Wheeler, K. O'Brien, W. Zhao, N. Klassen, J. Zhang, B. Bowman, Y. Wang, C. Jackson, J. M. Marshall, X.M. Chen. 2015. Registration of 'UI Platinum' Hard White Spring Wheat. *J. Plant Registration* 10: 36-40. DOI:10.3198/jpr2015.06.0037crc. Conceptualized this study, wrote and revised manuscript.
- Bowman, B., **J. Chen\***, J. Zhang, J. Wheeler, Y. Wang, W. Zhao, S. Nayak, N. Heslot, H. Bockelman, and J.M. Bonman. 2015. Evaluating grain yield in spring wheat with canopy spectral reflectance. *Crop Sci.*55:1881 – 1890. Conceptualized this study, wrote and revised manuscript.
- Bonman, J.M., E. M. Babiker, A. Cuesta-Marcos, K. Esvelt-Klos, G. Brown-Guedira, Sh. Chao, D. See, **J.Chen**, E. Akhunov, J. Zhang, H. E. Bockelman, and T. C. Gordon. 2015. Genetic Diversity among Wheat Germplasm-Bank Accessions. *Crop Sci.* 55:1243 – 1253. Collaborator.
- Sherman, J.D., N. K. Blake, J. M. Martin, K. D. Kephart, D. K. Weaver, S. P. Lanning, H.-Y. Heo, M. Pumphrey, **J. Chen**, and L. E. Talbert. 2015. Impact of a major gene for stem solidness on agronomic performance of spring wheat near-isogenic lines. *Crop Sci.* 55 (2): 514-520. Collaborator.
- Zhang, J., **J. Chen\***, Ch. Chu, W. Zhao, J. Wheeler, E. Souza, and R. Zemetra. 2014. Genetic dissecting of QTL

- associated with grain yield in diverse environments. *Agronomy* 4(4): 556-578. Conceptualized this study, wrote and revised manuscript.
- Zhang, J., **J. Chen\***, Y. Wang, B. Bonman, J. Wheeler, W. Zhao, K. O'Brien, J.M. Marshall, H. Bockelman, and J. Bonman. 2014. Association mapping of Hagberg falling number in hard white spring wheat collection materials. *Crop Science* 54:1243–1252. Conceptualized this study, wrote and revised manuscript.
- Chen, J\***, G. Hu, C. Chu, and Y. Wu. 2013. STS markers developed from drought tolerance candidate genes and mapped in two mapping populations and one set of nulli-tetrasomic lines of common wheat (*Triticum aestivum*). *Cereal Communication DOI: 10.1556/CRC.2013.0056*. Conceptualized this study, wrote and revised manuscript.
- Liu, Sh., C.A. Griffey, M.D. Hall, A. L. McKendry, **J. Chen**, W.S. Brooks, G. Brown-Guedira, D. Van Sanford, D.G. Schmale. 2013. Molecular characterization of field resistance to Fusarium head blight in two US soft red winter wheat cultivars. *Theor Appl Genet* DOI 10.1007/s00122-013-2149-y. Collaborator.
- Chen, J\***, J. Wheeler, J. Clayton, W. Zhao, K. O'Brien, C. Jackson, J. M. Marshall, B.D. Brown, K. Campbell, X.M. Chen, R. Zemetra, and E.J. Souza. 2013. Registration of 'UI Stone' Wheat. *J. Plant Registration* 7: 321 – 326. Conceptualized this study, wrote and revised manuscript.
- Chen, J\***, Ch. Chu, E.J. Souza, M.J. Guttieri, X. Chen, S. Xu, D. Hole, and R. Zemetra. 2012. Whole genome-wide mapping for high-temperature adult-plant resistance to stripe rust (*Puccinia striiformis* f. sp. *tritici*) in a hard red winter wheat germplasm IDO444. *Molecular Breeding* 29: 791 – 800. Conceptualized this study, wrote and revised manuscript.
- Chen, J\***, E.J. Souza, D. Hole, M.J. Guttieri, K. O'Brien, J. Wheeler, L. Sorensen, J. Clayton, R. Zemetra, J.M. Marshall, and X. Chen. 2012. Registration of 'UI SRG' Wheat. *J. Plant Registration* 6 (2): 66-70. Conceptualized this study, wrote and revised manuscript.
- Chen, J\***, C.A. Griffey, S. Liu, and M.A. Saghai Maroof. 2012. Registration of 'VA04W-433' and 'VA04W-474' Wheat Germplasm. *J. Plant Registration* 6 (1): 111-116. Conceptualized this study, wrote and revised manuscript.
- Liu, S.Y., C.A. Griffey, M.D. Hall, **J. Chen**, S. Liu, D. Tucker, W.S. Brooks. 2012. Registration of Becker/Massey Wheat Recombinant Inbred Line Mapping Population. *J. Plant Registration* 3:358-362. Collaborator.
- Li, P., **J. Chen\***, and P. Wu. 2012. Evaluation of grain yield and three physiological traits in 30 spring wheat genotypes across three irrigation regimes. *Crop Sci* 52 (1): 110-121. Conceptualized this study, wrote and revised manuscript.
- Li, P., P. Wu, and **J. Chen\***. 2012. Evaluation of flag leaf chlorophyll content index in 30 spring wheat genotypes under three irrigation regimes. *Australian Journal of Crop Science*, 6:1123-1130. Conceptualized this study, wrote and revised manuscript.
- Li, P., **J. Chen\***, P. Wu, J. Zhang, Ch. Chu, D. See, G. Brown-Guedira, R. Zemetra, and E. Souza. 2011. QTL analysis for the effect of *RhtB1* dwarfing gene on coleoptiles length, seedling root length and numbers of bread wheat (*Triticum aestivum* L.). *Crop Sci* 51: 2561-2568. Conceptualized this study, wrote and revised manuscript.
- Li, P., **J. Chen\***, and P. Wu. 2011. Agronomic characteristics and grain yield of 30 spring wheat genotypes under drought stress and non-stress conditions. *Agronomy Journal* 103 (6): 1619-1628. Conceptualized this study, wrote and revised manuscript.
- Li, P., P. Wu, and **J. Chen\***. 2011. Water use efficiency and nitrogen use efficiency of 30 spring wheat genotypes under drought stress and well-watered conditions. *International Agricultural Engineering Journal*, 20:8-17. Conceptualized this study, wrote and revised manuscript.
- Quincke, M. C., J. Peterson, R.S. Zemetra, J. L. Hansen, **J. Chen**, O. Riera-Lizarazu, Ch.C. Mundt. 2011. Quantitative trait loci analysis for resistance to Cephalosporium stripe, a vascular wilt disease of wheat. *Theor Appl Genet* 122:1339–1349. Collaborator.
- Chao, S., J. Dubcovsky, J. Dvorak, M.C. Luo, P.S. Baenziger, R. Matnyazov, D.R. Clark, L. Talbert, J.A. Anderson, S. Dreisigacker, K. Glover, **J. Chen**, K. Campbell, P.L. Bruckner, J.C. Rudd, S. Haley, B.F. Carver, R. Sims, M.E. Sorrells, and E. Akhunov. 2011. Homoeolog-specific patterns of linkage disequilibrium and SNP variation in hexaploid wheat. *BMC Genomics* 11: 727-744. Collaborator.
- Griffey, C.A., W. E. Thomason, R. M. Pitman, B. R. Beahm, P. G. Gundrum, S. Y. Liu, **J.Chen**, J. J. Paling, D. W. Dunaway, W. S. Brooks, M. E. Vaughn, J. E. Seago, B. C. Will, E.G. Hokanson, H. D. Behl, R. A. Corbin, T. R. Lewis, M. D. Hall, J. T. Custis, D.E. Starner, S. A. Gulick, S. R. Ashburn, D. L. Whitt, H. E. Bockelman, J. P. Murphy, R. A. Navarro, E. J. Souza, G. L. Brown-Guedira, J. A. Kolmer, D. L. Long, Y. Jin, X. Chen, and S. E. Cambron. 2011. Registration of 1 'SW049029104' Wheat. *J. Plant Registration* 1:

91-97. Collaborator.

- Griffey, C.A., W. E. Thomason, R. M. Pitman, B. R. Beahm, J. J. Paling, **J. Chen**, P. G. Gundrum, J. K. Fanelli, D. W. Dunaway, W. S. Brooks, M. E. Vaughn, E. G. Hokanson, H. D. Behl, R. A. Corbin, J. E. Seago, B. C. Will, M. D. Hall, S. Y. Liu, J. T. Custis, D. E. Starner, S. A. Gulick, S. R. Ashburn, E. H. Jones Jr., D. L. Whitt, H. E. Bockelman, E. J. Souza, G. L. Brown-Guedira, J. A. Kolmer, D. L. Long, Y. Jin, X. Chen, and S. E. Cambron. 2011. Registration of 'Merl' wheat. *J. Plant Registration* 1:68-74. Collaborator.
- Hall, M. D., W. Rohrer-Perkins, C. A. Griffey, S. Y. Liu, W. E. Thomason, A. O. Abaye, A. Bullard-Schilling, P. G. Gundrum, J. K. Fanelli, **J. Chen**, W. S. Brooks, J. E. Seago, B. C. Will, E. G. Hokanson, H. D. Behl, R. M. Pitman, J. C. Kenner, M. E. Vaughn, R. A. Corbin, D. W. Dunaway, T. R. Lewis, D. E. Starner, S. A. Gulick, B. R. Beahm, D. L. Whitt, J. B. Lafferty, and G. A. Hareland. 2011. Registration of 'Snowglenn' Winter Durum Wheat. *J. Plant Registration* 1: 81-86. Collaborator.
- Chen, J\***, E.J. Souza, N.A. Bosque-Pérez, M.J. Guttieri, K.L. O'Brien, J.M. Windes, S.O. Guy, B.D. Brown, X.M. Chen, and R.S. Zemetra. 2010. Registration of 'UI Winchester' Wheat. *J. Plant Registration* 4:1 - 4. Conceptualized this study, wrote and revised manuscript.
- Griffey, C.A., W. E. Thomason, R. M. Pitman, B. R. Beahm, J. J. Paling, **J. Chen**, J. K. Fanelli, J. C. Kenner, D. W. Dunaway, W. S. Brooks, M. E. Vaughn, E.G. Hokanson, H. D. Behl, R. A. Corbin, J. T. Custis, C. M. Waldenmaier, D. E. Starner, S. A. Gulick, S. R. Ashburn, D. L. Whitt, H. E. Bockelman, E. J. Souza, D. L. Long, Y. Jin, X. Chen, and S. E. Cambron. 2010. Registration of 'Jamestown' Wheat. *J. Plant Registration* 4: 28 – 33. Collaborator.
- Griffey, C.A., W. E. Thomason, R. M. Pitman, B. R. Beahm, J. J. Paling, **J. Chen**, J. K. Fanelli, J. C. Kenner, D. W. Dunaway, W. S. Brooks, M. E. Vaughn, E.G. Hokanson, H. D. Behl, R. A. Corbin, J. T. Custis, C. M. Waldenmaier, D. E. Starner, S. A. Gulick, S. R. Ashburn, D. L. Whitt, H. E. Bockelman, E. J. Souza, D. L. Long, Y. Jin, X. Chen, and S. E. Cambron. 2010. Registration of 'Shirley' Wheat. *J. Plant Registration* 4: 38 - 43. Collaborator.
- Griffey, C.A., W. E. Thomason, R. M. Pitman, B. R. Beahm, J. J. Paling, **J. Chen**, J. K. Fanelli, J. C. Kenner, D. W. Dunaway, W. S. Brooks, M. E. Vaughn, E.G. Hokanson, H. D. Behl, R. A. Corbin, J. T. Custis, C. M. Waldenmaier, D. E. Starner, S. A. Gulick, S. R. Ashburn, D. L. Whitt, H. E. Bockelman, E. J. Souza, D. L. Long, Y. Jin, X. Chen, and S. E. Cambron. 2010. Registration of '3434' Wheat. *J. Plant Registration* 4: 44 - 49. Collaborator.
- Chen, J\***, E. J. Souza, R. S. Zemetra, N. A. Bosque-Pérez, M. J. Guttieri, J. Wheeler, K. M. O'Brien, J. W. Windes, S. O. Guy, B. D. Brown, X. M. Chen. 2009. Registration of 'Cataldo' Spring Wheat. *J. Plant Registration* 3: 264 – 268. Conceptualized this study, wrote and revised manuscript.
- Griffey, C.A., W. E. Thomason, R. M. Pitman, B. R. Beahm, J. J. Paling, **J. Chen**, J. K. Fanelli, J. C. Kenner, D. W. Dunaway, W. S. Brooks, M. E. Vaughn, E.G. Hokanson, H. D. Behl, R. A. Corbin, J. T. Custis, C. M. Waldenmaier, D. E. Starner, S. A. Gulick, S. R. Ashburn, D. L. Whitt, H. E. Bockelman, E. J. Souza, D. L. Long, Y. Jin, X. Chen, and S. E. Cambron. 2009. Registration of 'USG 3555' Wheat. *J. Plant Registration* 3: 273 - 278. Collaborator.
- Griffey, C.A., W. E. Thomason, R. M. Pitman, B. R. Beahm, J. J. Paling, **J. Chen**, J. K. Fanelli, J. C. Kenner, D. W. Dunaway, W. S. Brooks, M. E. Vaughn, E.G. Hokanson, H. D. Behl, R. A. Corbin, J. T. Custis, C. M. Waldenmaier, D. E. Starner, S. A. Gulick, S. R. Ashburn, D. L. Whitt, H. E. Bockelman, E. J. Souza, D. L. Long, Y. Jin, X. Chen, and S. E. Cambron. 2009. Registration of '5205' Wheat. *J. Plant Registration* 3: 283 - 288. Collaborator.
- Zhou, K., J. Hao, C. Griffey, H. Chung, S. F. O'Keefe, **J. Chen**, and Sh. Hogan. 2007. Antioxidant Properties of Fusarium Head Blight-Resistant and-Susceptible Soft Red Winter Wheat Grains Grown in Virginia. *J. Agric. Food Chem.*, 2007, 55 (9), 3729-3736. Collaborator.
- Chen, J\***, C. A. Griffey, M. A. Saghai Maroof, E. L. Stromberg, R. M. Biyashev, W. Zhao, M. R. Chappell, T. H. Pridgen, Y. Dong, and Z. Zeng. 2006. Validation of Two Major QTL for *Fusarium* Head Blight Resistance in Chinese Wheat Line W14. *Plant Breeding* 125: 99-101. Conceptualized this study, wrote and revised manuscript.

#### Invited talks and seminars (13 since 2014)

- Chen, J.** 2019. Prospects and challenges to improve wheat grain yield components using molecular markers. Invited seminar to the students by the Institute of Plant Genetics at UGA. Athens, GA, Oct. 30 – Nov. 1.
- Chen, J.** 2019. Improving low falling number in spring wheat. Invited talk at Falling number workshop, Portland, OR, Jan. 29-30, 2019.
- Chen, J.** 2018. Unlocking Genes Related to Low Falling Number Wheat Using Genomics-Assisted

- Approaches. Invited talk at Western Wheat Workers meeting, Idaho Falls, ID. June 26-28, 2018.
- Chen, J.** 2018. Developing FHB Resistant Wheat Cultivars for Idaho and the Western US. Invited talk at Western FHB Symposium. Bozeman, MT. Mar. 13-14, 2018; at Western Wheat Workers meeting, Idaho Falls, ID. June 26-28, 2018.
- Chen, J.** 2018. Overview of US Wheat Breeding and Genetics Programs. Invited talk to Northwest A & F University, Yangling, Shaanxi, P.R. China. May 31, 2018.
- Chen, J.** 2018. Overview of US Wheat Breeding and Genetics Programs. Invited talk to Shandong Agricultural University, Taian, P.R. China. May 14, 2018.
- Chen, J.** 2018. Genomic-Assisted Breeding for Productive Tiller and Spikelet Numbers in Wheat. Invited talk to Shanxi Academy of Agricultural Sciences, Lin Fen, Shanxi, P.R. China. May 2018.
- Chen, J.** 2017. Overview of US Wheat Breeding and Genetics Programs. Invited talk to Shanxi Academy of Agricultural Sciences, Lin Fen, Shanxi, P.R. China. May 2017.
- Chen, J.** 2016. Breeding and Genetics for dwarf bunt resistance. Invited talk to Institute of Plant Protection, China Academy of Agricultural Sciences. Beijing, P.R. China. Oct. 2016.
- Chen, J.** 2015. University of Idaho Wheat Breeding and Genetics Program Update. Invited talk to Shanxi Academy of Agricultural Sciences, Lin Fen, Shanxi, P.R. China. Oct. 2016.
- Chen, J.** 2015. Accelerated wheat breeding and genetics program at the University of Idaho. Invited talk to faculty and students in the departments of Crop and Soil Sciences and USDA-ARS, Manhattan, KS, Aug. 2015.
- Chen, J.** 2015. Accelerated wheat breeding and genetics program at the University of Idaho. Invited talk to faculty and students in the department of Crop and Soil Sciences. Griffin Campus, University of Georgia, Griffin, GA, March, 2015.
- Chen, J.** University of Idaho Wheat Breeding and Genetics Program Update. Invited talk to XiJing Academy of Agricultural Sciences, XinJing, P.R. China. Oct. 13- 20, 2014.
- Chen, J.** Integrated wheat breeding and genetics program at University of Idaho. Invited talk at 2013 Yangling International Agri-science Forum. Yangling, Shaanxi, P.R. China. Nov. 7 - 9, 2013.
- Chen, J.** Breeding for drought tolerance in common wheat. Invited seminar by College of Agriculture, Northwest A&F University, Yangling, Shaanxi, P.R. China. May, 2012.
- Chen, J.** Molecular breeding for biotic and abiotic resistances in wheat. Invited seminar, College of Agriculture, Northwest A&F University, Yangling, Shaanxi, P.R. China. Sep. 2010.

#### **Oral talks and published abstracts (26 since 2007, 10 since 2014)**

- Chen, J.**, R. Wang, K. Isham, J. Wheeler, W. Zhao, N. Klassen. 2019. Prospects and challenges to improve wheat grain yield components using molecular markers. Oral presentation and abstract in the proceedings of 2019 ASA, CSSA and SSSA Int'l Annual meeting, San Antonio, TX, Nov. 9 - 14.
- Chen, J.**, L. Qiao, J. Wheeler, K. Isham, R. Wang, W. Zhao, N. Klassen. 2019. QTL mapping of grain cadmium and other related metal in spring wheat. Oral presentation and abstract in the proceedings of 2019 ASA, CSSA and SSSA Int'l Annual meeting, San Antonio, TX, Nov. 9 - 14.
- Chen, J.**, R. Wang, K. Isham, J. Wheeler, W. Zhao, N. Klassen. 2019. QTL associated with yield components identified in two spring wheat populations. Oral presentation and abstract in the proceedings of 2019 International Plant and Animal Genome XVI Conference, Town & Country Convention Center, San Diego, California Jan.12-16, 2019.
- Wang, R., **J. Chen**, D. Hole, W. Zhao, K. Isham, T. Gordon, J. M. Bonman, M. J. Guttieri, E. Souza, B. Goates. 2018. Prospects and challenges for breeding bunt resistant wheat using molecular marker assisted selection. Oral presentation and abstract in the proceedings of XX international workshop on the smuts and bunts, Logan, UT, USA, May 29 to June 2.
- Gordon, T., R. Wang, D. Hole, B. Goates, H. Bockelman, K. Klos, **J. Chen**, J. M. Bonman. 2018. Genome-Wide Association Mapping for Dwarf Bunt Resistance in the National Small Grains Collection. Oral presentation and abstract in the proceedings of XX international workshop on the smuts and bunts, Logan, UT, USA, May 29 to June 2.
- Chen, J.**, D. Hole, R. Wang, J. Zhang, W. Zhao, M. Guttieri, E. Souza, B. Goates. 2017. Perspective using molecular marker-assisted breeding for dwarf and common bunt resistance in winter wheat. Oral presentation and abstract in the proceedings of 2017 International Wheat Genetics Symposium, Tulln, Austria, April 23 to 28.
- Chen, J.**, R. Wang, J. Zhang, D. Hole, M. J. Guttieri, E. Souza, B. Goates. 2016. Validation and marker assisted selection for a novel QTL *Q.DB.ui-7DS* associated with dwarf bunt resistance of winter wheat.

- Oral presentation and abstract in the proceedings of ASA, CSSA and SSSA Int'l Annual meeting, Phoenix, AZ, Nov. 15-18.
- Tyler, G., **J. Chen**, R. Wang, J.M. Bonman. 2016. Association mapping of yield components in 2-Row spring barley from the USDA National Small Grains Collection. Oral presentation and abstract in the proceedings of ASA, CSSA and SSSA Int'l Annual meeting, Phoenix, AZ, Nov. 15-18.
- Liu., Y., R. Wang, **J. Chen**, D.R. See. 2016. Genome-wide linkage mapping of QTL for yield component in UI Platinum/SY Capstone double haploid population. Oral presentation and abstract in the proceedings of ASA, CSSA and SSSA Int'l Annual meeting, Phoenix, AZ, Nov. 15-18.
- Assanga, S.O., S. Dhakal, C-T., Tan, J.C. Rudd, G. Zhang, A. Ibrahim, Q. Xue, R. Devkota, S. Haley, **J. Chen**, M. P. Fuentealba, S. Baker, J. Baker. S.Y. Liu. 2015. Identification of QTL for yield and yield components and SNP development. ASA-CSSA-SSSA International Annual Meeting. Nov. 15-18, Minneapolis, MN USA.
- Chen, J.**, Y. Wang, J. Zhang, B. Bowman, S. Nayaky, J. Wheeler, W. Zhao, K. O'Brien, H. Bockelman, and J. Bonman. 2012. Evaluation and utilization of collection materials to solve Idaho wheat production concerns. Oral presentation and abstract in the proceedings of ASA, CSSA and SSSA Int'l Annual meeting, Cincinnati, OH, Oct.21-24.
- Bonman, J.M., H. E. Bockelman, **J. Chen**, B. Bowman, G. Brown-Guidera. 2012. Adding value to the National Small Grains Collection with molecular data. Oral presentation and abstract in the proceedings of 2012 ASA, CSSA and SSSA Int'l Annual meeting, Cincinnati, OH, Oct.21-24.
- Chen, J.**, J. Zhang, C. Chu, P. Li, W. Zhao, J. Clayton, J. Wheeler, E. Souza, and R. Zemetra. 2011. QTLs associated with grain yield and carbon isotope discrimination were mapped in the flanking regions of QTLs associated with plant height and days to heading. Oral presentation and abstract in the proceedings of 2011 ASA, CSSA and SSSA Int'l Annual meeting, San Antonio, TX, Oct.16-19.
- Liu, Sh. C. Griffey, M. Hall, A. McKendry, **J. Chen**, G. Brown-Guedira, D. Van Sanford, D. Schmale. 2011. QTL for Scab Resistance In Soft Red Winter Wheat Cultivars. Oral presentation and abstract in the proceedings of 2011 ASA, CSSA and SSSA Int'l Annual meeting, San Antonio, TX, Oct.16-19.
- Chen, J.**, Ch. Chu, E. Souza, X. Chen, M. Guttieri, S. Xu, D. Hole, and R. Zemetra. 2010. Genome-Wide Identification of QTLs Conferring High-Temperature Adult-Plant (HTAP) Resistance to Stripe Rust (*Puccinia striiformis* f. sp. tritici) In Wheat. Oral presentation and abstract in the proceedings of 2010 ASA, CSSA and SSSA Int'l Annual meeting, Long Beach, CA, Oct. 31 to Nov.3.
- Chen, J.**, Ch. Chu, E. Souza, X. Chen, M. Guttieri, S. Xu, D. Hole, and R. Zemetra. 2010. Genome-Wide Identification of QTLs Conferring High-Temperature Adult-Plant (HTAP) Resistance to Stripe Rust (*Puccinia striiformis* f. sp. tritici) In Wheat. Oral presentation and abstract in the proceedings of 12th ITMI meeting, Beijing, China, Sep.1 – 3.
- Chen, J.**, J. Zhang, P. Li, W. Zhao, J. Wheeler, and R. Zemetra. 2010. Physiology Breeding for Drought Tolerance at University of Idaho Wheat Breeding and Genetics Program. Oral presentation and abstract in the proceedings of 2010 ASA, CSSA and SSSA Int'l Annual meeting, Long Beach, CA, Oct. 31 to Nov.3. 2010
- Liu, Sh., C. Griffey, M. Hall, W. Brooks, A. McKendry, **J. Chen**, G. Brown-Guedira, and D. Van Sanford. 2010. Linkage and Association of Genes for Morphological Traits and Scab Resistance In US Soft Red Winter Wheat Cultivars. Oral presentation and abstract in the proceedings of 2010 ASA, CSSA and SSSA Int'l Annual meeting, Long Beach, CA, Oct. 31 to Nov.3.
- Chen, J.**, K.M. O'Brien, M.J. Guttieri, K. Peterson, E.J. Souza, Ch. Chu, S. Xu, D. See, R. Zemetra, and D. Hole. 2009. Whole genome mapping of the Quantitative Trait Loci (QTL) Associated with End-use Quality of Bread Wheat Grown under Drought Condition. Oral presentation and abstract in the proceedings of 2009 International Plant and Animal Genome XVI Conference, Town & Country Convention Center, San Diego, California Jan. 10-14, 2009.
- Liu, Sh., C.A. Griffey, A.L. McKendry, **J. Chen**, M. Hall, V. Sanford, and G. Brown-Guedira. 2009. Markers for Scab Resistance in Native Sources and Its Application in Marker-Assisted Breeding. Oral presentation and abstract in the proceedings of 2009 International Plant and Animal Genome XVI Conference, Town & Country Convention Center, San Diego, California, Jan. 10-14, 2009.
- Zemetra, R.S., J.L. Hansen, T. Koehler, **J. Chen**, O. Riera-Lizarazu, J. Leonard, M. Quincke, J. Peterson, C. Mundt, G.K. Campbell, and X. Chen. 2008. Creation of a Multiple-Use Recombinant Inbred Line Population for the Development of Molecular Markers in Soft White Winter Wheat. Manuscript in the Proceeding of the 10<sup>th</sup> International Wheat Genetics Symposium, Australia, Aug. 24-29, 2008.
- Chen, J.**, C. A. Griffey, M.A. Saghai Maroof, J. Fanelli, and J. Paling. 2006. Validation and Genetic Characterization of Three Major QTL for Fusarium Head Blight Resistance in Wheat. Oral presentation



- and abstract in the proceeding of 2006 ASA-CSSA-SSSA International Annual Meeting, Indianapolis, IN.
- Chen, J.**, C. A. Griffey, M.A. Saghai Maroof, E. Stromberg, R. M. Biyashev, W. Zhao, M. Chappell, and Y. Dong. 2004. Update on QTL Mapping of *Fusarium* Head Blight Resistance in Wheat. Oral presentation and abstract in the proceedings of 2<sup>nd</sup> International Symposium on Fusarium Head Blight Incorporating the 8<sup>th</sup> European Fusarium Seminar. Dec. 11-15, 2004. Wyndham Orlando Resort, Orlando, FL, USA.
- Chen, J.**, C.A. Griffey, J. Wilson, and M.A. Saghai Maroof. 2003. QTL Mapping and Marker Assisted Selection of Fusarium Head Blight Resistance in a Chinese Wheat Line W14. P. 342-345. Manuscript in the Proceedings of Tenth International Wheat Genetics Symposium. Sep.1-6, 2003. *Paestum*, Italy. Edited by Norberto E. Pogna, Maurizio Romano, Edgar A. Pogna, and Giovanni Galterio. Printed in Rome by S.I.M.I., Via N. Nisco 3/A – 00179 Roma, Italy.
- Chen, J.**, C.A. Griffey, T. Pridgen, M. Chappell. 2000. Assessment and Rational Utilization of Scab Resistance Sources in the Virginia Wheat Breeding Program. P.10-17. Manuscript in the Proceedings of International Wheat Scab Symposium. May 2000. Suzhou and Nanjing, P.R. China.
- Chen, J.**, C.A. Griffey, M.A. Saghai-Maroof, W. Zhao, R.M. Biyashev, W. Xie. 2001. Resistance to *Fusarium* Head Blight and Associated Molecular Markers. Oral presentation and abstract in the proceedings of 2001 ASA meetings. Charlotte, NC.

#### Posters and published abstracts (17 since 2014, 41 since 2007)

- Bevan, B., J. Wheeler, N. Klassen, W. Zhao, R. Chowdhury, R. Wang, and **J. Chen\***. 2021. Comparative QTL mapping of falling number, pre-harvest sprouting, and late maturity alpha amylase in UI Platinum by SY Capstone derived spring wheat population. 2020 ASA, CSSA, and SSSA Int'l annual meeting, poster presentation, virtual participation.
- Chen, J\***, R. Wang, K. Isham, J. Wheeler, W. Zhao, N. Klassen. 2019. Prospects and challenges to improve wheat grain yield components using molecular markers. Poster presentation and abstract in the proceedings of the first International Wheat Congress and the 14<sup>th</sup> International Wheat Genetics Symposium, Saskatoon, Canada, July 21-26.
- Isham, K., R. Wang, W. Zhao, J. Wheeler, N. Klassen, and **J. Chen\***. 2019. Genome-wide QTL mapping of three yield components in a doubled haploid population derived from two adapted spring wheat cultivars 'UI Platinum' and 'LCS Star'. 2018 WheatCAP annual meeting, San Diego, Jan. 13, 2019.
- Wang, R., K. Isham, M. Su, J. Wheeler, D. Fu, **J. Chen\***. 2019. Fine Mapping of Two QTL for Total Spikelet Number and Productive Tiller Number. 2018 WheatCAP annual meeting, San Diego, Jan. 13, 2019.
- Wang, R., Y. Liu, K. Isham, W. Zhao, J. Wheeler, N. Klassen, Y. Hu, J. M. Bonman, and **J. Chen\***. 2019. QTL identification and KASP markers development for productive tiller and fertile spikelet number in two high yielding hard white spring wheat cultivars. Poster presentation and abstract in the proceedings of 2019 International Plant and Animal Genome XVI Conference, Town & Country Convention Center, San Diego, California Jan.12-16, 2019.
- Wang, R., T. Gordon, D. Hole, W. Zhao, K. Isham, J. M. Bonman, B. Goates, and **J. Chen\***. 2019. QTL Identification and KASP Marker Development for Dwarf Bunt Resistance in Winter Wheat. Poster presentation and abstract in the proceedings of 2019 International Plant and Animal Genome XVI Conference, Town & Country Convention Center, San Diego, California Jan.12-16, 2019.
- Chen\*, J.**, R. Wang, W. Zhao, J. Wheeler, and N. Klassen. 2017. Update on Fusarium Head Blight Research and Breeding in Spring Wheat at University of Idaho Wheat Breeding and Genetics Program. Poster at Annual FHB Forum, Milwaukee, WI, Dec. 3-5, 2017.
- Wang, R., **J. Chen\***, J. Zhang, W. Zhao, J. Wheeler, N. Klassen, J.A. Anderson, D.R. See and Y. Dong. 2016. Genome-Wide Association Mapping of Resistance QTL to Fusarium Head Blight in Spring Wheat Lines Grown in Pacific Northwest and CIMMYT. Poster presentation and abstract in the proceedings of ASA, CSSA and SSSA Int'l Annual meeting, Phoenix, AZ, Nov. 15-18
- Liang, X., D. Strawn, **J. Chen**, and J. Marshall. 2016. Cadmium Accumulation in Spring Wheat Grains Is Influenced By Cadmium Bioavailability and Root Length. Poster presentation and abstract in the proceedings of ASA, CSSA and SSSA Int'l Annual meeting, Phoenix, AZ, Nov. 15-18.
- Liang, X., Y. Liu, B. Bowman, and **J. Chen**. 2015. Physiological Responses and Yield Component Changes of Winter Wheat Genotypes under Three Water Regimes. Poster presentation and abstract in the proceedings of ASA, CSSA and SSSA Int'l Annual meeting, St. Paul, Minnesota, Nov. 15-18.
- Chen, J.\***, J. Zhang, W. Zhao, J. Wheeler, N. Klassen, and J. Anderson. 2015. Assessment of resistance to *Fusarium* head blight in spring wheat lines grown in the Pacific Northwest and CIMMYT. Poster at Annual FHB Forum, St. Louis, MS, Dec. 7 -9, 2015.

- Bowman, B., **J. Chen\***, J. Zhang, J. Wheeler, Y. Wang, W. Zhao, S. Nayak, N. Heslot, H. Bockelman, and J.M. Bonman. 2015. Evaluating Grain Yield in Spring Wheat with Canopy Spectral Reflectance. Poster presentation at 2015 International Wheat Conference, Sydney, Australia, Sep. 21 to 28, 2015.
- Chen, J.\***, X. Chen, J. Zhang, D. See, Sh. Chao and J.M. Bonman. 2015. Identifying quantitative trait loci for high-temperature adult-plant resistance to stripe rust of wheat (*Triticum aestivum* L.). Poster presentation at 2015 Borlaug Global Rust Initiative, Sydney, Australia, Sep. 17 to 20, 2015.
- \*Bowman, B., J. Zhang, J. M. Bonman, H. Bockelman, J. Wheeler, and **J. Chen**. 2015. Association Analysis of Yield in a Diverse Panel of Spring Wheat (*T. aestivum* L.) Genotypes. Poster presentation at PAG meeting, San Diego, California, Jan. 10-11, 2015.
- Assanga, S., Sh. Liu, J. C. Rudd, G. Zhang, A. Ibrahim, Q. Xue, R. Devkota, Sh. Chao, G. Bai, S. Haley, **J. Chen**, CT. Tan, M. Fuentealba. 2014. Identifying SNP Markers Linked to QTL for Drought Tolerance and *Wsm2* in Hard Red Winter Wheat and Introgression of Drought Tolerance QTL into *Ug99* Resistant Spring Wheat Cultivars for African Countries. Poster presentation at 2014 ASA, CSSA and SSSA Int'l Annual meeting, Long Beach, CA, Nov.1-5.
- \*Nayak, S., Y. Wang, W. Zhao, B. Bowman, J. Wheeler, and **J. Chen**. 2014. QTL Conferring Type II Resistance to Fusarium Head Blight in Adapted Wheat Cultivar 'UI Stone' and Its Effect on Yield. Poster presentation at Annual FHB Forum, St. Louis, MS, Dec. 7 -9, 2014
- \*Bowman, B., J. Zhang, J. M. Bonman<sup>2</sup>, H. Bockelman<sup>2</sup>, J. Wheeler<sup>1</sup>, and **J. Chen**. 2014. Analysis of Yield and Drought Tolerance in a Diverse Panel of Spring Wheat (*T. aestivum* L.) Genotypes. Poster presentation at Annual TCAP meeting, San Diego, California, Jan. 11 - 12, 2014.
- Wang, Y., **J. Chen**, J. Zhang, B. Bowman, J. Wheeler, W. Zhao, S. Nayak, H. Bockelman, and J. Bonman. 2014. Evaluation of Grain Yield and Nitrogen Use efficiency of Spring Barley Accessions in Water Stress and Nitrogen Deficient Environments. Poster presentation at Annual TCAP meeting, San Diego, California, Jan. 11 - 12, 2014.

#### Patents and Cultivar Releases:

##### Since 2007

- UI Cataldo Soft White Spring Wheat, 2008
- UI Winchester Hard Red Spring Wheat, 2009
- VA04W433 and VA04W-474 Soft Red Winter Wheat Germplasm, 2009
- UICF-Grace Hard White ClearField Winter Wheat, 2009, PVP filed in 2010 (20100086)
- UI Silver Hard White Winter Wheat, 2009, PVP filed in 2013 (201400011)
- UI SRG Hard Red Common Winter Wheat, 2010
- UI Stone Soft White Common Spring Wheat, 2012, PVP filed in 2013 (201300342)
- UI Platinum Hard White Spring Wheat, 2014, PVP filed in 2014 (201400419)
- UI Sparrow Soft White Winter Wheat, 2016, PVP filed in 2017 (201700189)
- UI Bronze Jade, 2019, PVP pending
- UI Cookie, 2020, PVP filed in 2020 (202000298)

#### Grants and Contracts Awarded: Sole spending authority (SA) \$2,938,116 since 2014

##### Competitive: SA \$859,832 since 2014

- J. Dubcovsky, J. Chen et al. "Validation, characterization and deployment of QTL for grain yield components in wheat" sponsored by USDA-NIFA-IWYP, 10M. SA \$432,685 (01/01/2017 – 12/31/2021).
- J. Chen. "Developing FHB resistant wheat cultivars for Idaho and the Western US" sponsored by USWBSI. SA \$187,090 (05/01/14-06/30/20). SA \$113,124 (07/01/20 – 06/30/21).
- J. Chen, J. Marshall, and D. Fu. "Finding solutions to low falling number wheat in Idaho" sponsored by USDA-ARS NACA, \$150,000. SA \$50,000 (07/01/18 – 06/30/2023).
- D. Strawn, J. Chen, X. Liang. Integration of variety selection and soil properties to reduce cadmium in wheat grain. USDA-NIFA, \$200,000. SA \$0 (07/01/19 – 06/30/21).
- J. Dubcovsky, J. Chen et al. "Improving barley and wheat germplasm for changing environments" sponsored by USDA-NIFA, Federal, 25M. SA \$510,495 (02/01/2011 – 12/31/2016).
- J. Chen. "Phenotyping of NSGC" sponsored by USDA-ARS ATCA, \$246,625. SA \$246,625 (02/01/2011 – 12/31/2015).
- J. Chen, R. Zemetra, and D. Hole. "Developing the Next Generation of Neoclassical Plant Breeders" sponsored by USDA-NIFA, Federal, \$249,000. SA \$80,000 (01/15/11 – 01/14/16).

**Idaho Wheat Commission: SA \$1,669,454 since 2014**

- J. Chen, R. Wang, and S. Hunter. “Breeding durable, high level, dwarf bunt resistance using molecular-marker assisted selection”, \$146,655. SA \$126,249 (07/01/18 – 06/30/21)
- J. Chen. “Developing wheat cultivars for Idaho” sponsored by Idaho Wheat Commission, \$1,043,094. SA \$1,043,094 (07/01/14 – 06/30/21).
- J. Chen. “Characterizing the cause effect for low falling number hard white spring wheat” sponsored by Idaho Wheat Commission, \$191,218. SA \$191,218 (07/01/17 – 06/30/20).
- J. Chen. “Digging the genetic factors underlying late maturity  $\alpha$ -amylase (LMA) in wheat” sponsored by Idaho Wheat Commission, \$51,503. SA \$44,023 (07/01/14 – 06/30/16).
- D. Strawn, X. Liang, J. Chen, P. McDaniel, and J. Marshall. “Agronomic and genetic factors affecting cadmium uptake by wheat from Idaho soils” sponsored by Idaho Wheat Commission. \$264,105. SA \$103,657 (07/01/14 – 06/30/20).
- J. Chen. “GPS system” and “Real-time PCR” sponsored by Idaho Wheat Commission, \$67,500. SA \$67,500 (07/01/17 – 06/30/18).
- J. Chen. “Mini tractor and rototiller” sponsored by Idaho Wheat Commission, \$10,000. SA \$10,000 (07/01/16 – 06/30/17).
- J. Chen. “Aberdeen Plot Combine Upgrade” sponsored by Idaho Wheat Commission, \$100,000. SA \$30,000 (07/01/15 – 06/30/16).

**Industry: SA \$136,000 since 2014**

- J. Chen, D. Strawn, P. McDaniel, and J. Marshall. “Field-based study of factors affecting cadmium uptake by wheat from Idaho soils” sponsored by Ardent Flour Mill and Nestle. \$150,000. SA \$71,000 (07/01/15 – 06/30/20).
- J. Chen. “Evaluation of drought tolerance in spring wheat”, sponsored by KeyGene. SA \$28,000 (04/01 – 12/31/17).
- J. Chen. “Development of Imazamox resistant winter cultivars” sponsored by BASF. SA \$37,000 (1/01/14 – 12/31/16).

**Honors and Awards:**

Science Award, Idaho Grain Producer Association, 2018  
 UI President’s Mid-Career Award, University of Idaho, 2018  
 USDA Certificate of Appreciation, outstanding service as a member of the Plant Variety Protection Board from 2015-2017, 2017  
 First Place Outstanding Papers, CSSA Plant Genetic Resource, 2016  
 USDA-NIFA panelist, Biology of Agricultural Plants, 2011 and 2015  
 Aberdeen Wheat Breeding Professorship, Idaho Wheat Commission Endowment, 2013-current  
 Award of Excellence, Western Association of Agricultural Experiment Station Directors, 2012  
 Dr. Richard C. Heimsch Outstanding Research Award, Gamma Sigma Delta Awards Committee and College of Agricultural and Life Sciences, 2011  
 Third Prize of National Invention, Chinese Academy of Agricultural Sciences, 1998  
 First Progressive Prize of Sciences & Tech., Science & Technology Committee of Shaanxi, 1992

**OUTREACH AND EXTENSION****Video Productions:**

- Chen, J., J. Thomas, *Spring Wheat and New Experimental Lines*, University of Idaho College of Agriculture and Life Sciences YouTube Channel. July 15, 2020.
- Chen, J., J. Thomas, *Winter Wheat in Irrigated Trials*, University of Idaho College of Agriculture and Life Sciences YouTube Channel. July 15, 2020.
- Chen, J., J. Thomas, *Winter Wheat in Dryland Trials*, University of Idaho College of Agriculture and Life Sciences YouTube Channel. July 15, 2020.
- Chen, J., J. Thomas, *Spring Wheat Cultivars and New Experimental Lines at Aberdeen Research and Extension Center*, University of Idaho College of Agriculture and Life Sciences YouTube Channel. July 15, 2020.

**Scholarly Presentations**

- Chen, J. 2019. Improving low falling number in spring wheat. Invited talk at Falling number workshop, Portland, OR, Jan. 29-30, 2019.
- Chen, J. QTL mapping of grain Cadmium content. Invited talk by Ardent Flour Mills. Boise, ID. June 6, 2019.
- Chen, J. Sourcing wheat for Kellogg products. East Lansing, MI. July 28, 2019.
- Chen, J. 2019. Prospects and challenges to improve wheat grain yield components using molecular markers. Invited seminar to the students by the Institute of Plant Genetics at UGA. Athens, GA, Oct. 30 – Nov. 1.
- Chen, J. Developing Wheat Cultivars for Idaho and World Markets, IWC research review, Boise, ID, Feb. 2008 – 2019.
- Chen, J. Variety development and QTL mapping of low falling number wheat. IWC research review, Boise, ID, Feb. 2016 – 2019.
- Chen, J. Developing multiple, high-level dwarf bunt resistance using molecular marker assisted selection. IWC research review, Boise, ID, Feb. 2018 - 2019.
- Chen, J. Breeding for ultra-low Cadmium and desirable SRC wheat. Invited talk by Ardent Flour Mills. Denver, Co. July 23, 2018.
- Chen, J. Genetic responses to LMA and PHS. Invited talk to IWC-UI Falling number symposium. Spokane, Nov. 27, 2017.
- Chen, J. Breeding for ultra-low Cadmium wheat. Invited talk by Ardent Flour Mills. Boise, ID, May 16, 2017
- Chen, J. Characterization of the genetics and genomics of LMA. Invited talk to Tri-state Falling number summit. Spokane, ID. Feb. 15, 2017
- Chen, J. Variety update. Invited oral talk to Washington Crop Improvement Association, varied locations, Nov. 2013 – 2018.
- Chen, J. Breeding for ultra-low Cadmium wheat. Invited talk by Ardent Flour Mills. Boise, ID, Apr. 5, 2016
- Chen, J. Breeding for ultra-low Cadmium wheat. Invited talk by Ardent Flour Mills. Boise, ID, Apr. 2, 2015
- Chen, J. Variety development pipeline. Invited oral talk to Idaho Wheat Commissioners, Boise, ID, Oct. 2015
- Chen, J. Evaluation of WUE and NUE in Materials from NSGC. TCAP annual meeting. San Diego, Jan. 2011 – 2015
- Chen, J. Digging the genetic factors underlying late maturity  $\alpha$ -amylase (LMA) in wheat, IWC research Review, Boise, ID, 2012- 2015
- Chen, J. University of Idaho Hard White Breeding Program Update. Invited talk to Japanese trade team. Boise, Sep. 2015.
- Chen, J. Development of low cadmium content wheat. Invited talk to Ardent Flour Mill representatives, Boise, ID, April, 2015.
- Chen, J. How much moisture is too much? Invited seminar to grain elevator managers, Wheat Quality Workshop, Aberdeen, ID. March 18, 2015.
- Chen, J. Idaho Wheat Overview and University of Idaho Hard White Breeding Program Update. Invited talk to China Trade Team, Idaho Falls, ID. July 21, 2014.
- Chen, J. Idaho Hard White Update. Invited talk to USW and NAWG, Washington D. C. DC, Jan.28-Feb.1, 2014.
- Chen, J. Integrated wheat breeding and genetics program at University of Idaho. Invited talk at 2013 Yangling International Agri-science Forum. Yangling, Shaanxi, P.R. China. Nov. 7 - 9, 2013.
- Chen, J. Wheat variety development and production in Idaho. Invited talks by the Center of Agriculture and Technology Development. Boji, Shaanxi, P.R.China. Oct. 28- Nov.6, 2013.

**SERVICE:****Major Committee Assignments:****National:**

ASA Tengtou Agricultural Science Award Committee (2018 – 2019)  
USDA's Plant Variety Protection Board, 2015 – 2016  
National Wheat Improvement Committee, member, 2011 – 2013, Chair, 2014 – 2016  
National Crop Improvement Committee, member, 2012 - 2015

**Regional:**

Local Organizing Committee for Western Wheat Workers meeting, 2011, 2014, 2018  
Western Wheat Workers, member, 2007 – 2013; chair, 2014 – 2016  
WERA-1009 committee, member, 2008 – 2016, co-chair 2009, chair 2010

**State:**

Foundation Seed Stock Committee, member, 2007 – present  
Idaho Grain Producer Association, member, 2007 – present  
Search Committee for the Plant Geneticist position for USDA-ARS, 2013

**Professional and Scholarly Organizations****Memberships in Professional Society**

International Wheat Initiative Expert Working Group (2018 – current)  
Crop Science Society of America (2005 – current)  
Agronomy Science of America (2007 – current)  
Gamma Sigma Delta, the Honor Society of Agriculture (2011 – current)

**Review Activities**

Reviewer of manuscript for PMC genetics (2010), TAG (2011, 2012, 2014, 2015, 2017, 2018, 2019, 2020), Molecular Breeding (2011, 2012, 2018), Journal of Plant Registration (2009 – present), Crop Science (2009 – present), cereal chemistry (2011 - present), Euphytica (2012, 2014, 2017, 2018), PLO ONE (2017, 2018), Plant Disease (2020)  
Panelist, USDA-NIFA, Biology of Agricultural Plants Panel (2015)  
Panelist, USDA-NIFA, Biology of Agricultural Plants Panel (2011)  
Reviewer for USDA-ARS 5-year grants (2017)  
Reviewer of Hatch Hatch proposal for UI (2009, 2010, 2014, 2015, 2017)  
Reviewer of proposal for NSF-BREAD (2010)  
Reviewer of Hatch Hatch proposal for WSU (2011)