

## CURRICULUM VITAE

### NAME

Jahn, Courtney Elaine

### ADDRESS

Bioagricultural Sciences and Pest Management  
College of Agricultural Sciences

### PHONE

(970) 491-6741

### EDUCATION

2008 Ph D, University of Wisconsin

2003 MS, University of Wisconsin

2000 BS, University of Wisconsin

### OTHER POSITIONS

2011 - Present Assistant Professor, BSPM, Colorado State University.

2008 - 2011 Post Doc, Colorado State University.

### PUBLISHED WORKS

#### **Refereed Journal Articles**

Tanger, P., Vega-Sánchez, M. E., Fleming, M. B., Tran, K., Singh, S., Abrahamson, J. B., Jahn, C. E., Santoro, N., Naredo, E. B., Baraoidan, M. (2015). Cell Wall Composition and Bioenergy Potential of Rice Straw Tissues Are Influenced by Environment, Tissue Type, and Genotype. *BioEnergy Research*, 1-18.

Tanger, P., Vega-Sánchez, M. E., Fleming, M. B., Tran, K., Singh, S., Abrahamson, J. B., Jahn, C. E., Santoro, N., Naredo, E. B., Baraoidan, M., Danku, J. M.C., Salt, D. E., McNally, K. L., Simmons, B. A., Ronald, P. C., Leung, H., Bush, D. R., McKay, J. K., Leach, J. E. (2015). Cell Wall Composition and Bioenergy Potential of Rice Straw Tissues Are Influenced by Environment, Tissue Type, and Genotype. *BioEnergy Research*, 1-18.

Collins, C., Maruthi, M., Jahn, C. E. (2015). CYCD3 D-type cyclins regulate cambial cell proliferation and secondary growth in Arabidopsis. *Journal of Experimental Botany*, erv218.

Collins, C., Gowda, M., Jahn, C. E. Arabidopsis CYCD3 D-type cyclins regulate cambial cell proliferation during vascular development and secondary growth. *Journal of Experimental Botany*.

Turner, M., Kirkwood, J., Collins, C., Heuberger, A., Broeckling, C., Prenni, J., Jahn, C. E. Morphological, Physiological and Metabolic Diversity in Sorghum and Association to Biomass Composition and Yield. *Journal of Experimental Botany*.

Yasin, M., Al Mehdawi, A., Jahn, C. E., Anwar, A., Turner, M., Faisal, M., Pilon-Smits, E. (2015). Seleniferous soils as a source for production of selenium-enriched foods and potential of bacteria to enhance plant selenium uptake. *Plant and Soil*, 386(1-2), 385-394.

- Tanger, P., Vega-Sánchez, M., Fleming, M., Tran, K., Singh, S., Abrahamson, J., Jahn, C. E., Santoro, N., Naredo, E., Baraoidan, M., Danku, J., Salt, D., McNally, K., Leung, H., Ronald, P., Bush, D., McKay, J. K., Leach, J. E. (2015). Cell wall composition of rice straw varies among environments, varieties, and tissue types: impacts on bioenergy potential. *BioEnergy Research*.
- Tanger, P., Field, J. L., Jahn, C. E., DeFoort, M., Leach, J. E. (2013). Biomass for thermochemical conversion: targets and challenges. *Frontiers in Plant Science*, 4, 218. doi: 10.3389/fpls.2013.00218
- (2011). Genetic variation in biomass traits among 20 diverse rice varieties. *Plant Physiol*, 155, 157-168.
- (2011). The *Dickeya dadantii* biofilm matrix consists of cellulose nanofibers and is an emergent property dependent upon the type III secretion system and the cellulose synthesis operon. *Microbiol*, 157, 2733-44.
- (2008). Evaluation of isolation methods and RNA integrity for bacterial RNA quantitation. *J Microbiol Methods*, 75, 318-324.
- (2008). Niche specificity and the variable fraction of the *Pectobacterium* pan genome. *Mol Plant Microbe Interact*, 12, 1549-1560.
- (2008). The flagellar sigma factor FliA is required for *Dickeya dadantii* virulence. *Mol Plant Microbe Interact*, 21, 1431-1442.
- (2007). The role of cellulose and O-antigen capsule in the colonization of plants by *Salmonella enterica*. *Mol Plant Microbe Interact*, 20, 1083-1091.
- (2005). Cultivation of mesophilic soil crenarchaeotes in enrichment cultures from plant roots. *Applied and Environmental Microbiology*, 71, 4751-4760.
- (2005). The *Erwinia chrysanthemi* type III secretion system is required for multicellular behavior. *Journal of Bacteriology*, 187, 639-648.

### Non-Refereed Journal Articles

- Manmathan, H. K., Jahn, C. E., Haley, S. D. TILLING-by-Sequencing – an efficient method to screen induced mutants in wheat. *Plant Methods*.
- Collins, C., Gowda, M., Jahn, C. E. Arabidopsis CYCD3 D-type cyclins regulate cambial cell proliferation during vascular development and secondary growth. *Plant Physiology*.
- Johnson, J. J., Hain, J. P., Sauer, S. M., Larson, K., Jahn, C. E., Turner, M., Bartolo, M. E., Davidson, J. W., Brick, M. A., Schwartz, H. F., Vigil, M., Meyer, R., Jewell, K. S. (2014). 2013 Colorado Spring Crop Variety Performance Trial Results. *High Plains Journal*.
- Jahn, C. E., McKay, J. K., Mauleon, R., Stephens, J., McNally, K. L., Bush, D. R., Leung, H., Leach, J. E. (2011). Genetic variation in biomass traits among 20 diverse rice varieties. *Plant physiology*, 155(1), 157-68.
- (2012). *Biomass Yield, Bioenergy Trait Characteristics, and Cell-Wall Composition of Dryland Sweet Pearl Millet Grown at Multiple Locations in Colorado*. ASA-CSSA-SSSA International Annual Meeting Cincinnati, OH October 21-24.
- (2012). *Comprehensive approach to improve biofuels feedstocks using rice as a model system*. Plant and Animal

Genome San Diego, CA January 14-18.

- (2012). *Comprehensive approach to improve biofuels feedstocks using rice as a model system*. DOE Plant Feedstocks PI meeting, San Diego, CA January 13.
- (2012). *Weight loss at Night? Morphological and Night-time Physiological Factors that Negatively Impact Biomass Accumulation in Rice*. ASA-CSSA-SSSA International Annual Meeting Cincinnati, OH October 21-24.
- (2011). *Biomass accumulation in wide crosses between wild and domesticated rice*. USDA-DOE Plant Feedstock Genomics for Bioenergy Awards Meeting Arlington, VA April 10-13.
- (2011). *Fine tuning photosynthesis and cell-wall composition for improved biofuels feedstocks*. Sustainable Bioenergy and Bioproducts Project Directors Meeting Arlington, VA October, 24-26.
- (2011). *Genome analyses to understand durable disease resistance in rice*. Genome-Enabled Integration of Research in Plant Pathogen Systems T Wolpert, T Shiraishi, J Glazebrook, (eds), APS Press, Minneapolis, MN.
- (2011). *Identification of candidate genes using rice mutants for biomass engineering in switchgrass*. USDA-DOE Plant Feedstock Genomics for Bioenergy Awards Meeting Arlington, VA April 10-13.
- (2011). *Night-time stomatal conductance and transpiration negatively impact biomass accumulation*. USDA-DOE Plant Feedstock Genomics for Bioenergy Awards Meeting Arlington, VA April 10-13.
- (2011). *Targets to improve quantity and quality of lignocellulosic feedstocks*. Sustainable Bioenergy Development Center Seminar Series Fort Collins, CO November 29.
- (2010). *Screening a diverse set of rice varieties for variation in biomass and resistance to plant disease*. 10th US-Japan Genome-Enabled Integration of Research in Plant Pathogen Systems Corvallis, OR January 24-28.
- (2009). *Food vs. Fuel*. Crops for Health Open House Fort Collins, CO June 26.
- (2009). *Genetic variation in biomass traits among 20 diverse rice varieties*. Colorado Center for Bio refining and Biofuels Fall Semi Annual Meeting Fort Collins, CO September 21.
- (2009). *Genetic variation in biomass traits among 20 diverse rice varieties*. 6th International Rice Genetics Symposium, Manila, Philippines. November 16-19.
- (2009). *Identification of genes that control biomass production using rice as a model system*. Colorado State Clean Energy Expo Fort Collins, CO May 5.
- (2008). *A horizontally acquired cellulose synthase operon in Dickeya dadantii contributes to biofilm formation, attachment to plants*. Annual meeting of the American Phytopathological Society Minneapolis, MN July 26-30th.
- (2008). *Using the Oryza SNP set to characterize genes important to biofuel production*. 6th International Symposium of Rice Functional Genomics (ISRFG) JeJu, Korea November 10-12.
- (2007). *The flagellar sigma factor FliA is required for full virulence and biofilm formation of Dickeya dadantii*. Joint Meeting of the American Phytopathological Society and the Society of Nematologists San Diego, CA July 28-August 1.

- (2006). *Dickeya dadantii* cellulose production differs from related enterobacteria. 11th International Conference on Plant Pathogenic Bacteria Edinburgh, Scotland July 10-14.
- (2005). *Erwinia chrysanthemi* cellulose production differs from related enterobacteria. 12th Annual Midwest Microbial Pathogenesis Conference Minneapolis, MN October 14-16.
- (2005). *Erwinia chrysanthemi* cellulose synthesis. Joint Meeting of the Three Divisions of the International Union of Microbiological Societies San Francisco, CA July 23-28.
- (2005). *Purple-bordered leaf spot*. University of Wisconsin-Extension XHT1149.
- (2004). *Cellulose synthesis in Erwinia chrysanthemi*. 11th Annual Midwest Microbial Pathogenesis Conference East Lansing, MI October 1-3.
- (2004). *Cellulose synthesis in Erwinia chrysanthemi*. American Society for Microbiology. North Central Branch 64th Annual Meeting Madison, WI November 12-13.
- (2003). *Cultivation of mesophilic soil crenarchaeota in enrichments from tomato roots*. American Society for Microbiology 103rd General Meeting, Washington, DC May 18-22.

### **AES Report/Bulletin**

- Jahn, C. E. (2014). The Wheat Stem Sawfly--New Pest of Colorado Wheat from an Old Colorado Insect. *2014 Colorado Winter Wheat Variety Performance Trials* (TR14-8 ed.). CSU, CAS, AES, Dept. of Soil & Crop Sci., Extension, PRC.
- Johnson, J. J., Haley, S. D., Bartolo, M. E., Larson, K., Vigil, M., Bosley, B., Meyer, R., Trujillo, W., Sauer, S. M., Hain, J., Davidson, J. W., Randolph, T. L., Peairs, F. B., Jahn, C. E., Novak, R. A., Davis, J. G., Mostek, G. (2014). *Making better decisions: 2014 Colorado wheat variety performance trials*. (TR14-8 ed., pp. 51). Fort Collins, CO: Colorado Agricultural Experiment Station.
- Larson, K., Johnson, J. J., Jahn, C. E., Sauer, S. M., Pettinger, B. T. (2014). *2013 Sorghum Hybrid Performance Trials in Eastern Colorado* (TR14-1 ed.). CSU, CAS, AES, Dept. of Soil & Crop Sci., Extension, PRC. [webdoc.agsci.colostate.edu/aes/PRC/pubs/tr14-1.pdf](http://webdoc.agsci.colostate.edu/aes/PRC/pubs/tr14-1.pdf)
- Larson, K., Pettinger, B. T., Harn, D., Johnson, J. J., Haley, S. D., Trujillo, W., Jahn, C. E., Sauer, S. M. (2014). *Plainsman Research Center 2013 Research Reports* (TR14-2 ed.). Colorado Agricultural Experiment Station, CSU. [webdoc.agsci.colostate.edu/aes/PRC/pubs/tr14-2.pdf](http://webdoc.agsci.colostate.edu/aes/PRC/pubs/tr14-2.pdf)
- Larson, K., Johnson, J. J., Jahn, C. E., Pettinger, B. T. (2013). *2012 Sorghum Hybrid Performance Trials in Eastern Colorado* (TR13-1 ed., pp. 25). Fort Collins, Colorado: Colorado Agricultural Experiment Station, CSU. [http://www.extsoilcrop.colostate.edu/CropVar/documents/grainsorghum/2012\\_Sorghum\\_TR.pdf](http://www.extsoilcrop.colostate.edu/CropVar/documents/grainsorghum/2012_Sorghum_TR.pdf)
- Larson, K., Pettinger, B. T., Harn, D., Johnson, J. J., Haley, S. D., Jahn, C. E., Sauer, S. M., Trujillo, W. (2013). *Plainsman Research Center 2012 Research Reports* (TR13-2 ed., pp. 95). Fort Collins, Colorado: Agricultural Experiment Station, CSU. [www.colostate.edu/depts/prc/pubs/tr13-2.pdf](http://www.colostate.edu/depts/prc/pubs/tr13-2.pdf)

### **Abstract**

- baniszewski, J., Turner, M., Jahn, C. E. (2013). *Influence of Drought Stress on Bioenergy Traits in Sorghum*. ASA-CSSA-SSSA.
- Turner, M., baniszewski, J., Sauer, S. M., Johnson, J. J., Jahn, C. E. (2013). *Varietal Differences and the Impact*

*of Drought Stress on Bioenergy Traits of Forage and Sweet Sorghum. ASA-CSSA-SSSA.*

Tanger, P., Vega-Sanchez, M., Jahn, C. E., Santoro, N., Ronald, P., McKay, J. K., Bush, D., Leach, J. E. (2013). *Environmental variation in plant cell wall composition and implications for bioenergy*. Colorado Center for Biorefining and Biofuels.

Fulton-Smith, S., Jahn, C. E., Cotrufo, M. F. (2013). *Exploring the Potential for Biofuel Crops to Sequester Carbon in the Deep Soil*. Colorado Center for Biorefining and Biofuels.

Turner, M., Jahn, C. E., baniszewski, J., Sauer, S. M., Johnson, J. J. (2013). *Influence of Water Limitation on Bioenergy Traits in Sweet and Forage Sorghum*. Colorado Center for Biorefining and Biofuels.

Turner, M., Jahn, C. E., Larson, C. R., Sauer, S. M., Johnson, B. T. (2013). Influence of Drought Stress on Bioenergy Traits in Sweet Sorghum. *Our Energy Future-An Earth Week Symposium on Clean Energy*. CSU Clean Energy Supercluster.

### **Magazine/Trade Publication**

Johnson, J. J., Hain, J. P., Sauer, S. M., Larson, K., Jewett, F. G., Jahn, C. E., Turner, M., Bartolo, M. E., Davidson, J. W., Brick, M. A., Schwartz, H. F., Vigil, M., Jewell, K. S. (2012). *2012 Colorado Spring Crop Variety Performance Trial Results*. High Plains Journal.

### **Newsletter**

Jahn, C. E. (2014). Energy Crops for Now and in the future. *Southeast Area Extension Farm and Ranch Newsletter*. CSU Extension.

### **Technical Report**

Jahn, C. E., Turner, M., Johnson, J. J., Hain, J. P., Sauer, S. M., Schneekloth, J., Nielsen, D., Vigil, M. F. (2013). Dryland and Irrigated Forage Sorghum Performance Trial. *Central Great Plains Research Station 2012 Research Progress Report*. USDA-ARS.

### **PAPERS PRESENTED/SYMPOSIA/INVITED LECTURES/PROFESSIONAL MEETINGS/WORKSHOPS**

November 5, 2014, "The Relationship of Physiological, Morphological and Metabolic Traits to Biomass Accumulation and Drought Response in Sorghum", ASA, CSSA & SSSA International Annual Meeting, (Presenter) Jahn, C. E., Long Beach, CA.

October 27, 2014, "New Screening tools for Production Efficiency", CSU San Luis Valley Research Center--Industry Workshop, Alamosa, CO.

June 11, 2014, "Translation of molecular biology and physiology to improve bioenergy traits in rice and sorghum", North Central Division American Phytopathological Society Mtg, Madison, WI.

April 25, 2014, "Metabolic, morphological, and physiological factors that influence bioenergy traits in sorghum", Colorado Center for Biorefining and Biofuels Semi-annual Meeting, C2B2, Boulder, CO.

April 25, 2014, "Evaluation of Drought Stress on Bioenergy Traits in Sorghum and Millet", CSU Ventures Innovation symposium, CSU Ventures, (Presenter) Jahn, C. E., Fort Collins, CO.

April 25, 2014, "The relationship of Physiological, Morphological, and Metabolic Traits to Biomass Accumulation and Drought Response in Sorghum", CSU Ventures Innovation symposium, CSU Ventures,

(Presenter) Jahn, C. E., Fort Collins, CO.

April 17, 2014, "Evaluation of morphology, physiology, and biochemistry for improved bioenergy traits in sorghum", Powerhouse Grand Opening Poster Session, (Presenter) Turner, M., Fort Collins, CO.

April 15, 2014, "Evaluation of drought tolerance and energy traits on African landrace sorghu", Undergraduate Research and Creativity Showcase, (Presenter) Warneke, B., Fort Collins, CO.

February 28, 2014, "Role of primary and secondary metabolism in biomass yield and resistance to drought stress in the bioenergy crop sorghum", Cell and Molecular Biology Poster Symposium, (Presenter) Jahn, C. E., Fort Collins, CO.

January 10, 2014, "Straw composition variation between varieties, tissue types and environments and impacts on bioenergy performance", USDA/DOE Plant Feedstocks Genomics for Bioenergy PI/PD Meeting, DOE, Plant and Animal Genome Meegings, SanDiego, CA.

November 6, 2013, "Influence of Drought Stress on Bioenergy Traits in Sorghum", 2013 ASA-CSSA-SSSA International Annual Meeting, ASA-CSSA-SSSA, (Presenter) Baniszewski, J., Tampa, FL.

November 3, 2013, "Varietal Differences and the Impact of Drought Stress On Bioenergy Traits of Forage and Sweet Sorghum", 2013 ASA-CSSA-SSSA International Annual Meeting, ASA-CSSA-SSSA, (Presenter) Turner, M., Tampa, FL.

October 17, 2013, "Environmental variation in plant cell wall composition and implications for bioenergy", Colorado Center for Biorefining and Biofuels Spring Semi-Annual Meeting, Colorado Center for Biorefining and Biofuels, (Presenter) Tanger, P., Fort Collins, CO.

October 17, 2013, "Influence of Water Limitation on Bioenergy Traits in Sweet and Forage Sorghum", Colorado Center for Biorefining and Biofuels Spring Semi-Annual Meeting, Colorado Center for Biorefining and Biofuels, (Presenter) Turner, M., Fort Collins, CO.

October 17, 2013, "Sustainable Bioenergy: Exploring The Potential For Biofuel Crops To Sequester Carbon In The Deep Soil", Colorado Center for Biorefining and Biofuels Spring Semi-Annual Meeting, Colorado Center for Biorefining and Biofuels, (Presenter) Fulton-Smith, S., Fort Collins, CO.

August 16, 2013, "Can Biofuel Crops Contribute to Soil Carbon Storage In Deep Soil?", Front Range Isotope Day Symposium, (Presenter) Fulton-Smith, S., Fort Collins, CO.

August 1, 2013, "Influence of Drought Stress on Bioenergy Traits in Sorghum", 2013 C2B2 NSF-REU Poster Session, Colorado Center for Biorefining and Biofuels, (Presenter) Baniszewski, J., Boulder, CO.

April 18, 2013, "Biomass Panel Discussion: CSU's Role in Displacement of Petrochemicals with Renewable Options", Our Energy Future-An Earth Week Symposium on Clean Energy, Fort Collins, CO.

April 18, 2013, "Sorghum Varietal Performance and Bioenergy Traits Under Dryland and Irrigated Conditions", Our Energy Future-An Earth Week Symposium on Clean Energy, (Presenter) Turner, M., Fort Collins, CO.

April 9, 2013, "Sorghum Trial Results in Eastern Colorado", Colorado Sorghum Producers Meeting, Colorado Sorghum Producers, (Presenter) Larson, K., Springfield, Colorado.

January 24, 2013, "2012 Forage and Sweet Sorghum Variety Trials", Central Great Plains Research Station 2012 Research Progress Meeting, USDA-CSU, (Presenter) Sauer, S. M., Akron, CO.

2012, "C Jahn, L DeRose-Wilson, P Tanger, A Broz, B Broeckling, M Baroidan, A Bordeos, M Naredo, E Wolfrum, K McNally, A Kern, B Zhao, J McKay, D Bush, H Leung, J Leach. Comprehensive approach to improve biofuels feedstocks using rice as a model system. DOE Plant Feedstocks PI meeting, San Diego, CA. January 13, 2012".

2012, "C Jahn, L DeRose-Wilson, P Tanger, A Broz, B Broeckling, M Baroidan, A Bordeos, M Naredo, E Wolfrum, K McNally, A Kern, B Zhao, J McKay, D Bush, H Leung, J Leach. Comprehensive approach to improve biofuels feedstocks using rice as a model system. Plant and Animal Genome. San Diego, CA. January 14-18, 2012".

2012, "C Jahn. The American Phytopathological Society's Education Efforts. 2012 National Academic Programs Summit. Loveland, CO. June 17-19, 2012".

2012, "C. Jahn. Form and Function-New Targets to Improve Bioenergy Feedstocks. Sweet Sorghum Ethanol Association Annual Meeting. Orlando, FL. January 26-27, 2012".

2012, "Jahn, C. M. Turner, S. Sauer, J. Brummer, G. McMaster, G. Buchleiter, J. Johnson. Biomass Yield, Bioenergy Trait Characteristics, and Cell-Wall Composition of Dryland Sweet Pearl Millet Grown at Multiple Locations in Colorado. ASA-CSSA-SSSA International Annual Meeting. Cincinnati, OH. October 21-24, 2012".

2012, "Jahn, C. The Path Forward: Targets to Improve Next Generation Bioenergy Feedstocks. Department of Soil and Crops Seminar Series. Fort Collins, CO. November 29, 2012".

2012, "Jahn, C., L. DeRose-Wilson, J. McKay, D. Bush, H. Leung, J. Leach. Weight loss at Night? Morphological and Night-time Physiological Factors that Negatively Impact Biomass Accumulation in Rice. ASA-CSSA-SSSA International Annual Meeting. Cincinnati, OH. October 21-24, 2012".

2011, "C Jahn, L DeRose-Wilson, P Tanger, A Broz, M Baroidan, A. Bordeos, B. Broeckling, E. Wolfrum, J. McKay, D. R. Bush, H. Leung, J. Leach. Fine tuning photosynthesis and cell-wall composition for improved biofuels feedstocks. Sustainable Bioenergy and Bioproducts Project Directors Meeting. Arlington, VA. October, 24-26, 2011".

2011, "C Jahn. Targets to improve quantity and quality of lignocellulosic feedstocks. Sustainable Bioenergy Development Center Seminar Series. Fort Collins, CO. November 29, 2011".

2011, "Jahn, C. Genetic analysis of *Oryza sativa*: morphological and physiological traits that contribute to plant biomass. Colorado State University, Department of Soil and Crops spring seminar series, Fort Collins, CO. February 17, 2011".

2011, "Jahn, C. Research ethics: Seeing black and white in a gray world. Colorado State University, Bioagricultural Sciences and Pest Management Spring Seminar Series. Fort Collins, CO. January 26, 2011".

2011, "Jahn, C. Using rice as a model to identify genetic variation in traits related to biomass. CO-WY USDA-ARS spring seminar series. Fort Collins, CO. February 14, 2011".

2010, "Jahn, C. Exploiting diversity of biomass traits: What we have learned from rice. Plant Super Group. Fort Collins, CO. March 26, 2010".

2010, "Jahn, C. Understanding physiological and morphological traits that contribute to plant biomass: Lessons from rice. University of Northern Colorado, Biology Seminar Series. Greeley, CO. October 29, 2010".

2010, "Jahn, C. Unraveling plant biomass traits--lessons from rice. Western Great Plains Sustainable Feedstock Conference. Fort Collins, CO. September 15, 2010".



2010, "Jahn, C., I. Oña, J. Stephens, C. Vera Cruz, D. Bush, H. Leung, J. McKay, J. Leach. Screening a diverse set of rice varieties for variation in biomass and resistance to plant disease. 10th US-Japan Genome-Enabled Integration of Research in Plant Pathogen Systems Corvallis, OR. January 24-28, 2010."

2009, "Jahn, C. Approaches to Understanding Biomass Traits in Rice. Yunnan Academy of Agricultural Sciences, Kunming, China. August 10, 2009."

2009, "Jahn, C. E. RNA integrity for bacterial RNA quantitation. Quantitative PCR Meeting San Diego, CA. March 16-17, 2009."

2009, "Jahn, C. Identification of Candidate Genes for Increased Biomass Production. 2009 Colorado Center for Biorefining and Biofuels Spring Semi-Annual Meeting. Boulder, CO. February 5, 2009."

2009, "Jahn, C., J. Stephens, B. Mason, S. Broadstone, D. Bush, H. Leung, J. McKay, J. Leach. Genetic variation in biomass traits among 20 diverse rice varieties. 2009 6th International Rice Genetics Symposium, Manila, Philippines. November 16-19, 2009."

2008, "Jahn C., J. Apodaca, N. Perna, and A. Charkowski. A horizontally acquired cellulose synthase operon in *Dickeya dadantii* contributes to biofilm formation and attachment to plants. 2008 Annual meeting of the American Phytopathological Society. Minneapolis, MN. July 26-30th, 2008."

2008, "Jahn, C. and A. Charkowski. Should I stay or should I go? Biofilm formation in the plant pathogen *Dickeya dadantii*. University of Wisconsin-Madison Microbial Pathogenesis and Host Responses Group Seminar Series. Madison, WI. March 24, 2008."

2007, "Jahn, C. and A. Charkowski. The flagellar sigma factor FliA is required for full virulence and biofilm formation

of *Dickeya dadantii*. 2007 Joint Meeting of the American Phytopathological Society and the Society of Nematologists. San Diego, CA. July 28-August 1, 2007."

2006, "Jahn, C., M.-N. Yap, M. Hibbing, N. Perna, and A. Charkowski. *Dickeya dadantii* cellulose production differs from related enterobacteria. 11th International Conference on Plant Pathogenic Bacteria. Edinburgh, Scotland. July 10-14, 2006."

### **OTHER ACTIVITIES/ACCOMPLISHMENTS – PUBLICATIONS/SCHOLARLY RECORD**

(September 9, 2015 - Present). Workshop, "TILT Flipped Classrooms Workshop," CSU TILT, Fort Collins, CO, United States. Approximate Number of Hours Spent Per Year: 4.

(November 2, 2014 - November 5, 2014). Professional Meeting, "ASA, CSSA & SSSA International Annual Meeting," ASA, CSSA & SSSA, Long Beach, CA, United States.

(September 11, 2014 - October 23, 2014). Short Course, "Presentation as a Theatrical Art," The Institute for Learning and Teaching (TILT), Fort Collins, CO, United States.

(September 1, 2014 - September 3, 2014). Professional Meeting, "Sorghum Improvement Conference of North America," Manhattan, KS, United States.

(November 2, 2013 - November 6, 2013). Professional Meeting, "ASA, CSSA & SSSA International Annual Meeting," ASA, CSSA & SSSA, Tampa, FL, United States.

(October 21, 2012 - October 24, 2012). Professional Meeting, "ASA, CSSA & SSSA International Annual Meeting," ASA, CSSA & SSSA, Cincinnati, OH, United States.

### **TEACHING:**

<u>Year</u>	<u>Semester</u>	<u>Course No./Title</u>	<u>Cr. Hrs.</u>	<u>Enrollment</u>
2016	Spring	BSPM698 - Research	18	12
2016	Spring	BSPM798 - Research	18	14
2015	Fall	BSPM581A1 - Fundamentals of Bioag Sciences and Pest Mgmt	2	9
2015	Fall	BSPM698 - Research	18	10
2015	Fall	BSPM798 - Research	18	9
2015	Spring	BSPM361 - Elements of Plant Pathology	3	56
2015	Spring	BSPM361 - Elements of Plant Pathology - Lab	0	19
2015	Spring	BSPM361 - Elements of Plant Pathology - Lab	0	24
2015	Spring	BSPM361 - Elements of Plant Pathology - Lab	0	14
2015	Spring	BSPM798 - Research	18	9
2014	Fall	BSPM581A1 - Fundamentals of Bioag Sciences and Pest Mgmt	2	12
2014	Fall	HORT495 - Independent Study	18	3
2014	Fall	BSPM798 - Research	18	8
2014	Spring	AGRI180A1 - Topics in Sustainable Bioenergy	3	11

2014	Spring	AGRI180A1 - Topics in Sustainable Bioenergy - Recitation	0	11
2013	Fall	BSPM592 - Seminar BSPM Foundations	3	7
2013	Spring	AGRI180A1 - Topics in Sustainable Bioenergy	3	8
2013	Spring	AGRI180A1 - Topics in Sustainable Bioenergy - Recitation	0	8
2012	Fall	AGRI601 - Bioenergy Technology	3	4
2012	Fall	ENGR601 - Bioenergy Technology	3	2
2012	Fall	AGRI601 - Bioenergy Technology - Lab	0	4
2012	Fall	ENGR601 - Bioenergy Technology - Lab	0	2
2012	Fall	BSPM592 - Seminar BSPM Foundations	3	11

### Guest Lectures:

<u>Year</u>	<u>Semester</u>	<u>Course No./Title</u>	<u># of Guest Lectures</u>	<u>Delivery Mode</u>
2014	Summer	C2B2 NSF-REU Summer Seminar Series	2	Face to Face
2014	Summer	SOCR796 - Plant Breeding for Drought Tolerance	1	Face to Face
2014	Spring	SOCR475 - Global Challenges in Plant and Soil Science	1	Face to Face
2013	Fall	SOCR460 - Plant Breeding	1	Face to Face
2013	Summer	C2B2 NSF-REU Summer Seminar Series	2	Face to Face

### EXTENSION/ENGAGEMENT ACTIVITIES/ACCOMPLISHMENTS

#### Field Day

Sorghum Field Days. Walsh, Akron, Brandon, CO. Total number of participants: 30. Percent Responsible: 30%. 2014.

Sorghum Field Days. Walsh, CO. Total number of participants: 30. Percent Responsible: 30%. 2011.

#### Presentation

Aspen Science Festival - Science Street Fair. Aspen, CO. Total number of participants: 1500. Percent Responsible: 100%. 2014.

CSU Energy Laboratory Biofuels Tour. Adult, Fort Collins, CO. Total number of participants: 15. Percent Responsible: 30%. 2nd Quarter 2014.

Aspen Science Festival - Science Street Fair. Aspen, CO. Total number of participants: 1200. Percent Responsible: 100%. 2013.

Aspen Science Festival - Science Street Fair. Aspen, CO. Total number of participants: 1200. Percent Responsible: 100%. 2012.

Bioenergy outreach for fourth graders. Lochbuie, CO. Number of times program was made: 3. Total number of participants: 75. Percent Responsible: 60%. 2012.

Aspen Science Festival - Science Street Fair. Aspen, CO. Total number of participants: 1200. Percent Responsible: 100%. 2011.

### COMMITTEES

Program in Molecular Plant Biology Executive Committee, (January 2012 - Present).

Program in Molecular Plant Biology, (January 2011 - Present).

Soil and Crops Functional Genomics Search Committee, (September 2014 - Present).

Soil and Crops Physiologist Search Committee, (October 2012 - May 2013).

BSPM Coordinator of Programs Search Committee, (January 2015 - Present).

Ad hoc Future Positions Committee, (February 2014 - August 2014).

Fungal Pathology Search Committee, (July 2013 - May 2014).

## **PROFESSIONAL AFFILIATIONS AND ACTIVITIES**

Society for Experimental Biology. (October 2014 - Present).

American Society of Agronomy. (2012 - Present).

American Society of Plant Biologists. (2010 - Present).

Crop Science Society of America. (2010 - Present).

The American Phytopathological Society (APS. (2004 - Present).

Sweet Sorghum Ethanol Association. (2012 - 2013).

Member, American Society of Agronomy. (2012 - Present).

Reviewer, Ad Hoc Reviewer, Plant Disease. (2012 - Present).

Member, Sweet Sorghum Ethanol Association. (2012 - Present).

Member, Program in Molecular Plant Biology (PMPB) executive committee. (2011 - Present).

Member, American Society of Plant Biologists. (2010 - Present).

Member, Crop Science Society of America. (2010 - Present).

Member, The American Phytopathological Society (APS. (2004 - Present).

Reviewer, Ad Hoc Reviewer, BARD. (2013).

Member, Department of Soil and Crops Plant Physiologist Search Committee. (2012 - 2013).

Reviewer, Ad Hoc Reviewer, NSF. (November 2013).

Reviewer, Ad Hoc Reviewer, BBSRC, Swindon. (March 2013 - April 2013).

Association of Public and Land-grant Universities, Loveland, CO. (2012).

Grant Writer' Seminars and Workshops, LLC, Fort Collins, CO. (2012).

Grower talk "Research on Sweet/Forage Sorghum for Biofuel or Forage". Colorado Sorghum Producers Annual Meeting. Granada, CO. March 20, 2012 (20 participants). (2012).

Montana State University, Bozeman, MT. (2012).

Nobal Foundation, Ardmore, OK. (2012).

Reviewer, Ad Hoc Reviewer, NSF-BREAD. (2012).

Member, NSF-Symbiosis, Defense and Self-recognition grant panel. (2012).

Plant and Animal Genome, San Diego, CA. (2012).

Sorghum Checkoff, Denver, CO. (2012).

Sorghum Field Day. Walsh, CO. September 27, 2012. (23 Participants). (2012).

Sweet Sorghum Ethanol Association, Orlando, FL. (2012).

USDA and DOE, San Diego, CO. (2012).

National Institute of Food & Agriculture, Arlington, VA. (2011).

Reviewer, Ad Hoc Reviewer, Plant Physiology. (2010).

Crop evolution display “Genetic variation within species allows artificial selection to create crop varieties” at Putnam Elementary School Science Carnival, Fort Collins, CO. (2009).

**OTHER ACTIVITIES/ACCOMPLISHMENTS – SERVICE/OUTREACH**

Guest Speaker, Aspen Science Center, Aspen, CO. (August 11, 2014).

Guest Speaker, Aspen Science Center, Aspen, CO. (August 11, 2013).

K-12 Outreach, Lochbuie Elementary School, Lochbuie, CO. (May 20, 2013).

School of Global Environmental Sustainability. (2012).

Guest Speaker, Aspen Science Center, Aspen, CO. (August 12, 2012).

Poudre Valley Hospital. (2010).

Putnam Elementary School. (2010).

Putnam Elementary School. (2009).

\*\*\*\*\*