

NATALIA DE LEON

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RANK: Associate Professor

ASSIGNMENT: Maize breeding and genetics. Appointment; 75% research, 25% teaching

EDUCATION:

2002 - University of Wisconsin, Madison - Ph.D. - Plant Breeding and Plant Genetics
2000 - University of Wisconsin, Madison - M.S. - Plant Breeding and Plant Genetics
1997 - Argentinean Catholic University (UCA) - B.S. – Agronomy
1992-1993 - Attended Sao Paulo State University (UNESP)

APPOINTMENTS:

August 2013 – present - Associate professor – Dept. of Agronomy, University of Wisconsin- Madison
April 2006 – July 2013 - Assistant professor – Dept. of Agronomy, University of Wisconsin- Madison
2004 – 2006 - Corn breeder/research station manager – Golden Harvest, Dansville, Michigan and Syngenta Seeds Inc., Monroeville, Indiana
2003 – 2004 - Post-doctoral research fellow – Dept. of Crop & Soil sciences, Michigan State University
1997 – 2002 - Graduate student research assistant – Dept. of Agronomy, Univ. of Wisconsin-Madison

HONORS AND AWARDS:

- Technical University of Munich Institute for Advanced Study Visiting Fellow - 2015
- UW Vilas Associate Award – 2014/15
- Carl Storm Underrepresented Minority Fellowship - 2013 Gordon Research Conference in Quantitative Genetics & Genomics
- DuPont Young Professor Award – 2011/13
- UW Elton D. and Carrie R. Aberle Fellow Award – 2011/12

SYNERGISTIC ACTIVITIES:

- 1) Faculty Trainer in the Plant Breeding and Plant Genetics Program
- 2) UW Biology Major advisor - approximately 37 undergraduate advisees (2006 to present)
- 3) Instructor for the Global Health Institute Undergraduate Certificate
- 4) UW Representative to the Multistate Research Program NCCC-167 (2006 to present – Chair in 2011 and 2013-14)
- 5) Associate editor of Journals Crop Science, Scientia Agricola, and Theoretical and Applied Genetics
- 6) Scientific reviewer for the National Science Foundation, Graduate Women in Science Program
- 7) Co-lead of the “Genomes to fields: Predicting performance in variable environments” multi-state initiative organizing committee (2013 to present)

8) Member of the Corn Breeding Executive Committee (2013 to present)

PROFESSIONAL ORGANIZATIONS:

American Society of Agronomy

Crop Science Society of America

RESEARCH PUBLICATIONS:

Publications in peer-reviewed journals:

a) Publications based on research developed since joining UW:

1. Stelpflug, S., R.S. Sekhon, B. Vaillancourt C.N. Hirsch, C.R. Buell, N. de Leon and S.M. Kaeppler (2015) An expanded maize gene expression atlas based on RNAsequencing and its use to explore root development. *Plant Genome* (*accepted*)
2. Haase, N., T.M. Beissinger, C.N. Hirsch, C.R. Buell, S.M. Kaeppler, N. de Leon (2015) Genetic Dissection of Quantitative Traits Using a Bulk and Resequencing Method on a Large Segregating Population of Maize. *Target Journal: G3* *accepted* doi: 10.1534/g3.115.017665
3. Heckwolf, S., M. Heckwolf, S.M. Kaeppler, N. de Leon, E.P. Spalding (2015) A Practical Image-Based Method for Measuring Anatomical Traits in Stalk Transections of Maize and Other Grasses. *Plant Methods* 11: 26.
4. Johnson, J.M., I. Prust, C.N. Hirsch, G. Muttoni, C.R. Buell, N. de Leon, and S.M. Kaeppler. (2015) Registration of the NyH (Ny821xH99) maize recombinant inbred mapping population. *Journal of Plant Registrations* (*accepted*)
5. Lorenz, A.J., T.M. Beissinger, R. Rodrigues, N. de Leon* (2015) Selection for silage yield and composition did not affect genomic diversity within the Wisconsin Quality Synthetic maize population. *G3 journal* 5: 541-549
6. Beissinger, T.M., G.J.M. Rosa, S.M. Kaeppler, D. Gianola, N. de Leon (2015) Defining window-boundaries for genomic analyses using smoothing spline techniques. *Genetics, Selection and Evolution* 47: 30-38
7. Li, M., M. Heckwolf, J. Crowe, D.L. Williams, S.M. Kaeppler, N. de Leon, and D.B. Hodge (2015) Plant cell wall properties contributing to improved alkaline pretreatment and enzymatic hydrolysis in diverse maize lines. *J. Exp. Bot.* doi: 10.1093/jxb/erv016
8. Foerster, J.M., T. Beissinger, N. de Leon, S.M. Kaeppler (2014) Large Effect QTL Explain Natural Phenotypic Variation for the Developmental Timing of Vegetative Phase Change in Maize (*Zea mays* L.). *Theoretical and Applied Genetics* 128: 529-538
9. Teixeira, J., T. Weldekidan, N. De Leon, S. Flint-Garcia, N. Lauter, J. Holland, S. Murray, W. Xu, D. Hessel, A. Kleintop, J. Hawk, A. Hallauer, R. J. Wisser (2014) Hallauer's Tusón: a Decade of Selection for Tropical-to-Temperate Phenological Adaptation in Maize. *Heredity* 114: 229–240.
10. Hirsch C.N., S.A. Flint-Garcia, T.M. Beissinger, S.R. Eichten, S. Deshpande, K. Barry, M.D. McMullen, J.B. Holland, E.S. Buckler, N.M. Springer, C.R. Buell, N. de Leon, S.M. Kaeppler (2014) Insights into the Effects of Long-Term Artificial Selection on Seed Size in Maize. *Genetics* 198: 409-421.
11. Sekhon, R.S., C.N. Hirsch, K.L. Childs, M.W. Breitzman, P. Kell, S. Duvick, C.R. Buell, N. de Leon, and S.M. Kaeppler (2014) Phenotypic and transcriptional analysis of divergently selected maize populations reveals the role of developmental timing in seed size determination. *Plant Physiology* 165: 658-669.

12. Beissinger, T.M., C.N. Hirsch, B. Vaillancourt, S. Deshpande, K. Barry, C.R. Buell, S.M. Kaeppler, D. Gianola, N. de Leon (2014) Genome-wide scan for selection following thirty generations of artificial selection for increased number of ears per plant in the Golden Glow maize population. *Genetics* 196: 829-840.
13. Hirsch, C.N., J.M. Foerster, J.M. Johnson, R.S. Sekhon, G. Muttoni, B. Vaillancourt, F. Peñagaricano, E. Lindquist, M.A. Pedraza, K. Barry, N. de Leon, S.M. Kaeppler, C.R. Buell (2014) Insights into the Maize (*Zea mays* L.) Pan-Genome and Pan-Transcriptome. *Plant Cell* 26: 121-135.
14. Peiffer, J.A., S.A. Flint-Garcia, N. de Leon, M.D. McMullen, S.M. Kaeppler and E.S. Buckler (2013) The genetic architecture of maize stalk strength. *PLoS ONE* 8 (6), e67066.
15. Sekhon, R.S., R. Briskine, C.N. Hansey, C.L. Meyers, N.M. Springer, C.R. Buell, N. de Leon, S.M. Kaeppler (2013) Maize gene atlas developed by RNA sequencing and comparative evaluation of transcriptomes based on RNA sequencing and microarrays. *PLOS One* 8 (4), e61005.
16. Beissinger, T.M., C.N. Hirsch, R. Sekhon, J. Foerster, J. Johnson, G. Muttoni, B. Vaillancourt, C.R. Buell, S.M. Kaeppler, N. de Leon (2013) Marker density and read-depth for genotyping populations using next-generation sequencing approaches. *Genetics* 193: 1073-1081.
17. Yerka, M., A. Wiersma, B. Lindenmayer, P. Westra, W. Johnson, N. de Leon, D. E. Stoltenberg (2013) Reduced Translocation is Associated with Tolerance of Common Lambsquarters (*Chenopodium album*) to Glyphosate. *Weed Science* 61: 353-360.
18. Muttoni, G., N. Palacios-Rojas, L. Galicia, A. Rosales, K.V. Pixley, N. de Leon (2013) Cell wall composition and biomass digestibility diversity in Mexican maize (*Zea mays* L.) landraces and CIMMYT elite inbred lines. *Maydica* 58: 21-33.
19. Jansen, C., N. Lauter, N. de Leon, C. Hirsch, L. Ruff, T. Lübberstedt (2013) Genetic and morphometric analysis of cob architecture and biomass related traits in the intermated B73xMo17 recombinant inbred lines of maize. *BioEnergy Research* 1-14.
20. Wu, X.L., T. Beissinger, G. Rosa, K. Weigel, N. de Leon, D. Gianola (2012). Parallel Markov chain Monte Carlo - Bridging the gap to high performance Bayesian computation in animal and plant breeding. *GSE* 44(1):29.
21. Sekhon, R., C.N. Hansey, C.R. Buell, N. de Leon, S.M. Kaeppler (2012). Transcriptional and metabolic analysis of induced senescence in maize. *Plant Physiology* 159: 1730-1744.
22. Yerka, M. K., D. E. Stoltenberg and N. de Leon. (2012) Pollen-mediated gene flow in common lambsquarters (*Chenopodium album* L.). *Weed Science* 60: 600-606.
23. Muttoni, G., J.M. Johnson, N. Santoro, C.J. Rhiner, S.M. Kaeppler, N. de Leon (2012). A high-throughput core sampling device for the evaluation of maize stalk composition. *Biotechnology for Biofuels* 5:27.
24. Chia, J.M., C. Song, P.J. Bradbury, D. Costich, N. de Leon, J. Doebley, R.J. Elshire, B. Gaut, L. Geller, J.C. Glaubitz, M. Gore, K.E. Guill, J. Holland, M.B. Hufford, J. Lai, M.Li, X. Liu, Y. Lu, R. McCombie, R. Nelson, J. Poland, B.M. Prasanna, T. Pyhäjärvi, T. Rong, R.S. Sekhon, Q. Sun, M.I. Tenailon, F. Tian, J. Wang, X. Xu, Z. Zhang, S.M. Kaeppler, J. Ross-Ibarra, M.D. McMullen, E.S. Buckler, G. Zhang, Y. Xu, D. Ware (2012). Maize HapMap2 identifies extant variation from a genome in flux. *Nature Genetics* 44(7):803-7.
25. Zystro, J.P, N. de Leon and W. F. Tracy (2012). Analysis of Traits Related to Weed Competitiveness in Sweet Corn (*Zea mays* L.). *Sustainability* 4:543-56.
26. Howard, N.P. and D. Stimart, N. de Leon, M.J. Havey, W. Martin (2012). Diallel Analysis of Floral Longevity in *Impatiens walleriana*. *J. Amer. Soc. Hort. Sci.* 137: 47-50.

27. Hansey, C.N., B. Vaillancourt, R.S. Sekhon, N. de Leon, S.M. Kaeppler, C.R. Buell (2012). Maize (*Zea mays* L.) genome diversity as revealed by RNA-sequencing. PLoS ONE 7(3): e33071.
28. Davidson, R.M., C.N. Hansey†, M. Gowda, K.L. Childs, H. Lin, B. Vaillancourt, R.S. Sekhon, N. de Leon, S.M. Kaeppler, N. Jiang and C.R. Buell (2011). Utility of RNA-seq for Analysis of Maize Reproductive Transcriptomes. Plant Genome 4:191-203.
29. Eichten, S.R., J. Foerster, N. de Leon, Y. Kai, C.-T. Yeh, S. Liu, J. Jeddelloh, P.S. Schnable, S.M. Kaeppler, N.M. Springer (2011). B73-Mo17 near isogenic lines (NILs) demonstrate dispersed structural variation in maize. Plant Physiology 156: 1679-1690.
30. Wu, X. L., T. M. Beissinger, S. Bauck, B. Woodward, G. J. M. Rosa, K. A. Weigel, N. de Leon, D. Gianola (2011). A Primer on High-Throughput Computing for Genomic Selection. Frontiers in Livestock Genomics 2(2): 1-10.
31. Sekhon, R, H. Lin, K. Childs, C. Hansey†, C. Buell, N. de Leon, S. Kaeppler (2011) Genome-wide atlas of transcription through maize development. Plant Journal 66: 553 - 563.
32. Hansey, C.N and N. de Leon (2011). Biomass yield and cell wall composition of corn (*Zea mays* L.) with alternative morphologies planted at variable densities. Crop Sci 51: 1005 - 1015.
33. Hansey, C., J. Johnson, R. Sekhon, S. Kaeppler and N. de Leon (2011). Genetic diversity of a maize association population with restricted phenology. Crop Sci 51: 704 -715.
34. Gustafson, T., J.G. Coors and N. de Leon (2010). Evaluation of S2-topcross selection for maize (*Zea mays* L.) silage yield and quality in the Wisconsin Quality Synthetic population. Crop Science 50: 1795-1804.
35. Gustafson, T. and N. de Leon (2010). Genetic analysis of maize (*Zea mays* L.) endosperm vitreousness and related hardness traits in the Intermated B73 x Mo17 recombinant inbred line population. Crop Science 50: 2318-2327.
36. Hansey, C.N., A.J. Lorenz and N. de Leon (2010). Variation for compositional attributes of maize (*Zea mays* L.) plant parts across hybrids and associations between plant development stages. Bioenergy Research 3: 295-304.
37. Lorenz, A.J., N. de Leon, C.N. Hansey, J.G. Coors and S.M. Kaeppler (2010). Genetic analysis of agronomic and cell wall traits relevant to cellulosic ethanol production in maize (*Zea mays* L.). Crop Science 50: 842-852.
38. Lorenz, A.J., T. Gustafson, N. de Leon and J.G. Coors (2010). Breeding maize for a bioeconomy: A literature survey examining harvest index and stover yield and their relationship to grain yield. Crop Science 50: 1-12.
39. Zhe, Y., J.G. Lauer, R. Borges, and N. de Leon (2010). Effects of genotype by environment interaction on agronomic traits in soybean. Crop Science 50: 696-702.
40. Wolfrum, E.J., A.J. Lorenz, and N. de Leon (2009). Correlating forage analysis information with dietary fiber analysis data for corn stover. Cellulose 16: 577-585.
41. Lorenz, A.J., R.P. Anex, A. Isci, J.G. Coors, N. de Leon, and P.J. Weimer (2009). Forage quality and composition measurements as predictors of ethanol yield from maize stover. Biotechnology for Biofuels. Biotechnology for Biofuels 2: 5.
42. Lorenz, A.J., J.G. Coors, N. de Leon , E.J. Wolfrum, B.R. Hames, A.D. Sluiter and P.J. Weimer (2009). Characterization, genetic variation, and combining ability of maize traits beneficial to the production of cellulosic ethanol. Crop Science 49: 85 - 98.

b) Publications developed prior to arrival at UW as an assistant professor:

1. Rosa, G.J.M., N. de Leon and A.J.M. Rosa (2006). A review of microarray experimental design strategies for genetical genomics studies. Physiological Genomics 28: 15-23.

2. de Leon, N., J. G. Coors, S.M. Kaeppler, G.J.M. Rosa (2005). Genetic control of the number of ears per plants and related morphological traits in the Golden Glow maize population: I. Phenotypic evaluation. *Crop Science* 45: 1361-1369.
3. de Leon, N., J. G. Coors, S.M. Kaeppler (2005). Genetic control of the number of ears per plants and related morphological traits in the Golden Glow maize population: II. Genotypic analysis. *Crop Science* 45: 1370-1378.
4. Cornelious, B., P. Chen , Y. Chen, N. de Leon, J.G. Shannon, and D. Wang (2005). Identification of QTLs underlying water-logging tolerance in soybean. *Molecular Breeding* 16: 103-112
5. Canavessi, A.M.O., J. Harms, N. de Leon, G.A. Splitter (2004). The role of integrase/recombinase xerD and monofunctional biosynthesis peptidoglycan transglycosylase genes in the pathogenicity of *Brucella abortus* infection in vitro and in vivo. *Microbial Pathogenesis* 37:241-251.
6. de Leon, N. and J.G. Coors (2002). Twenty-four cycles of mass selection for prolificacy in the Golden Glow maize population. *Crop Sci.* 42: 325-333.
7. Broderick, G.A., N. de Leon, and Y. Nakamura (2000). Potential of fermentation byproducts as nitrogen supplements for lactating dairy cows. *Journal of Dairy Sciences* 83: 2548-2556.

c. Publications in preparation or submitted to refereed journals but not yet accepted for publication:

1. Jeffrey, B.D., N. Kuzhiyil, N. de Leon, T. Lübberstedt (201X) Genetic and quantitative trait locus analysis for bio-oil compounds after fast pyrolysis in maize cobs. *Plos ONE* (*submitted for publication*)
2. Sekhon, R.S., M.W. Breitzman, R. Rodrigues, N. Santoro, N. de Leon, S.M. Kaeppler (201X) Comparative Analysis of Stover Quality in Maize and Sorghum Reveals Remarkable Plasticity for Carbohydrate Accumulation. *Publication in preparation*
3. Zhang, X., C.N. Hirsch, R.S. Sekhon, N. de Leon, S.M. Kaeppler (201X) Developmental and Molecular Mechanisms Underlying Maternal Control of Seed Size in Maize. *Publication in preparation*
4. de Leon, N., D. Jarquin, M.C. Romay, J. Gage, A.J. Lorenz, G2F Cooperators (201X). Genotype by Environment Interaction in a Diverse Hybrid Panel in Diverse U.S.. *Publication in preparation*
5. de Leon, N. (201X) Genotype by environment interaction in the genomic era, a general perspective. *Publication in preparation*

BOOK CHAPTERS:

1. de Leon, N, S.M. Kaeppler and J.G. Lauer (2012). Breeding maize for lignocellulosic biofuel production. In: Saha, Malay (ed.) *Biomass Crops: Breeding and Genetics*. Wiley. Malden, MA.
2. de Leon, N and J.G. Coors (2008). Genetic improvement of corn for ligno-cellulosic biofeedstock production. p.185-210, In Wilfred Vermerris (ed.) *Genetic improvement of bioenergy crops*. Springer Science, New York, NY.

EXTENDED ABSTRACTS AND OTHER PUBLICATIONS:

1. de Leon, N and C.N. Hansey (2010). Breeding Improved Lignocellulosic Stover for Biofuels. Corn & Sorghum and Soybean Seed Research Conference, American Seed Trade Association Annual Meeting, Hyatt Regency Hotel - Chicago, IL - Dec 9.

POSTER ABSTRACTS:

1. Haase, N., N.D. Miller, E.P. Spalding, S.M. Kaeppler, N. de Leon (2015) Image-Based Precision Phenotyping of Maize Ear Morphology and Kernel Size. DROPS Conference: Recent progress in drought tolerance: from genetics to modeling. Montpellier, France, June 8-9, 2015.
2. Heckwolf, M., G. Muttoni, N. Santoro, S. Cantu, C.N. Hirsch, B. Vaillancourt, C.R. Buell, N. de Leon, S.M. Kaeppler (2015) Genomic Science Contractors-Grantees Meeting XIII/USDA-DOE Plant Feedstock Genomics for Bioenergy Meeting - Sheraton Tysons Hotel. Tysons, Virginia, February 22-25, 2015.
3. Gage, J., C.N. Hirsch, S.M. Kaeppler, N. de Leon (2015) Genome-Wide Association Analysis of Tassel Size and Branch Number in the Wisconsin Diverse Association Panel. 57th Maize Genetics Conference. Pheasant Run Resort. St Charles, IL, March 12-15, 2015.
4. Fang, Z., J. Teixeira, T. Weldekidan, M. Patzold, N. de Leon, S. Flint-Garcia, N. Lauter, S. Murray, W. Xu, A. Hallauer, J. Holland, R. J. Wissler (2015) A tropical genome with a temperate phenome: inference on the genetic architecture of tropical-to-temperate maize adaptation. 57th Maize Genetics Conference. Pheasant Run Resort. St Charles, IL, March 12-15, 2015.
5. Haase, N., N.D. Miller, E.P. Spalding, S.M. Kaeppler, N. de Leon (2015) Image-based precision phenotyping of maize ear morphology and kernel size. 57th Maize Genetics Conference. Pheasant Run Resort. St Charles, IL, March 12-15, 2015.
6. Zhang, X., C.N. Hirsch, R.S. Sekhon, N. de Leon, S.M. Kaeppler (2015) Transcriptional regulation and maternal effect underlying the control of seed size in the Krug inbreds and hybrids. 57th Maize Genetics Conference. Pheasant Run Resort. St Charles, IL, March 12-15, 2015.
7. Stelpflug, S.C., R. Sekhon, B. Vaillancourt, C.N. Hirsch, C.R. Buell, N. de Leon, S.M. Kaeppler (2015) The expanded RNA-seq maize gene atlas: A focus on root development. 57th Maize Genetics Conference. Pheasant Run Resort. St Charles, IL, March 12-15, 2015.
8. Sekhon, R, W. Poehlman, N. de Leon, S.M Kaeppler (2015) Investigation of mechanisms governing senescence in maize through a systems-oriented approach. 57th Maize Genetics Conference. Pheasant Run Resort. St Charles, IL, March 12-15, 2015.
9. Hirsch, C.N., C.D. Hirsch, A. Brohammer, M.J. Bowman, K.L. Childs, I. Soifer, O. Barad, C.R. Buell, N. de Leon, M.A. Mikel, S.M. Kaeppler (2015) Comprehensive De Novo genome Assemblies and Resequencing of Diverse Individuals Provides Insights into Structural Diversity and the Relationship with Transcriptional Diversity in Maize. XXIII Plant & Animal Genome Meeting, San Diego, CA, January 10-14, 2015
10. Hirsch, C.N., C.D. Hirsch, A. Brohammer, M. Bowman, K. Childs, I. Soifer, O. Barad, C.R. Buell, N. de Leon, S.M. Kaeppler, M.A. Mikel (2015) Insights into the relationship between structural diversity and transcriptional diversity in maize. American Society of Plant Biologists Annual Meeting – Plant Biology. Minneapolis Convention Center, Minneapolis, MN, July 26 – 30, 2015.
11. Hirsch, C.N., R. S. Sekhon, S. Stelpflug, S.M. Kaeppler, N. de Leon, C.R. Buell, J. Foerster, G. Muttoni, N.M. Springer, R. Briskine, C. Myers, and B. Vaillancourt. (2014) From seed to senescence: Transcriptome tools to understand maize development, physiology, and phenotypic diversity. 56th Maize Genetics Conference. Beijing, China, March 13-16, 2014.
12. Zhang, X., R. S. Sekhon, N. de Leon, and S.M. Kaeppler. (2014) Developmental processes controlling seed size in maize evaluated in the Krug seed size populations and derived inbreds. 56th Maize Genetics Conference. Beijing, China, March 13-16, 2014.
13. Kaeppler, S., M. Casler, C.R. Buell, C. Hirsch, J. Evans, J. Kim, B. Vaillancourt, E. Crisovan, and N. de Leon. (2014) Analysis of natural variation in switchgrass and maize at GLBRC. XXII Plant & Animal Genome Meeting. San Diego, CA, January 11-15, 2014.

14. Haase, N., Beissinger, T., C. Hirsch, C.R. Buell, S.M. Kaeppler, and N. de Leon. (2013) Utilizing bulk-segregant analysis for the detection of quantitative trait loci (QTL) in a large population of diverse individuals. Joint International Sweet Corn Development Association (ISCD) and the Corn Breeding Research (CBR-NCCC167) Annual Meeting, Chicago, IL, December 9 and 10, 2013.
15. Beissinger, T., D. Gianola, N. de Leon (2013) Defining data-driven boundaries for window analyses with smoothing spline techniques. Impact of Large-Scale Genomic Data on Statistical and Quantitative Genetics Conference. University of Washington, Seattle, WA. November 24-26, 2013
16. Hirsch, C.N., J.M. Foerster, J.M. Johnson, R.S. Sekhon, G. Muttoni, B. Vaillancourt, F. Penagaricano, N. de Leon, S.M. Kaeppler, C.R. Buell. (2013) Natural and genetic variation controlling vegetative and floral transition in the context of the maize pan genome and pan transcriptome. GLBRC Science Retreat, South Bend, IN, May 22-24, 2013
17. Sekhon, R.S., M. Breitzman, C.N. Hirsch, C.R. Buell, N. de Leon, S.M. Kaeppler, (2013) Systems approaches to understand the role of source-sink relationships in senescence. 55th Maize Genetics Conference. St Charles, IL, March 14-17
18. Haase, N.J., T.M. Beissinger, J.M. Foerster, Muttoni G., J.M. Johnson, C.N. Hirsch, B. Vaillancourt, C.R. Buell, S.M. Kaeppler, N. de Leon (2013) Genetic Dissection of Quantitative Traits Using a Bulk and Resequencing Method on a Large Segregating Population of Maize. 55th Maize Genetics Conference. St Charles, IL, March 14-17
19. Beissinger, T.M., C.N. Hirsch, B. Vaillancourt, C.R. Buell, S.M. Kaeppler, D. Gianola, N. de Leon (2013) Genomic impact of artificial selection for number of ears per plant in maize. 55th Maize Genetics Conference. St Charles, IL, March 14-17
20. Muttoni G., J.M. Foerster, J.M. Johnson, N.J. Haase, T.M. Beissinger, S.C. Stelpflug, C.N. Hirsch, R.S. Sekhon, C.R. Buell, S.M. Kaeppler, N. de Leon (2013) Phenotypic and Genetic Dissection of Maize Internode Length. 55th Maize Genetics Conference. St Charles, IL, March 14-17
21. Rogers, K.G, T. Weldekidan, G. Muttoni, N. de Leon, S. Flint-Garcia, J. Brewer, D. Horne, J. Holland, N. Lauter, S. Murray, W. Xu, R. Wisser (2013) Parallel Selection Experiment Aimed at Elucidating the Genetic Architecture of Tropical to Temperate Adaptation. 55th Maize Genetics Conference. St Charles, IL, March 14-17
22. Salgado, C., C.D. Cruz, N. de Leon (2013) Comparative analysis of the inheritance of binary traits using phenotypic and molecular marker information. 55th Maize Genetics Conference. St Charles, IL, March 14-17
23. Teixeira, J., A. Kleintop, T. Weldekidan, N. de Leon, S. Flint-Garcia, J. Holland, N. Lauter, S. Murray, W. Xu, D. Hessel, R. Wisser (2013) Environmental and genetic dissection of flowering time in a population subjected to a decade of temperature adaptation. 55th Maize Genetics Conference. St Charles, IL, March 14-17
24. Lorenz, A.J., N. de Leon (2013) Optimal resource allocation for a maize genomic recurrent selection program. 55th Maize Genetics Conference. St Charles, IL, March 14-17
25. Muttoni G., J.M. Foerster, N.J. Haase, R.S. Sekhon, J.M. Johnson, T.M. Beissinger, S.C. Stelpflug, S.M. Kaeppler, N. de Leon (2013) Phenotypic and Genetic Dissection of Maize Internode Length. Genomic Science Annual Contractor-Grantee Meeting/USDA-DOE Plant Feedstock Genomics for Bioenergy Program Meeting, Bethesda, MD, February 24-27
26. Muttoni G., J.M. Foerster, N.J. Haase, R.S. Sekhon, J.M. Johnson, T.M. Beissinger, S.C. Stelpflug, S.M. Kaeppler, N. de Leon (2013) Phenotypic and Genetic Dissection of Maize

- Internode Length. Gordon Research Conference in Quantitative Genetics and Genomics, Galveston, TX, February 17-22
27. Johnson, J., C. Hansey, C.R. Buell, N. de Leon, S. Kaeppler (2012) Genetic Map Construction with Incomplete Marker Information in Maize. ASA, CSSA, SSSA International Annual Meeting. Cincinnati, OH. October 21-24.
 28. Muttoni G., J.M. Foerster, N.J. Haase, R.S. Sekhon, J.M. Johnson, T.M. Beissinger, S.C. Stelpflug, S.M. Kaeppler, N. de Leon (2012) Phenotypic and Genetic Dissection of Maize Internode Length. ASA, CSSA, SSSA International Annual Meeting. Cincinnati, OH. October 21-24.
 29. Beissinger, T., C.N. Hansey, J. M. Foerster, R. Sekhon, J. M. Johnson, G. Muttoni, B. Vaillancourt, C. R. Buell, S. M. Kaeppler, N. de Leon (2012). Empirical observations of genotyping by sequencing in maize diverse inbreds and recombinant inbred populations. Maize Genetics Conference. Portland, OR, March 15-18.
 30. Wisser, R., N. de Leon, S. Flint-Garcia, J. Holland, N. Lauter, S. Murray, W. Xu, T. Weldekidan, J. Teixeira, Y. Veturi, N. Kumar, K. Rogers, J. Reiner, R. Kanchi, L. Peddicord, M. Lopez (2012). The Maize ATLAS project: implementation of an experimental framework for studying adaptation. Maize Genetics Conference. Portland, OR, March 15-18.
 31. Muttoni, G, J.M. Johnson, N. Santoro, S.M. Kaeppler and N. de Leon (2012). A high-throughput stalk-core sampling device for the evaluation of maize biomass composition. Maize Genetics Conference. Portland, OR, March 15-18.
 32. Sekhon, R.S., C. Hansey, K. Childs, R. Briskine, R. J. Schaefer, C. L. Myers, N. Springer, C. R. Buell, N. de Leon and S. M. Kaeppler (2012). An RNA sequencing and microarray-based gene atlas for the maize community. Maize Genetics Conference. Portland, OR, March 15-18.
 33. Foerster, J., C. Hansey, E. Rledeman, T. Beissinger, R.S. Sekhon, W.F. Tracy, H.F. Kaeppler, N. de Leon, S. M. Kaeppler (2012). Large Effect QTL Explain Natural Phenotypic Variation for the Developmental Timing of Vegetative Phase Change in Maize. Maize Genetics Conference. Portland, OR, March 15-18.
 34. Beissinger, T., C. Hansey, R. Sekhon, B. Vaillancourt, C. R. Buell, S. M. Kaeppler, N. de Leon (2012). Dissecting the genetic control of seed size by analysis of the Krug divergently selected maize populations. NCCC-167 Corn Breeding Meeting. Portland, OR, March 14-15.
 35. Haase, N., J. Foerster, T. Beissinger, S. M. Kaeppler, N. de Leon (2012). Theoretical Implications of Utilizing Bulk Segregant Analysis for the Detection of Quantitative Trait Loci in a Large Synthetic Maize Population (IBM Syn14). NCCC-167 Corn Breeding Meeting. Portland, OR, March 14-15.
 36. Sekhon, R., K. Childs, N. Santoro, C. Foster, C. R. Buell, N. de Leon, S.M. Kaeppler (2012). Metabolic and transcriptional changes during induced senescence in maize. DOE Genomic Sciences Awardees Meeting, February 25-28, Washington, D.C.
 37. Teixeira, J., T. Weldekidan, Y. Veturi, K. Rogers, J. Reiner, N. Kumar, R. Kanchi, L. Peddicord, M. Lopez, N. de Leon, S. Flint-Garcia, J. Holland, N. Lauter, S. Murray, W. Xu and R. J. Wisser (2012). The Maize ATLAS project: Implementation of an Experimental Framework for Studying Adaptation. Plant and Animal Genome XX Conference, Town & Country Hotel in San Diego, CA, January 14-18.
 38. Thompson, A. M., L. Li, J. E. Crants, J. Foerster, N. de Leon, S. Kaeppler, N. M. Springer, P. S. Schnable, M. Timmermans, J. Yu, M. Scanlon and G. Muehlbauer (2012). Genetic Control of Natural Variation in Maize Shoot Apical Meristem Architecture. Plant and Animal Genome XX Conference, Town & Country Hotel in San Diego, CA, January 14-18.

39. Wu, X. L., O. Hayrettin, H. Duan, T. Beissinger, S. Bauck, B. Woodward, G. J. M. Rosa, K. A. Weigel, N. de Leon and D. Gianola (2012). Parallel-BayesCpC on OSG: grid-enabled high-throughput computing for genomic selection in practice. Plant and Animal Genome XX Conference, Town & Country Hotel in San Diego, CA, January 14-18.
40. de Leon, N., S. Kaeppler, R. Sekhon, C. Hansey, R. Buell, K. Childs, H. Lin (2011). Exploitation of endogenous variation for the identification of genes and pathways associated with enhanced biofuel production in maize. Genomic Science Contractor-Grantee Meeting/USDA-DOE Plant Feedstock Genomics Bioenergy Awardeed Meeting. US DOE, Office of Biological Environmental Research. Hyatt Regency Cristal City, April 10-13.
41. Lorenz, A. and N. de Leon (2011). Effect of model and training population on genomic selection for multiple traits in maize. Maize Genetics Conference. St Charles, IL, March 17-20.
42. Beissinger, T., N. de Leon and S. M. Kaeppler (2011). Effect of allele frequency changes on the ability to detect loci of genetic importance in the Golden Glow maize population long term selection. Maize Genetics Conference. St Charles, IL, March 17-20.
43. Sekhon, R., N. Santoro, E. Rothfusz, N. de Leon, S. Kaeppler (2011). Transcriptional and metabolic changes during induced senescence in maize. Maize Genetics Conference. St Charles, IL, March 17-20.
44. Sekhon, R., N. Santoro, E. Rothfusz, N. de Leon, S. Kaeppler (2011). Metabolic reprogramming and genetic variation associated with pre-mature senescence in maize. NCCC-167 Corn Breeding Meeting. St Charles, IL, March 16-17.
45. Hansey, C. N., R. S. Sekhon, J. M. Johnson, C. R. Buell, S. M. Kaeppler, N. de Leon (2011). Genetic Diversity of a Maize Association Population with Restricted Phenology. Gordon Research Conference – Quantitative Genetics. Galveston, TX, February 20-25.
46. Foerster, J., N. de Leon, C. Hansey, E. Riedeman, R. Sekhon, W. Tracy, H. Kaeppler and S. Kaeppler (2010). Genetic Architecture of Vegetative Phase Change in Maize. ASA-CSSA-SSSA International Meetings, Long Beach, CA, October 31 - November 3.
47. Sekhon, R., H. Lin, K. Childs, C.R. Buell, C. Hansey, N. de Leon and S. Kaeppler (2010). Dynamics of Lignin Pathway Gene Expression During Maize Development. ASA-CSSA-SSSA International Meetings, Long Beach, CA, October 31 - November 3.
48. Hansey, C. and N. de Leon (2010). Effect of Plant Morphology and Planting Methodology On Biomass Production and Compositional Characteristics in Maize. ASA-CSSA-SSSA International Meetings, Long Beach, CA, October 31 - November 3.
49. Johnson, J.M, S. Kaeppler and N. de Leon (2010). Approaches to Association Analysis In a Hybrid Context In Maize. ASA-CSSA-SSSA International Meetings, Long Beach, CA, October 31 - November 3.
50. Yerka, M., D. Stoltenberg and N. de Leon (2010). The Role of Gene Flow In the Spread of *Chenopodium album* Resistance to Herbicides. ASA-CSSA-SSSA International Meetings, Long Beach, CA, October 31 - November 3.
51. Kaeppler, S., C. Hansey, J. Johnson, R. Sekhon and N. de Leon (2010). Resources for maize association analysis. NCCC-167 Corn Breeding annual meeting. Sheraton Four-Points Hotel. Chicago IL, April 6-7.
52. Foerster, J., C. Hansey, E. Riedeman, R. Sekhon, W.F. Tracy, N. de Leon and S. Kaeppler (2010). Genetic architecture of vegetative phase transition in maize. Maize Genetics Conference. Riva del Garda, Italy. March 18 – 21.

53. Hansey, C., J. Johnson, R. Sekhon, S. Kaeppler and N. de Leon (2010). Genetic diversity of a Maize Association Population with Restricted Phenology. Maize Genetics Conference. Riva del Garda, Italy. March 18 – 21.
54. Sekhon, R., H. Lin, K. Childs, R. Buell, C. Hansey, N. de Leon and S. Kaeppler (2010). Genome-wide atlas of gene transcription through maize development from germinating seed to maturing seed. Maize Genetics Conference. Riva del Garda, Italy. March 18 – 21.
55. Viesselmann, L.M., M.A. Chandler, C. Hansey, A.L. Bodnar, N. de Leon., S. Kaeppler, M.P. Scott and W. Tracy (2010). Differential zein protein levels in su1 populations divergently selected for visual endosperm starchiness. Maize Genetics Conference. Riva del Garda, Italy. March 18 – 21.
56. Zalapa, J.E., M.D. Casler, S.M. Kaeppler, N. de Leon and C.M. Tobias (2010). EST-SSR Markers discriminate switchgrass ecotypes. 2010 Genomic Science Contractor-Grantee and Knowledgebase Workshop. Crystal City, VA, February 7-10.
57. Lauer, J.G., R.D. Shaver, J.G. Coors, P. Hoffman and N. de Leon (2009). Evaluating performance of corn hybrids for silage production on Wisconsin farms. The XVth International Silage Conference, Madison, WI, July 27-29.
58. Hansey, C.N., E. Riedeman, R. Sekhon, W. Tracy, N. de Leon and S. Kaeppler (2009). The Genetic Architecture of Vegetative Phase Change. NCCC-167 Corn Breeding Meeting, Allerton Conference Center, Monticello IL, March 10-12.
59. Hansey, C.N., A. Lorenz and N. de Leon (2009). Variation for compositional attributes of maize plant parts across hybrids and associations between plant development stages. NCCC-167 Corn Breeding Meeting, Allerton Conference Center, Monticello IL, March 10-12.
60. Gustafson, T.J., J.G. Coors and N. de Leon (2009). Breeding maize for enhanced silage quality: aspects of stover and grain improvement. NCCC-167 Corn Breeding Meeting, Allerton Conference Center, Monticello IL, March 10-12.
61. Lorenz, A.J., T.J. Gustafson, J.G. Coors and N. de Leon (2009). Is Harvest Index Related to Maize Productivity? NCCC-167 Corn Breeding Meeting, Allerton Conference Center, Monticello IL, March 10-12.
62. Hansey, C.N. and N. de Leon (2009). Effect of Plant Morphology and Planting Methodology on Biomass Production and Compositional Characteristics in Maize. Maize Genetics Conference. St. Charles, IL. March 12 - 15.
63. Gustafson, T., N. de Leon, and J.G. Coors (2008). Evaluation of Selection for Silage Quality in Wisconsin Quality Synthetic and Connections to Maize Biofeedstock Breeding. ASA-CSSA-SSSA International Meetings, Houston, TX, October 5 - 9.
64. Lorenz, A. and N. de Leon (2008). Variation for compositional attributes of maize plant parts across hybrids and associations between plant developmental stages. The Pan American Congress on Plants & BioEnergy. Merida, Mexico, June 22 – 25.
65. Lorenz, A., N. de Leon and J. G. Coors (2008). Analysis and inheritance of maize traits related to cellulosic biofuels production. The Pan American Congress on Plants & BioEnergy. Merida, Mexico, June 22 -25.
66. Hansey C., and N. de Leon (2008). Axillary meristem development of a variable penetrance maize mutant, *grassy tillers1*. Maize Genetics Conference. Washington, DC. February 27-March 2.

INVITED PRESENTATIONS (* INDICATES PRESENTER):

- de Leon, N* & G2F Consortium- The US Maize G X E Project: Overview, Progress and Perspective. XXIIIrd EUCARPIA Maize and Sorghum Conference: Genomics and Phenomics for Model-based Maize and Sorghum Breeding, Montpellier, France, June 10 – 12, 2015.
- de Leon, N* - Genomic Signatures of Long Term Selection Programs in Maize. – KWS Headquarters, Einbeck, Germany, April 24, 2015.
- de Leon, N* - Genomic Signatures of Long Term Selection Programs in Maize. Synbreed Colloquium: Understanding and predicting complex traits through genome discovery. Technical University of Munich, Freising, Germany, March 4 – 6, 2015.
- de Leon, N* - Connecting Genotypes and Phenotypes in a Complex Genome, the Example of Maize. Technical University of Munich Institute for Advanced Study Fellow's Seminar Series, Garching, Germany, February 2, 2015
- de Leon, N* & G2F Consortium - Corn & Sorghum Genetics for the Downstream Customer: The G2F Initiative, 69th Corn and Sorghum Seed Research Conference, Hyatt Regency, Chicago, IL, December 12, 2014
- de Leon, N*, S.M Kaeppler, E. Spalding, N. Miller, N. Haase, J. Gage & G2F Consortium - Utilization of High-Throughput Phenotyping Tools for Plant Improvement – Big Data Symposium: From Data to Knowledge. Lincoln, NE, November 6 & 7, 2014
- de Leon, N*, S.M Kaeppler, C.R. Buell, C.N. Hirsch, J.M. Foerster, G. Muttoni, J. Johnson, R. Sekhon, B. Vaillancourt - Maize GWAS and Trait Discovery. TCAP Seminar Series, October 22, 2014 - <http://www.triticeacap.org/tcap-seminar-series/>
- de Leon, N* & D. Ertl - Genomes To Fields (G2F) Phenotyping Update – Presentation to the IA Corn Growers Board – Johnston, IA, August 12, 2014
- de Leon, N* - Genomic Signatures of Long Term Selection Programs in Maize – Seminar in Animal Genetics, Department of Animal and Dairy Sciences UW- Madison, April 1, 2014
- de Leon, N* - Genomic Signatures of Long Term Selection Programs in Maize - 50th Annual Illinois Corn Breeders' School - I-Hotel and Conference Center, Champaign, Illinois - March 3-4, 2014
- de Leon, N* - Genomic Signatures of Long Term Selection Programs in Maize. Cornell University Plant Breeding and Genetics Seminar Series, Ithaca, NY, November 18, 2013
- de Leon, N* - Utilization of Plant Biomass for the Production of Biofuels: The Example of Maize. Interface Colloquium – UW Department of Materials Science and Engineering, Madison, WI, November 13, 2013
- de Leon, N* - Connecting Genotypes and Phenotypes for the Improvement of Biomass Production in Maize. Pioneer Hi-Breds, Johnston, IA, August 21, 2013
- de Leon, N* - Connecting Genotypes and Phenotypes in a Complex Genome, the Example of Maize. Escola Superior de Agricultura Luiz de Queiroz, University of Sao Paulo, Piracicaba, SP, Brazil, July 3, 2013
- de Leon, N* - Connecting Genotypes and Phenotypes in a Complex Genome, the Example of Maize. University of Sao Paulo State, Botucatu, SP, Brazil, June 21, 2013
- de Leon, N* - Utility of complementary populations structures for genome wide association studies in maize. National Association of Plant Breeders. Tampa, FL. June 2 to 5, 2013
- de Leon, N.*, S.M. Kaeppler, M.D. Casler. Translational Genomics in Grasses. Genomic Science Annual Contractor-Grantee Meeting/USDA-DOE Plant Feedstock Genomics for Bioenergy Program Meeting, Bethesda, MD, February 24-27, 2013
- de Leon, N.*. Integrated Strategies for Genome-Wide Association Studies. Gordon Research Conference in Quantitative Genetics and Genomics, Galveston, TX, February 17-22, 2013

- Hansey, C*, B. Vaillancourt, R. Sekhon, N. de Leon, S. Kaeppler, C.R. Buell (2012). Maize genome diversity as revealed by RNA sequencing. Maize Genetics Conference. Portland, OR, March 15-18, 2013.
- de Leon, N*. Breeding Corn for Silage: Resources and Technologies Developed in the UW Program. Wisconsin Crop Management Meeting, Alliant Energy Center, Madison, WI, – January 10-12, 2012.
- Kaeppler, S.*, N. de Leon, R. Sekhon, C. Hansey, C. Buell, H. Lin and K. Childs. Expression Analysis Supporting Functional Genomics Research In Maize. Symposium--RNA Profiling Applications to Crop Improvement. ASA-CSSA-SSSA International Meetings, San Antonio, TX, October 16-19, 2011.
- de Leon, N*. The University of Wisconsin Corn Silage Breeding Program. Pioneer Janesville station, Janesville, WI – September, 19th, 2011.
- de Leon, N*, S. Kaeppler and G. Sanford. Biomass Production, harvest and storage, Great Lakes Bioenergy Research Center Annual Retreat - South Bend, IN - May 18th, 2011.
- de Leon, N* and S. Kaeppler. Linking of cell wall digestibility and fermentation studies, Great Lakes Bioenergy Research Center Annual Retreat - South Bend, IN - May 18th, 2011.
- de Leon, N*. Breeding maize for feed and fuel: Improvement of forage and stover quality. University of Minnesota Plant Breeding Symposium, Continuing Education and Conference Center University of Minnesota, St. Paul, March 14th, 2011.
- de Leon, N* and C.N. Hansey. Breeding Improved Lignocellulosic Stover for Biofuels. Corn & Sorghum and Soybean Seed Research Conference, American Seed Trade Association Annual Meeting, Hyatt Regency Hotel - Chicago, IL - December 9th, 2010.
- Kaeppler, S.M.* and N. de Leon. Designing Crop Varieties for Lignocellulosic Ethanol Production, Symposium--Biomass Energy Systems: Breeding, Genetics, & Genomics, ASA-CSSA-SSSA International Meetings, Long Beach, CA, November 1st, 2010.
- de Leon, N*. Genetic Improvement of Corn for Lignocellulosic Biofuel Production. Monsanto Auditorium, Life Sciences Center, University of Missouri - Columbia, MO - September 22nd, 2010.
- de Leon, N*, S.M. Kaeppler, H. Kaeppler and M. Casler. Issues Related to the Use of Residues from Annual Crops, Sustainable production of improved biomass Session, Great Lakes Bioenergy Research Center Scientific Advisory Board Annual Meeting, Madison Concourse Hotel - Madison, WI – July 13th, 2010.
- de Leon, N*. The diversity of feedstocks within and across species – Biofeedstock center resources, baseline feedstock needs, feedstock analysis platforms, and feedstock quality issues related to ethanol production breakout session, Great Lakes Bioenergy Research Center Annual Retreat - South Bend, IN - May 19th, 2010.
- de Leon, N*. The Corn Silage and Biofeedstock Breeding Program at UW – 2009 North Central Branch of the American Society of Agronomy Annual Meeting, Wisconsin Dells, WI, July 23rd, 2009.
- de Leon, N*. Utilization of Lignocellulosic Biomass for Bioenergy Production: A Plant Scientist Perspective. UW Masters of Sciences in Biotechnology, February 6th, 2009.
- de Leon, N*. The Plant Breeding and Plant Genetics Program at UW – Agricultural College of the National University of Uruguay – Montevideo, Uruguay – December 29th 2008.
- de Leon, N*. The Corn Silage and Biofeedstock Breeding Program at UW – GEM Cooperators Meeting – American Seed Trade Association Annual Meeting – Chicago, IL - December 10th 2008.
- de Leon, N*. Outlook and Challenges of Breeding Corn for Lignocellulosic Biofeedstock Production. Symposium –Symposium: Challenges to Transforming Forage Germplasm into Bioenergy Crops. C06 Forage and Grazinglands; A10 Bioenergy and Agroindustrial Systems (Provisional), C08 Plant Genetic Resources. ASA-CSSA-SSSA Annual Meeting. Houston, TX October 7th 2008.

- de Leon, N*. Genetic Improvement of Feedstock for Biofuel Industry – Department of Agronomy – University of Padova, Padova, Italy. September 10th 2008.
- de Leon, N*. The Corn Silage and Biofeedstock Breeding Program at UW – Iowa State University Department of Agronomy, Ames, IA. September 18th 2008.
- de Leon, N*. Corn Plant Breeding - Biomass and Cell Wall Composition - UW-Extension Team Grains Professional Development. June 19th 2008.
- de Leon, N*. Utilization of Lignocellulosic Biomass for Bioenergy Production: A Plant Scientist Perspective. Animal Genomic Seminar, Department of Animal and Dairy Sciences UW, May 6th 2008.
- de Leon, N*. Utilization of Corn Stover as a Source of Biofeedstock for the Biofuel Industry. UW Rural Media Forum, March 13th 2008.
- de Leon, N*. Utilization of Lignocellulosic Biomass for Bioenergy Production: A Plant Scientist Perspective. UW Masters of Sciences in Biotechnology, February 8th 2008.

TEACHING RESPONSIBILITIES:

- Agronomy/Horticulture 811 - Biometrical Procedures in Plant Breeding (teach 75% and coordinate the course overall); 3cr. Advanced graduate level course.
- Agronomy/Horticulture 850 - Advanced Plant Breeding and Selection Theory (teach and coordinate 100% of course); 3cr. Advanced graduate level course.

ADVISING:

- Ph.D. (completed) - 3 - Candy (Hansey) Hirsch, German Muttoni – Plant Breeding and Plant Genetics; Timothy Beissinger - Statistical and Quantitative Genetics
 - M.S. (completed) - 1 - Tim Gustafson - Plant Breeding and Plant Genetics
 - Ph.D. co-advised (current) - 1 - Brett Burdo - Plant Breeding and Plant Genetics
 - Ph.D. co-advised (completed) - 3 - Melinda Yerka, Aaron Lorenz, Ntjapa Lebaka - Plant Breeding and Plant Genetics
 - Ph.D. (current) - 3 - Nicholas Haase, Joe Gage, Calli Anibas - Plant Breeding and Plant Genetics
 - M.S. (current) - 1 - Jonathan Renk - Plant Breeding and Plant Genetics
 - Post doctoral fellows (current) - 2 - Marlies Heckwolf, Mona Mazaheri
 - Post doctoral fellows (past) - 2 - Rajan Sekhon, Renato Rodrigues Silva
 - Visiting scientist (current) – 1 – Manfred Mayer
 - Visiting scientist (past) – 6 – Luis Alberto Galicia Flores, Fred Rattunde Weltzien, Eva Rattunde Weltzien, Marcela Mendes, Sigifredo Balderrama, Camila Ribeiro
- Graduate students committees total to date – 44 students (M.S. and Ph.D.)
 - Undergraduate students in the Biology Major total advised to date – 37 students
 - Directed research project and internship advisor total to date – 12 undergraduate students

Student Name	Targeted Degree	Advisor	Date		
			Certification meeting	Prelim Exam	Thesis Defense
<i>Michael Chandler</i>	Ph.D. PBPG†	William Tracy	07/05/06	06/08/07	04/03/08
<i>Aaron Lorenz</i>	Ph.D. PBPG	James Coors/ Natalia de Leon	07/05/06	05/24/07	11/25/08

<i>Zhe Yan</i>	M.S. Agronomy	Joseph Lauer			03/06/07
<i>Carrin Carlson</i>	M.S. PBPG	Dennis Stimart			12/14/07
<i>Kevin Thalacker</i>	M.S. PBPG	William Tracy			12/11/07
<i>Isabelle Delannay</i>	Ph.D. PBPG	Jack Staub/ Phil Simon		10/16/07	07/30/09
<i>Chad Kramer</i>	Ph.D. PBPG	Tom Osborn			08/03/07
<i>Eric Riedeman</i>	M.S. PBPG	William Tracy			06/21/07
<i>Eric Riedeman</i>	Ph.D. PBPG	William Tracy	12/01/08	04/17/09	04/21/10
<i>Gabriela Ronquillo</i>	M.S. PBPG	James Nienhuis			08/17/09
<i>Hugo Cuevas</i>	Ph.D. PBPG	Jack Staub			08/22/08
<i>Robert Kane</i>	M.S. PBPG	Phil Simon			06/12/08
<i>Timothy Gustafson</i>	M.S. PBPG	Natalia de Leon			04/08/09
<i>Candy Hansey</i>	Ph.D. PBPG	Natalia de Leon	02/07/08	03/27/09	06/03/10
<i>Jared Zyskowski</i>	M.S. PBPG	William Tracy			03/31/09
<i>Leah Viesselmann</i>	M.S. PBPG	William Tracy			04/14/09
<i>Jason Cook</i>	Ph.D. PBPG	Heidi Kaeppler			07/15/09
<i>Timothy Beissinger</i>	Ph.D. Statistical and Quantitative Genetics	Natalia de Leon	09/29/09	08/16/12	05/12/14
<i>Steve Wilkens</i>	M.S. Agronomy	Joseph Lauer			01/09/12
<i>Melinda (Markham) Yerka</i>	Ph.D. PBPG	Natalia de Leon/ Dave Stoltenberg	11/17/09	06/16/10	11/30/11
<i>Loren Trimble</i>	Ph.D. PBPG	William Tracy	06/07/10	03/31/11	04/23/12
<i>Leah Viesselmann</i>	Ph.D. PBPG	William Tracy	06/17/10	12/02/10	09/30/11
<i>German Muttoni</i>	Ph.D. PBPG	Natalia de Leon	08/30/10	12/11/12	05/29/13
<i>Stella Salvo</i>	Ph.D. PBPG	Heidi Kaeppler	09/27/10	05/15/12	08/27/14
<i>Karl Von Mogel</i>	Ph.D. PBPG	Shawn Kaeppler	10/05/10	03/24/11	05/23/14
<i>Nicholas Howard</i>	M.S. PBPG	Mike Havey			06/08/11
<i>James Johnson</i>	Ph.D. PBPG	Shawn Kaeppler	11/30/10	12/12/11	08/12/13
<i>Jillian Foerster</i>	Ph.D. PBPG	Shawn Kaeppler	01/13/11	12/13/11	07/08/13
<i>David Price</i>	Ph.D. PBPG	Mike Casler	07/20/11	04/03/12	05/15/13
<i>Pattama Hannok</i>	Ph.D. PBPG	Kevin Pixley	09/27/11	05/02/14	07/14/15
<i>Janejira Duangjit</i>	Ph.D. PBPG	Mike Havey	04/13/12	09/20/12	07/09/13
<i>Adrienne Shelton</i>	M.S. PBPG	William Tracy			09/26/12
<i>Kyle Rak</i>	Ph.D. PBPG	Jiwan Palta	09/20/12	08/23/13	
<i>Steve Damon</i>	Ph.D. PBPG	Mike Havey	11/01/12	03/21/13	04/23/14
<i>Chin Jian Yang</i>	Ph.D. Genetics	John Doebley	02/14/13		
<i>Reid Rice</i>	Ph.D. PBPG	William Tracy	03/08/13	04/03/13	
<i>Axel Ramirez-</i>	Ph.D. PBPG	Mike Havey	05/14/13	11/20/14	

<i>Madera</i>					
<i>Nick Haase</i>	Ph.D. PBPG	Natalia de Leon	12/06/13	06/18/14	
<i>Brittany Glaza</i>	M.S. PBPG	William Tracy			01/22/14
<i>Joe Gage</i>	Ph.D. PBPG	Natalia de Leon	12/16/14		
<i>Maria Sardi</i>	Ph.D. Microbiology	Audrey Gasch		07/07/14	
<i>Scott Stelpflug</i>	Ph.D. PBPG	Shawn Kaeppler	09/20/13	06/02/14	
<i>Yaodong Hu</i>	Ph.D. Animal Sciences	Dan Gianola		12/02/13	05/12/15
<i>Calli Anibas</i>	M.S. PBPG	Natalia de Leon	12/18/14		
<i>Guillaume Ramstein</i>	Ph.D. PBPG	Mike Casler	03/24/14	03/16/15	
<i>Raghuveer Sripathi</i>	Ph.D. PBPG	Mike Casler	04/16/14	04/13/15	
<i>Jared Zystro</i>	Ph.D. PBPG	William Tracy	04/21/15		
<i>Tim Gustafson</i>	Ph.D. PBPG	William Tracy	05/12/15		
<i>Eduardo Covarrubias</i>	Ph.D. PBPG	Juan Zalapa	07/08/15		

GERMPLASM RELEASES:

a) Maize populations:

1. Wisconsin Quality Synthetic Cycle 4 (WQS C4) - WQS is a broad-based synthetic with a maturity of approximately 100 to 110RM. Inbreds derived from WQS combine well with inbreds derived from the Stiff Stalk Synthetic.
2. GEM Quality Synthetic Cycle 1 (GQS C1) – GQS was developed from the cross CUBA164:S1517 and CUBA117:S1520 from the Germplasm Enhancement of Maize program at Iowa State University. Inbreds derived from GQS combine well with inbreds derived from the Non-Stiff Stalk Synthetic.

b) Inbred lines (relative maturity of these lines is approximately 105 RM):

1. W606S - Inbred line developed from germplasm provided by the GEM program and released in late 2009 from population SCRO1:N1310-398. Line is a Non-Stiff Stalk type.
2. W607S - Inbred line developed from germplasm provided by the GEM program and released in late 2009 from population BR52051:N04-76. Line is a Non-Stiff Stalk type.
3. W608S - Inbred line developed from germplasm provided by the GEM program and released in late 2009 from population CHO5015:N15-8. Line is a Non-Stiff Stalk type.
4. W609S - Inbred line developed from germplasm provided by the GEM program and released in late 2009 from population FS8B(T):N11a-322. Line is a Non-Stiff Stalk type.
5. W610S - Inbred line developed from germplasm provided by the GEM program and released in late 2009 from population CUBA164:S2012-235. Line is a Stiff Stalk type.
6. W611S - Inbred line developed from WQS C2 and released in 2009.
7. W612S - Inbred line developed from WQS C2 and released in 2009.
8. W613S - Inbred line developed from WQS C3 and released in 2012.
9. W614S - Inbred line developed from WQS C3 and released in 2012.
10. W615S - Inbred line developed from GQS C0 and released in 2012.

11. W616S - Inbred line developed from germplasm provided by the GEM program and released in 2012 from population AR16026:S1719-052.

SERVICE:

a) University service

- Chair of search committee Agronomy Small Grain Breeding and Genetics position (2014)
- Graduate School Research Competition Committee Member (2014 to present)
- College of Agricultural & Life Sciences' Research Advisory Committee (2013)
- College of Agricultural & Life Sciences' Equity and Diversity Committee (2013 to present)
- UW Women at the University Committee (2010 to present – co-chair in 2013-14 and 2015-16)
- Campus Wide Ad Hoc Bullying Committee (2013 - 2014)
- Department of Agronomy Curriculum Committee (2007 to present)
- Department of Agronomy Hatch Capital Exercise Committee (2007 to present)
- Department of Agronomy Farms: West Madison and Seeds Building Committee (2009 to present)
- Department of Agronomy Seeds Building Committee – (2011 to present, interim chair in 2012)
- Search committee CALS population/quantitative genetics position (2011)
- Plant Breeding and Plant Genetics Fellowship Committee (2008 to 2013)
- Plant Breeding and Plant Genetics Curriculum Committee (2008 to present)
- College of Agricultural & Life Sciences Biometry Committee (2008, 2009)
- Department of Agronomy Seed Certification and Foundation Seeds Committee (2008)
- Department of Agronomy Graduate Studies Committee (2008, 2009)
- Graduate Student Screen Committee for Pioneer Fellowship (2008)
- Committee for Cucurbita Research Faculty Position at UW Horticulture Department (2008)

b) Editorial duties

- Associate Editor Theoretical and Applied Genetics (2012 to present)
- Associate Editor Crop Science (2012 to present)
- Associate Editor Scientia Agricola (2012 to present)
- Reviewer for Crop Science (2008 to present)
- Reviewer for Euphytica (2007 to present)
- Reviewer for Maydica (2007 to present)
- Reviewer for Theoretical and Applied Genetics (2011 to present)
- Reviewer for G3 (2014 to present)

c) Grant reviews

- Ad-hoc reviewer National Science Foundation Plant Genome Research - 2012
- Ad-hoc proposal reviewer for the International Center for Wheat and Corn Breeding Research (CIMMYT) – MASAGRO project- 2011
- National Science Foundation Plant Genome Research Program review panel participant - 2011
- Ad-hoc reviewer of NSF 08-607 – Organizational unit: Plant Genome Research Project - 2009
- Ad-hoc reviewer Univ. of Minnesota's Discovery Grant program on biofuels and related areas - 2007
- Reviewer for research project plan for USDA NP 301 – Plant Genetic Resources, Genomics and Genetic Improvement Research Group, Corn Insect and Crop Genetics Research Unit - 2007

d) Committees

- Member of USDA Germplasm Enhancement of Maize (GEM) Steering Committee (2007 to 2013) (travel to Washington DC in February 2009 to lobby for continuous support of the GEM program)
- Member of the International Board of the Acta Scientiarum- Agronomy Journal (2008 to present)
- Representative of the Multistate Research Program NCR-167 (Corn Breeding Research) – attended meeting March 21-22, 2007; Feb 26-27, 2008; March 10-12, 2009, April 7, 2010, March 16-17, 2011, March 14-15, 2013, December 9-10, 2013.