

Lucia Gutierrez

Associate Professor

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EDUCATION

Post-doc at Wageningen University and Research Center, Netherlands. 2010. Statistical Genetics to develop Quantitative Genetics tools. Supervisor: Dr. F. van eeuwijk.
Ph.D. in Plant Breeding and Ecology and Evolutionary Biology with a minor in Statistics. 2008. Iowa State University (ISU), USA. Dissertation: Genetic diversity in cultivated and wild *Hordeum* species. Advisors Dr. J.-L. Jannink, Dr. J. Nason.
Ingeniera Agronoma (Agriculture). 2001. College of Agriculture (FAGRO), Universidad de la Republica, Uruguay (UDELAR). Thesis: Comparison of the racial with a numerical classification of the Uruguayan maize collection (in Spanish). Advisors Dr. T.E. Abadie, Dr. J.E. Franco.

RESEARCH AND PROFESSIONAL EXPERIENCE

Current position

2020 – Present. Associate Professor, Department of Agronomy, University of Wisconsin - Madison. Cereals Breeding and Quantitative Genetics.
2014 – Present. Associate Prof. Statistics Department, FAGRO, UDELAR. Statistical Genetics.

Past positions

2022 – 2023. Visiting professor on sabbatical at Swedish Agricultural University (SLU), Sweden.
2023 – 2023. Visiting professor on sabbatical at Hohenheim University, Germany.
2015 – 2020. Assistant Professor, Department of Agronomy, University of Wisconsin - Madison.
2008 – 2014. Assistant Professor, Statistics Dep., FAGRO, UDELAR, Statistical Genetics.
2009 – 2009. Visiting Scientist at OSU with Dr. Hayes. Association mapping in the Barley CAP.
2002 – 2008. Research Assistant in Plant Breeding, ISU Dr. Jannink in Quantitative Genetics.
2002 – 2002. Internship at CIMMYT with Dr. Crossa in Biometrics and Statistics.
2001 – 2001. Research Assistant in Genetics, UDELAR, Dr. Abadie in Quantitative Genetics.
2000 - 2000. Research Assistant at the National Agriculture Research Institute (INIA), Uruguay.
1998 – 2000. Research Assistant in Biochemistry, UDELAR, Uruguay.

TEACHING

International courses

Quantitative Genetics for Plant Breeding. Co-teach Walsh, Gore. Brazil-2015. South Korea-2016. Cornell-2017. Uruguay-2018. India-2023. Sweden-2023. Uruguay – 2024 (Expected).
Genomics-based breeding for climate adaptation. NOVA course. Co-teach Lillemo. Norway 2023.
Introduction to Plant Quantitative Genetics. TPBI, UA-USA. Co-teach Walsh, Gore. 2013-2020.
Advanced Statistical Plant Breeding. TPBI, UA-USA. Co-teach Walsh and Gore. 2013-2020.
Marker-Assisted Plant Breeding. Co-teach Bernardo, UMN-USA 2012-2016, Advanta-Argentina 2013, UDELAR-Uruguay 2015.

Statistical Genetics. Co-teach Balzarini, Latin-American Statistical Societies, Chile 2014.
GxE and QTL Mapping. Co-teach van Eeuwijk for GCP, Spain, 2013.
GWAS in Plants. Co-teach Balzarini, Ibero-American Biometrics Conference, Argentina 2013.
GWAS Data Analysis Workshop, Latin-American Genetics Conference, Argentina 2012.
QTL detection and deployment. Co-teach van Eeuwijk for GCP, WUR-Netherlands 2011. Mixed
Models QTL Mapping. Co-teach Malosetti, UNC-Argentina 2011.
Statistical Genetics. Lab instructor for van Eeuwijk, Leiden University-Netherlands 2010.

Graduate courses

Experimental Design, UW-Madison, USA, 2017-present (Responsible).
Applications in ANOVA, UW-Madison, USA, 2017-present (Responsible).
Advanced Plant Breeding, SLU, Sweden, 2022 (Guest lecturer)
Current Topics in Plant Breeding and Genetics, Oregon State University, USA, 2021 (Guest lecturer).
Techniques of Plant Breeding, UW-Madison, USA, 2017, 2019 (Guest lecturer).
Plant Breeding and Plant Genetics Seminar, UW-Madison, USA, 2018 (Co-instructor).
Marker Assisted Plant Breeding, UW-Madison, USA, 2016 (Co-instructor).
Plant Disease Resistance, UW-Madison, USA, 2016 (Guest lecturer).
QTL Analysis, FAGRO, UDELAR, Uruguay, 2009-2017 (Co-instructor).
Advanced Plant Breeding, FAGRO, UDELAR, Uruguay, 2009-2014 (Co-instructor).
Statistical Inference, FAGRO, UDELAR, Uruguay, 2009-2012 (Responsible).
Quantitative Genetics, FAGRO, UDELAR, Uruguay, 2009 (Co-instructor).
Population and Quantitative Genetics for Breeding, ISU, USA, 2003 (Teaching Assistant).

Undergraduate courses

Plant Breeding and Biotechnology, UW-Madison, USA, 2016-present (Responsible).
Statistical Experimental Design, FAGRO, UDELAR, Uruguay, 2009-2015 (Responsible).
Plant Breeding, FAGRO, UDELAR, Uruguay, 2008, 2009, 2014 (Co-instructor, Guest Lecturer).
Issues in Sustainable Agriculture in Uruguay, ISU, USA, 2004, 2006 (Teaching Assistant).
Plant Breeding, FAGRO, UDELAR, Uruguay, 2001 (Teaching Assistant).

Mentorship

27 graduate students (6 current): *Current Ph.D. students (5)*: Ines Berro (2019-present), Pablo Sandro (2021-present), Rishap Dhakal (2022-present), Gopika Gopinathan (2022-present), Johanna Osterman (Com. 2023-present). *Current M.Sc. students (1)*: Guillermo Sniadower (C. 2022-present). *Ph.D. alumni (10)*: Andres Locatelli (C. 2017-2023, assistant professor at UdelaR), Raegan Hoefler (2018-2022, scientist at Syngenta, USA), Christopher Massman (2018-2022, post-doc at Oregon State University), Alejandra Borges (Com. 2014-2022, assistant professor at UdelaR), Pablo Gonzalez-Barrios (2016-2020, assistant professor at UdelaR), Gaston Quero (Com. 2014-2020, assistant professor at UdelaR), Rafael S. Nalin (C. 2016-2019, scientist at Bayer, Brazil), Eliana Monteverde (Com. 2016-2019, assistant professor, UdelaR), Bettina Lado (2013-2018, assistant professor at UdelaR), Juan Rosas (2012-2017, scientist at INIA). *M.Sc. alumni (11)*: Sarah Bullock (2018-2020, private industry), Pablo Sandro (C. 2014-2020, Ph.D. student UW- Madison), Ines Berro (2013-2017, Ph.D. student at UW-Madison), Natalia Berberian (2012-2016, lecturer at UdelaR), Andrea Garay (2012-2016), Sofia Brandariz (2013-2015, scientist at Bayer, USA), Pablo Gonzalez-Barrios (2011-2014, assistant professor at UdelaR), Camila Bonilla (C. 2011- 2014, postdoc at Wageningen University and Research Center), Paula Silva (DA. 2011-2014, scientist at INIA), Juan Pedro Posse (2010-2014, CEO Wayerhausser), Agustin Gonzalez (2011-2013, scientist, USA). Main supervisor unless otherwise noted: C=co-advisor, Com=committee member with substantial advisory role (others not listed here), DA=academic director.

26 undergraduate students. Sarojshree Namasivayam Janaki (Agron 399, 2023), Tanner Oyen (Biol 152, Sophomore Fellowship, 2020-2021), Madalene Halley (Biol 152, 2019), Cormac O'harrow (Chancellor;s Schollar, 2019-2020), Syeeda R. Simmons (Undergraduate Research Scholars, 2018), Chandler Siegenthaler (ARS Intern, 2018), Anna J. Muhich (Integrated Biological Sciences, 2016). Thesis or final project advisor: Sofia Brandariz (Ing. Agr. Thesis, 2013), Pablo Sandro (Ing. Agr. Thesis, 2014), Gabriel Perazza (B.S. Ecology final project, 2014), Natalia Berberian (B.S. Stats final project, 2011), Ines Berro (B.S. Stats final project, 2011), Martin Ibarra (Ing. Agr. Thesis, 2010), Mauricio Rodriguez (Ing. Agr. Thesis, 2010), Oscar Rodriguez (Ing. Agr. Thesis, 2010), Diego Michelini (Ing. Agr. Thesis, 2010), Gabriel Bueno (Ing. Agr. Thesis, 2010), Sebastian Segredo (Ing. Agr. Thesis, 2010). Statistical advisor: Bettina Porta (B.S. in Biology final project, 2013), Franco Bordenave (Ing. Agr. Thesis, 2013), Matias Mugurusa (Ing. Agr. Thesis, 2012), Fernando Rocha (Ing. Agr. Thesis, 2012), Mauro Cuña (Ing. Agr. Thesis, 2012), Mauro Mosqueira (Ing. Agr. Thesis, 2012), Agustin Boffano (Ing. Agr. Thesis, 2012), Ines Espasandin (Ing. Agr. Thesis, 2010).

3 post-doctoral fellows. Madhav Bhatta (2019-2020, senior scientist at Bayer, USA), Jose A. Nunes (2019-2020, assistant professor at Universidade Federal de Lavras, Brazil), Josefina Racedo (2015, scientist at EEAOC, Argentina).

8 junior scientist projects. Ines Rebollo (CSIC, 2020-2021), Pablo Gonzalez (DT, 2015 - 2021), Agustin Gonzalez (CSIC, 2014-2015), Andrea Garay (CSIC, 2014-2015), Santiago Masnaliski (ANII, 2014-2015), Pablo Sandro (ANII, 2013-2015), Alejandra Borges (CSIC, 2011-2013), Pablo Gonzalez (CSIC, 2011-2013).

12 graduate fellowship awards. Raegan Hoefler (Smith), Pablo Gonzalez (Goetz), Bettina Lado (ANII), Ines Berro (ANII), Ines Berro (CSIC), Natalia Berberian (ANII), Natalia Berberian (CSIC), Juan Rosas (MBBIS), Pablo Gonzalez (ANII), Agustin Gonzalez (ANII), Sofia Brandariz (ANII), Andrea Garay (CSIC).

13 visiting scientists and students. Guillermo Sniadower (2023, international master student internship from UdelaR, funded by CSIC Uruguay), Wesly Aníbal Curruchich Chalí, (2023, international master student internship from Escuela Agricola Panamericana Zamorano, Honduras). Ines Rebollo (2021, international master student internship from UdelaR, funded by CSIC Uruguay), Rafael S. Nalin (2019, sandwich Ph.D. student from ESALQ, University of Sao Paulo, Brazil), Pablo Sandro (2016, 2018-2019, international master student internship from UdelaR funded by CSIC, Uruguay), Ines Berro (2016, 2018, international master student internship from UdelaR funded by CSIC, Uruguay), Diane Rozzetto (2017, sandwich Ph.D. student from ESALQ, funded by the Santander program, Brazil), Olga Ponce (2017, visiting scientist from Universidad Peruana Cayetano Heredia, funded by the Peruvian government), Bettina Lado (2016, international Ph.D. student internship from UdelaR funded by CSIC, Uruguay), Cecilia Bruno (2015, visiting professor from Universidad Nacional de Cordoba, funded by the Argentinean government), Monica Balzarini (2015, visiting professor from Universidad Nacional de Cordoba, funded by the Argentinean government), Ignacio Alberdi (2014, visiting graduate student from Universidad Nacional de Mar del Plata, funded by the Argentinean government), Andrea Peña-Malavera (2012-2013 international Ph.D. student internship from Universidad Nacional de Cordoba, funded by the Argentinean government).

49 graduate student committees at the University of Wisconsin-Madison and Cornell University in the USA; Queensland University in Australia; University of Guelph and Laval University in Canada; Sao Paulo University in Brazil, Universidad de Tucuman in Argentina; Universidad de la Republica in Uruguay, Swedish Agricultural University and Lund University in Sweden, and the Norwegian University of Life Sciences in Norway. *Ph.D. (30)*: Johana Osterman (2023-present, SLU, Sweden), Rishap Dhakal (2022-present, UW-Madison, USA), Gopika Gopinathan (2022-present), Hector Lopez

(2022-present, UW-Madison, USA), Pablo Sandro (2021–present, UW- Madison, USA), Ines Berro (2019–present, UW-Madison, USA), Andres Locatelli (2017–present, UdelaR, Uruguay), Nikos Tsardakas Renhuldt (2023, Lund University, Sweden), Zach Zalewski (2018–2023, UW- Madison, USA), Magnus Göransson (2023, NMBU, Norway), Alejandra Borges (2014-2022, UdelaR, Uruguay), Paulina Letelier (2021, UW-Madison, USA), Alexandra Fitch (2021, University of Guelph, Canada), Neal Tilhou (2019–2022, UW-Madison, USA*), Raegan Hoefler (2018–2022, UW-Madison, USA), Christopher Massman (2018–2022, UW-Madison, USA), Jenyne Loarca (2019- 2021, UW-Madison, USA), Amina Abed (2019, Laval University, Canada), Keo Corak (2018-2021, UW-Madison, USA), Bridget McFarland (2018-2021, UW-Madison, USA), Amy E. Watson (2018, University of Queensland, Australia), Maria Caraza-Harter (2017-2020, UW-Madison, USA), Eliana Monteverde (2016-2019, Cornell University, USA), Pablo Gonzalez-Barrios (2016-2020, UW- Madison, USA), Brett Burdo (2016-2018, UW-Madison, USA), Rafael S. Nalin (2016-2019, ESALQ, Brazil), Gaston Quero (2015-2020, UdelaR, Uruguay), Josefina Racedo (2014, Universidad de Tucuman, Argentina), Bettina Lado (2013-2018, UdelaR, Uruguay), Juan Rosas (2012-2017, UdelaR, Uruguay). *M.Sc. (19)*: Guillermo Sniadower (2022-present, UdelaR, Uruguay), Ines Rebollo (2020- 2022, UdelaR, Uruguay), Sarah Bullock (2018-2020, UW-Madison, USA), Olivia Steinmetz (2018- 2019, UW-Madison, USA), Pablo Sandro (2017 – 2020, UdelaR, Uruguay), Ines Berro (2013-2017, UdelaR), Sofia Brandariz (2013-2015, UdelaR, Uruguay), Natalia Berberian (2012-2016, UdelaR, Uruguay), Andrea Garay (2012-2016, UdelaR, Uruguay), Pablo Gonzalez-Barrios (2011-2014, UdelaR, Uruguay), Camila Bonilla (2011-2014, UdelaR, Uruguay), Paula Silva (2011-2014, UdelaR, Uruguay), Agustin Gonzalez (2011-2013, UdelaR, Uruguay), Estela Baccino (2011, UdelaR, Uruguay), Gaston Quero (2010-2011, UdelaR, Uruguay), Juan Pedro Posse (2010-2014, UdelaR, Uruguay), Andres Locatelli (2009-2011, UdelaR, Uruguay), Leticia Bao (2009-2010, UdelaR, Uruguay), Rafael Vidal (2008-2009, UdelaR, Uruguay).

PUBLICATIONS IN REFEREED JOURNALS

- Sandro, P., Bhatta, M., Bower, A., Carlson, S., Jannink, J.-L., Waring, D.J., Birkett, C., Smith, K., Wiersma, J., Caffè, M., Kleinjan, J., McMullen, M.S., English, L., **Gutierrez, L.**‡ Genomic prediction for targeted populations of environments in oat (*Avena sativa* L.). In review Crop and Pasture Science (Jul 2023).
- Kunze, K.; Meints, B.; Massman, C.; **Gutierrez, L.**; Smith, K.P.; Hayes, P.; Sorrells, M.E. Genotype x Environment Interactions of Organic Winter Naked Barley for Agronomic, Disease and Grain Quality Traits. In review Crop Science (Jun 2023).
- Li, Z., **Gutierrez, L.** 2023. Editorial: Statistical Methods for Analysing Multiple Environmental Quantitative Genomic Data. Front. Genet. 14:121280. <https://doi.org/10.3389/fgene.2023.1212804>
- Rebollo, I., Aguilar, I., Perez de Vida, F., Molina, F., **Gutierrez, L.**, Rosas, J.‡ 2023. Genotype by environment interaction characterization and its modelling with random regression to climatic variables in two rice breeding populations. Crop Science. <https://doi.org/10.1002/csc2.21029>
- Brzozowski, L.J.‡, Campbell, M., Hu, H., Yao, L., Caffè, M., **Gutiérrez, L.**, Smith, K.P., Sorrells, M.E., Gore, M.A., Jannink, J.-L. 2023. Genomic prediction of seed nutritional traits in biparental families of oat (*Avena sativa*). The Plant Genome <https://doi.org/10.1002/tpg2.20370>
- Berro, I., Varela, J., **Gutierrez, L.**‡ 2023. An image-based methodology to evaluate oat panicle architecture. Crop Science 63(2):648–661. <https://doi.org/10.1002/csc2.20884>
- Massman, C., Meints, B., Hernandez, J., Kunze, K., Smith, K.P., Sorrells, M.E., Hayes, P.M., **Gutierrez, L.**‡ 2023. Genomic prediction of threshability in naked barley. Crop Science 63(2):674–689. <https://doi.org/10.1002/csc2.20907>
- Locatelli, A., **Gutierrez, L.**, Duchene, O., Speranza, P.R., Picasso, V.D. 2023. Agronomic performance of intermediate wheatgrass - Kernza® (*Thinopyrum intermedium*) in temperate South America. Grassland Research 1:262-278, <https://doi.org/10.1002/blr2.12032>

- Sandro, P., Kissing Kucek, L., Sorrells, M.E., Dawson, J.‡, **Gutierrez, L.**‡ 2022. Developing high-quality value-added cereals for organic systems in the U.S. Upper Midwest: hard red winter wheat (*Triticum aestivum* L.) breeding. *Theor Appl Genet* 1-23. <https://doi.org/10.1007/s00122-022-04112-0>
- Brzozowski, L.J.‡, Campbell, M.T., Hu, H., Broeckling, C.D., Caffè-Treml, M., **Gutierrez, L.**, Smith, K.P., Sorrells, M.E., Gore, M.A., and Jannink, J.-L. 2022. Generalizable approaches for genomic prediction of metabolites in plants. *The Plant Genome* 15(2): e20205. <https://doi.org/10.1002/tpg2.20205>
- Locatelli, A., **Gutierrez, L.**, Mastrandea, N., Viega, L., Castro, A.J.‡ 2022. Genetic control of barley phenology in South American environments. *Euphytica* 218:53. <https://doi.org/10.1007/s10681-022-02993-2>
- Massman, C., Meints, B., Hernandez, J., Kunze, K., Hayes, P.M., Sorrells, M.E., Smith, K.P., Dawson, J.C., **Gutierrez, L.**‡ 2022. Characterization of agronomic traits in organic spring naked barley. *Crop Science* 62(2): 690-703. <https://doi.org/10.1002/csc2.20686>
- Locatelli, A.; **Gutierrez, L.**; Picasso, V.‡. 2022. Vernalization requirements of Kernza intermediate wheatgrass (*Thinopyrum intermedium*). *Crop Science* 62(1): 524-535. <https://doi.org/10.1002/csc2.20667>
- Neyhart, J.L., Silverstein, K., **Gutierrez, L.**, Smith, K.P. 2022. Optimizing the choice of test locations for multi-trait genotypic evaluation. *Crop Science* 62(1): 192-202. <https://doi.org/10.1002/csc2.20657>
- Hu, H., Campbell, M.T., Yeats, T.H. Zheng, X., Runcie, D.E., Covarrubias-Pazarán, G., Broeckling, C., Yao, L., Caffè-Treml, M., **Gutiérrez, L.**, Smith, K.P., Tanaka, J., Hoekenga, O.A., Sorrells, M.E., Gore, M.A., Jannink, J.-L. 2021. Multi-omics prediction of oat agronomic and seed nutritional traits across environments and in distantly related populations. *Theor Appl Genet* 134, 4043–4054. <https://doi.org/10.1007/s00122-021-03946-4>
- Brzozowski, L.; Hu, H.; Campbell, M.; Broeckling, C.; Caffè-Treml, M.; **Gutierrez, L.**; Smith, K.; Sorrells, M.; Gore, M.; Jannink, J.-L. 2021. Selection for seed size has indirectly shaped specialized metabolite abundance in oat (*Avena sativa* L.). *G3 (Bethesda)*. 2021 Dec 10;jkab419. <http://doi.org/10.1093/g3journal/jkab419>
- Campbell, M.C.; Hu, H.; Yeats, T.H; Brzozowski, L.J; Caffè-Treml, M; **Gutierrez, L.**; Smith, K.P; Sorrells, M.E; Gore, M.A; Jannink, J.-L. 2021. Improving genomic prediction for seed quality traits in oat (*Avena sativa* L.) using trait-specific relationship matrices. *Frontiers in Genetics* 12:643733 <https://doi.org/10.3389/fgene.2021.643733>
- Campbell, M., Hu, H., Yeats, T., Caffè-Treml, M., **Gutierrez, L.**, Smith, K., Sorrells, M., Gore, M., Jannink, J.-L. 2021. Translating insights from the seed metabolome into improved prediction for lipid-composition traits in oat (*Avena sativa* L.). *Genetics*, 217(3): March 2021, iyaa043. <https://doi.org/10.1093/genetics/iyaa043>
- Bhatta, M., Sandro, P., Smith, MR., Delaney, O., Voss-Fels, K-P., **Gutierrez, L.**‡, Hickey, LT.‡ 2021. Need for speed: manipulating plant growth to accelerate breeding cycles. *Current Opinion in Plant Biology* 60, 101986. <https://doi.org/10.1016/j.pbi.2020.101986>
- Neyhart, J.L., **Gutiérrez, L.**, Smith, K.P. 2021. Using environmental similarities to design training sets for genomewide selection. *Crop Science* 61(1): 396-409. <https://doi.org/10.1002/csc2.20303>
- González-Barrios P., Bhatta M., Halley M., Sandro P., **Gutiérrez L.**‡ 2021. Speed breeding and early panicle harvest accelerates oat (*Avena sativa* L.) breeding cycles. *Crop Science* 61(1):320-330. <https://doi.org/10.1002/csc2.20269>
- Rosas, J., Escobar, M., Martínez, S., Blanco, P., Pérez, F., Quero, G., **Gutiérrez, L.**, Bonnacerrere, V. 2020. Epistasis and quantitative resistance to *Pyricularia oryzae* revealed by GWAS in advanced rice breeding populations. *Agriculture* 10:622. <http://doi:10.3390/agriculture10120622>
- Baraibar, S.; García, R.; Silva, P.; Lado, B.; Castro, A.; **Gutierrez, L.**; Kavanová, M.; Quincke, M.; Bhavani, S.; Randhawa, M.; Germán, S.‡ 2020. QTL mapping of resistance to Ug99 and other stem rust races in bread wheat. *Mol Breeding* 40:82. <https://doi.org/10.1007/s11032-020-01153-5>

- Hoefler, R., Gonzalez-Barrios, P., Bhatta, M., Berro, I., Nalin, R.S., Borges, A., Covarrubias, E., Diaz-Garcia, L., Gutierrez, L. 2020. Do spatial designs outperform classic experimental designs? *Journal of Agricultural, Biological, and Environmental Statistics* 25:523-552. <http://doi.org/10.1007/s13253-020-00406-2>
- Steinmetz, O.J., Huset, D.E., Rouse, D.I., Raasch, J.A., Gutiérrez, L., Riday, H. 2020. Synthetic Cultivar Parent Number Impacts on Genetic Drift and Disease Resistance in Alfalfa (*Medicago sativa* L.). *Crop Science* 60: 2304– 2316. <http://doi.org/10.1002/csc2.20219>
- González-Barrios, P., Borges, A., Terra, J., Pérez-Bidegain, M., Gutiérrez, L. 2020. Spatio-Temporal Modeling and Competition Dynamics in Forest Tillage Experiments on Early Growth of *Eucalyptus grandis* L. *Forest Science* 66(5): 526–536. <https://doi.org/10.1093/forsci/fxaa007>
- Quero, G., Bonnacarrère, V., Simondi, S., Santos, J., Fernandez, S., Gutierrez, L., Garaycochea, S., Borsani, O. 2020. Genetic architecture of photosynthesis energy partitioning as revealed by a genome-wide association approach. *Photosynth Res* 150: 97–115. <https://doi.org/10.1007/s11120-020-00721-2>
- Bhatta, M., Gutierrez, L., Cammarota, L., Cardozo, F., Germán, S., Gómez-Guerrero, B., Pardo, M.F., Lanaro, V., Sayas, M., Castro, A.J. 2020. Multi-trait Genomic Prediction Model Increased the Predictive Ability for Agronomic and Malting Quality Traits in Barley (*Hordeum vulgare* L.). *G3: Genes, Genomes, Genetics*. Mar 1;10(3):1113-24. <https://doi.org/10.1534/g3.119.400968>
- González-Barrios, P., Diaz-Garcia, L., Gutierrez, L. 2019. Mega-environmental design: using genotype by environment interaction to optimize resources for cultivar testing. *Crop Science* 59:1–17. <https://doi.org/10.2135/cropsci2018.11.0692>
- Borges, A., González-Reymúndez, A., Ernst, O., Cadenazzi, M., Terra, J., Gutierrez L. 2019. Can spatial modeling substitute for experimental design in agricultural experiments? *Crop Science* 59:44–53. <https://doi.org/10.2135/cropsci2018.03.0177>
- Berro, I., Nalin, R., Quincke M., Gutierrez, L. 2019. Training population optimization for genomic selection. *The Plant Genome* 12(3): 1-14. <https://doi.org/10.3835/plantgenome2019.04.0028>
- Monteverde, E., Gutierrez, L., Blanco, P., Pérez de Vida, F., Rosas, J.E., Bonnacarrère, V., Quero, G., McCouch, S. 2019. Integrating molecular markers and environmental covariates to interpret genotype by environment interaction in rice (*Oryza sativa* L.) grown in temperate areas. *G3: Genes, Genomes, Genetics* 9(5): 1519-1531; <https://doi.org/10.1534/g3.119.400064>
- Sandro, P., Gutierrez, L., Speranza, P. 2019. Distribution of genetic and phenotypic diversity in the autogamous perennial *Paspalum dilatatum* subsp. *flavescens* (Poaceae). *Genetic Resources and Crop Evolution* 66:1205-1216. <https://doi.org/10.1007/s10722-019-00791-9>
- Favre, J., Albrecht, K.A., Gutierrez, L., Picasso, V.D. 2019. Harvesting oat forage at late heading increases milk production per unit of area. *Crop, Forage and Turfgrass Management* 5(1):180046. <https://doi.org/10.2134/cftm2018.06.0046>
- Neyhart, J.L., Sweeney, D., Sorrells, M., Kapp, C., McFarland, A., Kephart, K.D., Sherman, J., Stockinger, E.J., Fisk, S., Hayes, P., Daba, S., Mohammadi, M., Hughes, N., Lukens, L., González Barrios, P., Gutierrez, L., Smith, K. 2019. Registration of the S2MET barley mapping population for multi-environment genomewide selection. *Journal of Plant Registration* 13:270-280. <https://doi.org/10.3198/jpr2018.06.0037crmp>
- Lado, B., Vazquez, D., Quincke, M., Silva, P., Aguilar, I., Gutiérrez, L. 2018. Resource Allocation Optimization with Multi-trait Genomic Prediction for Bread Wheat (*Triticum aestivum* L.) Quality. *Theoretical and Applied Genetics* 19:1-13. <https://doi.org/10.1007/s00122-018-3186-3>
- Quero, G., Gutierrez, L., Monteverde, E., Blanco, P., Perez de Vida, F., Rosas, J., Fernandez, S., Garaycochea, S., McCouch, S., Berberian, N., Simondi, S., Bonnacarrere, V. 2018. Genome-wide association study using historical breeding population discovers genomic regions involved in high-quality rice. *The Plant Genome* 11:170076. <https://doi.org/10.3835/plantgenome2017.08.0076>
- Monteverde, E.; Rosas, J.E.; Blanco, P.; Perez de Vida, F.; Bonnacarrere, V.; Quero, G.; Gutiérrez, L.; McCouch, S. 2018. Multi-Environment models increase prediction accuracy of complex traits in

- rice advanced breeding lines of rice (*O. sativa*). *Crop Science* 58:1519–1530. <https://doi.org/10.2135/cropsci2017.09.0564>
- Rosas, J.E.**, Martinez, S., Blanco, P., Perez de Vida, F., Bonnacarrere, V., Mosquera, G., Cruz, M., Fernandez, S., Garaycochea, Monteverde, E., McCouch, S., Silvia Germán, Jannink, J.-L., **Gutiérrez, L.** 2018. Resistance to Multiple Temperate and Tropical Stem and Sheath Diseases of Rice. *The Plant Genome* 11(1): 1-13. <https://doi.org/10.3835/plantgenome2017.03.0029>
- González-Barrios, P.**, Castro, M.; Pérez, O., Vilaró, D., **Gutiérrez, L.** 2017. Genotype by environment interaction in sunflower (*Helianthus annuus* L.) to optimize trial network efficiency. *Spanish Journal of Agricultural Research*, Volume 15, Issue 4, e0705. <https://doi.org/10.5424/sjar/2017154-11016>
- Lado, B.**, Battenfield, S., Guzman, C., Quincke, M., Singh, R.P., Dreisigacker, S., Peña, J., Fritz, A., Poland, J. 2017. Strategies to select crosses using genomic prediction in two wheat breeding programs. *The Plant Genome*. <https://doi.org/10.3835/plantgenome2016.12.0128>
- Gonzalez Reymundez, A.**, de los Campos, G., **Gutiérrez, L.**, Lunt, S., Vazquez Saravia, A.I. 2017. Prediction of Years of Life after Diagnosis of Breast Cancer Using Omics and Omic-by-Treatment Interactions. *Eur J Hum Genet*. 2017 25(5):538-544. <https://doi.org/10.1038/ejhg.2017.12>
- Brandariz, S.P.**, **González Reymúndez, A.**, **Lado, B.**, Malosetti, M., Garcia, A.A.F., Quincke, M., von Zitzewitz, J., Castro, M., Matus, I., del Pozo, A., Castro, A.J., **Gutiérrez, L.** 2016. Ascertainment bias from imputation methods evaluation in wheat. *BMC Genomics* 17:773 <https://doi.org/10.1186/s12864-016-3120-5>
- Racedo, J.**, **Gutiérrez, L.**, Perera, M.F., Ostengo, S., Pardo, E.M., Cuenya, M.I., Wellin, B., Castagnaro, A.P. 2016. Genome-wide association mapping of quantitative traits in a breeding population of sugarcane. *BMC Plant Biology* 16:142. <https://doi.org/10.1186/s12870-016-0829-x>
- Rosas, J.**, Martinez, S., Bonnacarrere, V., Perez de Vida, F., Blanco, P., Malosetti, M., Jannink, J.-L., **Gutiérrez, L.** 2016. Comparison of phenotyping methods for resistance to stem rot and aggregated sheath spot in rice. *Crop Sci*. 56:1619–1627. <https://doi.org/10.2135/cropsci2015.09.0598>
- Lado, B.**, Gonzalez-Barrios, P., Quincke, M., Silva, P., **Gutiérrez, L.** 2016. Modelling Genotype by Environment Interaction for Genomic Selection with Unbalanced Data from a Wheat (*Triticum aestivum* L.) Breeding Program. *Crop Science (Special Edition)* <https://doi.org/10.2135/cropsci2015.04.0207>
- Bonilla, C.**, Terra, J.A., **Gutiérrez, L.**, Roel, A. 2015. Harvesting precision agriculture benefits in rice from Uruguay (in Spanish). *Agrociencia (Uruguay)* 19(1): 112-121.
- González-Barrios, P.**, Pérez-Bidegain, M., **Gutiérrez, L.** 2015. Effects of tillage intensities on spatial soil variability and site-specific management in early growth of Eucalyptus. *Forest Ecology and Management* 346:41-50. <https://doi.org/10.1016/j.foreco.2015.02.031>
- Cajarville, C.**, Britos, A., Errandonea, N., **Gutiérrez, L.**, Cozzolino, D., Repetto, J. 2015. Diurnal changes in water soluble carbohydrate concentration and effect on in vitro fermentation of Lucerne and fescue in autumn. *New Zealand Journal of Agricultural Research*. <https://doi.org/10.1080/00288233.2015.1018391>
- Mourelle, D.**, Gaiero, P., Speroni, G., Millan, C., **Gutiérrez, L.**, Mazzella, C. 2015. Comparative pollen morphology and viability among endangered species of *Butia* (Arecaceae) and its implications for delimitation and conservation. *Palinology*. doi: 10.1080/01916122.2014.999955.
- Silva, P.**, Calvo-Salazar, V., Condon, F., Quincke, M., Pritsch, C., **Gutiérrez, L.**, Castro, A., Herrera-Foessel, S., von Zitzewitz, J., German, S. 2015. Effects and interactions of genes Lr34, Lr68 and Sr2 on wheat leaf rust adult plant resistance in Uruguay. *Euphytica*. <https://doi.org/10.1007/s10681-014-1343-6>
- Gonzalez-Barrios, P.**; Speranza, P.; Glison, N.; Piccardi, M.; Balzarni, M.; **Gutiérrez, L.** 2015 Analysis of flowering dynamics heritability in the perennial warm-season grass *Paspalum dilatatum*. *Grass and Forage Science* <https://doi.org/10.1111/gfs.12159>
- Gutiérrez, L.**; Germán, S.; Pereyra, S.; Hayes, P.M.; Pérez, C.A.; Capettini, F.; Locatelli, A.; **Berberian, N.M.**; Falcioni, E.; Estrada, R.; Fros, D.; Gonza, V.; Altamirano, H.; Huerta-Espino, J.; Neyra, E.; Orjeda, G.; Sandoval-Islas, S.; Singh, R.; Turkington, K.; Castro A.J. 2015. Multi-environment

- multi-QTL association mapping identifies disease resistance QTLs in barley germplasm from Latin America. *Theoretical and Applied Genetics* 128(3): 501-516. <https://doi.org/10.1007/s00122-014-2448-y>
- Bao, L.; Scatoni, I.B.; Gaggero, C.; **Gutierrez, L.**; Monza, J.; Walker, M.A. 2015. Genetic Diversity of Grape Phylloxera Leaf Gallings Populations on *Vitis* species in Uruguay. *American Journal of Enology and Viticulture* 66:46-53. Published ahead of print October 1, 2014. <https://doi.org/10.5344/ajev.2014.14026>
- Glison, N.; Viega, L.; Cornaglia, P.; **Gutierrez, L.**; Speranza, P. 2015. Variability in germination behaviour of *Paspalum dilatatum* Poir. seeds is genotype dependent. *Grass and Forage Science* 70(1): 144-153. <https://doi.org/10.1111/gfs.12119>
- Peña-Malavera, A.; **Gutierrez, L.**; Balzarini, M.[‡] 2014. Principal Components in Associative Mapping. *Journal of Basic and Applied Genetics* 25(2): 34-40.
- Rivas, M.; Jaurena, M.; **Gutierrez, L.**; Barbieri, R.L. 2014. Grassland diversity under *Butia odorata* (Barb. Rodr.) Noblick in Uruguay (in Spanish). *Agrociencia (Uruguay)* 18:14-27.
- Picasso, V.; Modernel, P.D.; Becoña, G.; Salvo, L.; **Gutierrez, L.**; Astigarraga, L. 2014. Sustainability of meat production beyond carbon footprint: a synthesis of case studies from grazing systems in Uruguay. *Meat Science* 98(3): 346 – 354.
- Quero, G.; **Gutierrez, L.**; Lascano, R.; Monza, J.; Sandal, N.; Borsani, O., 2014. Identification of QTLs for shoot and root growth under ionic-osmotic stress in *Lotus*, using a RIL population. *Crop and Pasture Science* 65(2): 139-149. <https://doi.org/10.1071/CP13222>
- Porta, B.; Rivas, Mercedes; **Gutierrez, L.**; Galván, G. 2014. Variability, Heritability, and Correlations of Agronomic Traits in an Onion Landrace and Derived S1-Lines. *Crop Breeding and Applied Biotechnology* 14: 29-35.
- Bellini, I.; **Gutierrez, L.**; Tarlera, S.; Fernández, A. 2013. Isolation and Functional Analysis of Denitrifiers in an Aquifer with High Potential for Denitrification. *Systematic and Applied Microbiology* 36 (7): 507-516.
- Quero, G.; Borsani, O., **Gutierrez, L.**; Melchiorre, M.; Monza, J.; Lascano, R. 2013. A phenotyping system for evaluating plant stress response in *Lotus* (in Spanish). *Agrociencia (Uruguay)* 17(1): 11–21.
- Locatelli, A.; Cuesta-Marcos, A.; **Gutierrez, L.**; Hayes, P.M.; Smith, K.P.; Castro, A.J. 2013. Genome-wide association mapping of agronomic traits in relevant barley germplasm in Uruguay. *Molecular Breeding*, 31: 631 – 654. <https://doi.org/10.1007/s11032-012-9820-x>
- Gonzalez, P.; Pérez, M.; **Gutierrez, L.**; Martinez, L.; Garcia-Prechac, F. 2012. Evaluation of Different Tillage Intensities on *Eucalyptus grandis* on a Typic Hapludult of Uruguay. *Agrociencia (Uruguay)*. 16(3): 302-305.
- Gutierrez, L.**; Cuesta-Marcos, A.; Castro, A.J.; Zitzewitz von, J.; Schmitt, Mark; Hayes, P.M. 2011. Association Mapping of Malting Quality Quantitative Trait Loci in Winter Barley: Positive Signals from Small Germplasm Arrays. *The Plant Genome* 4:256 – 272. <https://doi.org/10.3835/plantgenome2011.07.0020>
- Zitzewitz von, J., Cuesta-Marcos, A., Condon, F., Castro, A.J., Chao, S., Corey, A., Filichkin, T., Fisk, S.P., **Gutierrez, L.**, Haggard, K., Karsai, I., Muehlbauer, G.J., Smith, K.P., Veisz, O., Hayes, P.M. 2011. The Genetics of Winterhardiness in Barley: Perspectives from Genome-Wide Association Mapping. *The Plant Genome* 4(1): 76-91. <https://doi.org/10.3835/plantgenome2010.12.0030>
- Vidal, R., González, A., **Gutierrez, L.**, Umana, R., Speranza, P. 2011. Genetic diversity distribution and reproductive system of *Stipa neesiana* Trin. et Rupr. In Uruguay (in Spanish). *Agrociencia (Uruguay)*. 15(1): 1-12.
- Gutierrez, L.**[‡], Nason, J.D., and Jannink, J.-L. Morphological Diversity of Worldwide Barley and Mega-Targets of Selection 2009. *Crop Science* 49: 483-497.
- Gutierrez, L.**, Franco, J., Crossa, J., and Abadie, T. 2003. Comparing a Preliminary Racial Classification with a Numerical Classification of the Maize Landraces of Uruguay. *Crop Sci.* 43: 718-727. (1).
- Underlined indicates graduate student or postdoc in Gutierrez's Lab. ‡corresponding author.

BOOK CHAPTERS

- Smith, K., Thomas, W., **Gutierrez, L.**, Bull, H. 2018. Genomics-based barley breeding. In: The Barley Genome, Compendium of Plant Genomes (CPG). Nils Stein and Gary J. Muehlbauer (Eds). 287-315. https://doi.org/10.1007/978-3-319-92528-8_16
- Gutierrez, L.**, Berberian, N., Capettini, Flavio, Falcioni, E., Fros, D., Germán, S., Hayes, P.M., Huerta-Espino, J., Herrera, S., Pereyra, S., Pérez, C., Sandoval-Islas, S., Singh, R., Castro, A.J. 2013. Genome-Wide Association Mapping Identifies Disease-Resistance QTLs in Barley Germplasm From Latin America. In: Advance in Barley Breeding. Springer, Netherlands. Pp 209 – 216.
- Castro, A.J., Cammarota, L., Gomez, B., **Gutierrez, L.**, Hayes, P.M., Locatelli, A., Motta, L., and Pieroni, S. 2013. Genome-Wide Association Mapping Of Malting Quality Traits in Relevant Barley Germplasm in Uruguay. In: Advance in Barley Breeding. Springer, Netherlands. Pp 37 – 46.

INVITED RESEARCH PRESENTATIONS

International Invited Oral Presentations

2023. Genomic selection strategies for developing high value oats for sustainable cropping systems. Keynote speaker at the 2nd Food Oat Conference. June 19-21st, 2023. Lund, Sweden.
2023. Genomic selection in cereals: what to do with genotype by environment interaction? Invited speaker at the National Research Institute for Agriculture, Food and the Environment (INRAe) of France. June 1, 2023. Clermont-Ferrand, France.
2023. Genomic selection in cereals: from genes to satellites. Invited speaker at the Norwegian University of Life Sciences (NMBU) of Norway. May 25, 2023. Ås, Norway.
2023. Designing Experiments for large multi-environment genetic studies: mega-environmental designs (MED) optimization for sparse testing. Invited speaker at the Conference on Applied statistics in Agriculture and Natural Resources May 15-18th, 2023. West Lafayette, IN, USA.
2023. Recent developments in the use of genomic tools in breeding. Invited speaker at the Natural Resource Institute (LUKE) of Finland. May 3, 2023. Jokioinen, Finland.
2022. Genomic selection in cereals. Invited speaker at the Public-Private-Partnership (PPP) WheatCres annual project meeting. December 7-9, 2022. Hamar, Norway.
2022. Genomic selection in cereals and resource optimization in breeding programs. Invited speaker at the plant breeding group of the Swedish farmers' cooperative, Lantmännen. December 5th, 2022. Svalöv, Sweden.
2022. Genomic selection in cereals and resource optimization. Invited speaker at the Swedish Agricultural University (SLU) plant breeding seminar series. November 17th, 2022. Alnarp, Sweden.
2022. Genomic selection in oats and leveraging of learnings from other crops. Keynote speaker at the International Oat Conference. Perth, Australia. October 10-13th.
2022. Resource allocation optimization for multi-environment trials in cereals breeding. XVIII Eucarpia Biometrics in Plant Breeding Conference. (contributed but competitive). Gif-sur-Yvette, France. September 21-23.
2022. Experimental design optimization for large genomic studies. International Biometrics Conference (contributed but competitive). Riga, Latvia. July 20-15.
2022. Designing Experiments for large multi-environment genetic studies: mega-environmental designs (MED) optimization for sparse testing. Invited speaker at the XII Working Seminar on Statistical Methods in Variety Testing. Poznan, Poland. July 4-6.
2020. Resource Optimization in Cereals. International Quantitative Genetics Conference (contributed but competitive). Virtual (Sidney, Australia). November 1-12.

- 2019. Genomic tools for germplasm valorization and utilization in barley. Symposium on Genetic Resources for the Americas (SIRGEAC), Rocha, Uruguay, December 8-12.
- 2018. Bio-statistical Tools in Plant Breeding. Plant Science Symposium. Part of the DuPont Plant Sciences Symposia Series. Colegio de Posgraduados de Chapingo and CIMMYT – Texcoco, Mexico, September 6.
- 2017. Quantitative Genetics Deployed in Breeding Programs. XXI Symposium on Genetics and Plant Breeding: Quantitative Genetics and its relationship to plant breeding. Part of the DuPont Plant Sciences Symposia Series. Universidad Federal do Lavras, Lavras, Brazil, November 8-10.
- 2016. Quantitative genetics: connecting the genotype, phenotype, and the environment from satellites to genes. Latin-American Genetics Conference (ALAG). Montevideo, Uruguay, October 9-12.
- 2016. Incorporating genotype-by-environment and genomic selection information into oat breeding programs. Oats International Conference (contributed but competitive). St. Petersburg, Russia, July 11-15.
- 2016. Quantitative genetics: Connecting the genotype, phenotype, and the environment from satellites to genes. Seminar at the Seoul National University. Seoul, South Korea, September 28.
- 2014. Discovery, validation and breeding populations, marker type and density for GWS. 31st Meeting on Genetics and Breeding Themes. University of Sao Paulo. Piracicaba, Brazil, October 7-8.
- 2013. Statistical Models for Genomic Data. Ibero-American Biometrics Conference. Mar del Plata, Argentina, November 18-22.
- 2011. Association Mapping: Model Comparison and R Applications. Argentinean Biometrics Conference (GAB). Salta, Argentina. October 12-14.
- 2010. QTL Mapping Applications in R. Wageningen University and Research Center Seminar. Wageningen, Netherlands.
- 2003. Maize classification of Uruguayan Landraces. Center for Maize and Wheat Improvement (CIMMYT). Texcoco, Mexico, August 17-22, 2003.

National[†] Invited Oral Presentations

- 2023. Optimization of Sparse Testing Experimental Designs. ASA-CSSA-SSSA Annual Conference. St. Louis, MO, USA. October 29th – November 2nd.
- 2021. Designing Experiments for Predictive Agriculture. ASA-CSSA-SSSA Annual Conference. Salt Lake City, UT, USA. November 7-10th.
- 2021. Genomic Selection in Cereals. National Association of Plant Breeders Annual Conference. Virtual (Ithaca, NY, USA). August 15-19.
- 2021. Experimental Design Optimization for Large Genomic Studies. Conference on Applied Statistics in Agriculture and Natural Resources. Virtual (Gainesville, FL, USA). May 17-20.
- 2021. Breeding for the future: how to put it all together? R.F. Baker Plant Breeding Symposium. Virtual (Ames, IA, USA). April 1.
- 2021. UW-Madison Organic Wheat Breeding. Great Lakes Winter Wheat Workers Meeting. Virtual. March 16.
- 2020. Genotype by environment in Plant Breeding. ASA-CSSA-SSSA International Conference (Phoenix, AZ, USA). Virtual. November 9-13.
- 2020. UW-Madison Cereals Breeding. Organic Grain Winter Conference. Madison, WI, USA. January 24-25.
- 2019. Improving Plant Breeding efficiency with Quantitative Genetics. Plant Breeding and Genetics Seminar. Cornell University, Ithaca, NY, USA, September 10.
- 2019. Biostatistical tools in breeding: predicting genotypes from satellites to genes. International Plant and Animal Genome Conference. San Diego, CA, USA, January 12-16.
- 2019. Genotype by environment interaction in genomic selection. Phenotype Prediction Using Genomic Data Workshop. University of Florida, Gainesville, FL, USA, January 25.
- 2018. Resource Optimization for large Multi-Environment Trials in Oat. American Oat Workers Association. Seattle, WA, USA, June 19-21.

2018. Genomic Selection Addresses Genotype by Environment Interaction. International Plant and Animal Genome Conference. San Diego, CA, USA, January 13-17.
2018. Breeding Cereals: Harnessing Genomic Data to Accelerate Gains in Quantitate Traits. Plant Science Symposium. Part of the DuPont Plant Sciences Symposia Series. University of California – Davis, CA, USA, April 16.
2017. Genomic Selection Strategies to Accelerate Breeding Progress in Wheat. ASA-CSSA-SSSA Meetings. Tampa, FL, USA, October 22-25 (Volunteered but highly competitive).
2017. Quantitative Genetics and Cereals Breeding at UW-Madison. Midwest Extended Rotation council meeting. Practical Farmers of Iowa. Ames, IA, USA, August 17.
2016. Modeling GxE in breeding programs: some ideas for a grant proposal. Midwest oat researchers. Saint Paul, MN, USA, November 10.
2014. Biostatistical tools for plant breeding in the genomics era. International Wheat Symposium, Colonia, Uruguay, July 27-29.
2014. Association Mapping for Grain Yield and Quality in Rice. XV Meetings of the Uruguayan Bioscience Society, Piriapolis, Uruguay, September 5-7.
2013. Statistics in Genomics. Meetings of the Uruguayan Statistics Society (SUE). Montevideo, Uruguay, November 23.
2011. Statistics in Agronomy. Meetings of the Uruguayan Statistics Society (SUE). Montevideo, Uruguay, November 9.
2011. Not only selection fixes alleles: GWAS identifies causes of allele fixation. Meetings of the Uruguayan Society of Genetics (SUG). Montevideo, Uruguay. July 21.
2010. Disease Resistance QTL identification in barley Germplasm through Association Mapping. Uruguayan Bioscience Society (SUB). Piriapolis, Uruguay, May 28-30.
2010. Importance of Statistics in Research in Biology. Uruguayan Bioscience Society (SUB). Piriapolis, Uruguay, May 28-30.
2009. Genetic diversity and Mega-Targets of selection in Barley. Plant Breeding Seminars. University of Georgia. Athens, USA.
2005. Comparing molecular markers and phenotypic trait diversity: addressing the dichotomy between genes and phenotypes. Beyond Dichotomies, across the Boundaries Conference. Minnesota, USA, April 14-17.
2005. Is there an Association between Molecular Markers and Phenotypic Traits in Hordeum? College of Agriculture, Universidad de la Republica. Montevideo, Uruguay.
2004. The use of Molecular Markers in Plant Breeding. College of Agriculture, Universidad de la Republica. Montevideo, Uruguay.
2002. Linkage Disequilibrium in Maize Landraces of Uruguay. College of Agriculture, Universidad de la Republica. Montevideo, Uruguay.
2000. Blue-green algae nitrogen fixing in rice: nitrogen and weed-killer application effect (in Spanish). IX Uruguayan Bioscience Society Meeting (SUB). Solis, Uruguay.
- † Invited talks in Uruguay while being an Assistant/Associate Professor there were considered as national invitations instead of international.

State and UW Invited Oral Presentations

2022. UW-Madison Cereals Breeding program and release update. Arlington, WI. June 14
2022. Organic Cereals Field day: wheat, barley, oat, Kernza™. Verona, WI. June 6
2022. Developing high-quality cereals for organic and perennial systems in the Upper Midwest. CIAS annual meeting. Joint presentation: Picasso, V.P., Sandro, P., Olugbenle, K., and Dawson, J. Madison, WI, USA. February 28.
2021. UW-Madison cereals breeding program update. WCIA annual meeting. Wisconsin Dells, WI, USA. November 30.
2021. Organic Wheat Breeding at UW Madison. Great Lakes Wheat Workers Meeting. Online March 16. Joint presentation: Dawson, J.C. and Gutierrez, L.

2021. Kernza and organic grain breeding. Organic Field Day. Arlington, WI. August 24. Attendance about 150. Joint presentation: Picasso, V., Gutierrez, L. and Dawson, J.C.
2021. Research update from UW Madison and Artisan Grain Collaborative. Grains week. Online, May 6. Attendance and unique views about 1200. Joint presentation: Dawson, J.C., Gutierrez, L. and Hartman, A.
2021. Variety evaluation for artisanal bread quality. Grains week. Online, May 6. Attendance and unique views about 1200. Joint presentation: Dawson, J.C., Gutierrez, L. and Hartman, A.
2021. Cold weather cereals and breeding. Stone Barns Center for Food and Agriculture. Online Feb 25, attendance 10. Joint presentation: Dawson, J.C., Gutierrez, L. and Hartman, A.
2021. Organic Cereals Breeding. OGRAIN Organic Field-day. Arlington, WI, USA. August 24.
2021. Organic Breeding at the Cereals Breeding and Quantitative Genetics group. Field-day. Madison, WI, USA. June 4
2021. Breeding efforts in grains at UW-Madison. Regenerative Farming Fellowship Invitation. Virtual (Madison, WI, USA). March 4.
2021. Breeding for the Future: Agronomic Crops. Bayer Crop Science and University of Wisconsin virtual event (Madison, WI, USA). January 29.
2020. Cereals breeding program update. WCIA annual meeting. Virtual (Madison, WI, USA). December 1.
2020. Barley research update at the CBQG at UW-Madison. Artisan Grain collaborative. Virtual (Madison, WI, USA). October 14th.
2019. Cereals breeding program update. WCIA annual meeting. Wisconsin Dells, WI, USA, December 3.
2019. Cereals Breeding and Quantitative Genetics Variety Trials. Buffalo County field day. Alma, WI, USA, July 18.
2019. Cereals Breeding and Quantitative Genetics: research update. Small grains field day. WCIA field day. Arlington, WI, USA, July 15.
2019. Barley Day. Multi-purpose organic naked barley. West Madison Agricultural Research Station. Verona, WI, USA, June 27-28.
2019. Organic Cereals Breeding at UW-Madison. From Grains to Plate: Diversify Kitchens, Strengthen Farms, Increase Acreages. Meadowlark Organics Farm. OGRAIN field day, WI, USA, June 30.
2018. Cereals Breeding and Quantitative Genetics: research update. Annual meeting of the Wisconsin Crop Improvement Association. Madison, WI, USA, November 27.
2018. Small grains with frost-seeded clover. Agronomy/Soils field day. Arlington, WI, USA, August 22.
2018. Cereals Breeding and Quantitative Genetics: oats in Langlade County. Langlade County Agricultural Research Station field day. Antigo, WI, USA, July 26.
2018. Cereals Breeding and Quantitative Genetics: research update. Small grains field day. WCIA field day. Arlington, WI, USA, July 18.
2018. Cereals Breeding and Quantitative Genetics Variety Trials. Chippewa County field day. Chippewa Falls, WI, USA, July 19.
2018. Cereals Breeding and Quantitative Genetics Variety Trials. Buffalo County field day. Alma, WI, USA, July 19.
2018. Organic Cereals Breeding at UW-Madison. Organic small-grains field day, West-Madison Agricultural Research Station. Madison, WI, USA, June 27.
2017. Cereals Breeding and Quantitative Genetics: research update. Annual Meeting of the Wisconsin Crop Improvement Association. Madison, WI, USA, November 28[†].
2017. Organic Wheat Breeding. OGRAIN field day. Wisconsin, July 21.
2017. Cereals Breeding and Quantitative Genetics: research update. Small grains field day. WCIA field day. Arlington, WI, USA, July 7[†].
2016. UW-Madison Cereals Breeding Program Update. Annual Meeting of the Wisconsin Crop Improvement Association. Madison, WI, USA, November 29[†].
2016. The importance of breeding diversity into varieties. Annual Meeting of the Wisconsin Crop Improvement Association. Madison, WI, USA, November 29[†].

2016. Importance of diversity in the landscape. Agronomy field day. Arlington, WI, USA, August 31[†].
2016. Cereals Breeding and Quantitative Genetics: research update. Small grains field day. WCIA field day. Arlington, WI, USA, July 7[†].
2016. Small grains breeding: some experiences and UW-Madison plans. USDA-ARS Annual Meeting. January 19. Madison, WI, USA.
2016. Genomic tools for plant breeding: connecting the genotype, the phenotype, and the environment using the animal model. Animal Breeding and Genetics Seminar. January 26, Madison, WI, USA.
2015. Small Grains Breeding: Some experiences and UW-Madison plans. Annual Meeting of the Wisconsin Crop Improvement Association. Madison, December 1[†].

PATENTS AND OTHER DISCOVERIES

- Mink oat. 2022. Release of a new oat variety *Mink*. This is a high-yielding grain variety with good disease resistance to crown rust and excellent seed production. My contribution to the development of the variety includes selection and multi-environment evaluation, evaluation of historical information, assessment of the market needs, and writing of the release documents. It was released under PVP.
- George oat. 2021. Release of a new oat variety *George*. This is a high-yielding forage variety with good disease resistance to crown rust and excellent seed production. My contribution to the development of the variety includes selection and multi-environment evaluation, evaluation of historical information, assessment of the market needs, and writing of the release documents. It was released under PVP.
- Esker2020 oat. 2020. Release of a new oat variety *Esker2020*. This is a high-yielding, disease resistant variety with good test weight. My contribution to the development of the variety includes selection and multi-environment evaluation of the genotype, evaluation of historical information, assessment of the market needs, and writing of the release documents. It was released under PVP.
- Antigo oat. 2018. Release of a new oat variety *Antigo*. This is a high-test weight variety with good yield and disease resistance. My contribution to the development of the variety includes selection and multi-environment evaluation of the genotype, evaluation of historical information, assessment of the market needs, and writing of the release documents. It was released under PVP.
- Laker oat. 2018. Release of a new oat variety *Laker*. This is a variety with high forage yield and quality. My contribution to the development of the variety includes selection and multi-environment evaluation of the genotype, evaluation of historical information, assessment of the market needs, and writing of the release documents. It was released under PVP.

RESEARCH PROJECTS

More than 7 million dollars in research projects funds from Federal (i.e. *USDA-AFRI- Foundation*; USDA-NCR-SARE; USDA-AFRI-OREI; USDA-AFRI-Food), Industry (Monsanto; Brewers' Association), State (i.e. Hatch Fund Act; VCRGE; WARF; WCIA; OSU), and international (CSIC, Uruguay; INNOVAGRO-ANII, Uruguay; FMV-ANII, Uruguay; FPTA-INIA, Uruguay; WUR, Netherlands; FONTAGRO, International) agencies to exclusively fund Dr. Gutierrez's program.

Project title	PI/Co-PIs	Source of funds	Duration	Total budget
United States Federally Funded grants (highly competitive)				
Developing Multi-use Naked Barley for Organic Farming Systems III	B. Meints, <u>L. Gutierrez</u> , et al.	USDA-OREI	09/2023 08/2027	\$3,500,000
Value-added grains for local and regional food systems	M.E. Sorrels, <u>L. Gutierrez</u> , et al.	USDA-OREI	09/2023 08/2027	\$3,300,000
Seizing on the potential to breed for intercrops: Definition of breeding goals	K. Robins, J.-L., Jannink, <u>L. Gutierrez</u> (c), et al.	USDA-OREI	09/2023 08/2027	\$50,000
Leveraging high-throughput genotyping and phenotyping technologies to accelerate wheat improvement	J. Dubcovsky <u>L. Gutierrez</u> et al.	USDA-NIFA	01/2022 12/2026	\$15,000,000
Developing Multi-use Naked Barley for Organic Farming Systems II	P. Hayes, <u>L. Gutierrez</u> , et al.	USDA-OREI	09/2020 08/2024	\$2,000,000
Value-Added Grains for Local and Regional Food Systems	M. Sorrels, <u>L. Gutierrez</u> , et al.	USDA-OREI	09/2020 08/2023	\$2,000,000
Treating Small Grains as a Cash Crop: stepping up small grain variety selection for Cornbelt farmers.	S. Carlson, <u>L. Gutierrez</u> , et al.	USDA-NIFA- SARE*	10/2018 09/2021	\$200,000
Resource allocation optimization for multi-environment trials and genomic selection in barley	<u>L. Gutierrez</u> , K. Smith	USDA-AFRI- NIFA- Foundation*	02/2018 03/2023	\$490,000
Developing Multi-use Naked Barley for Organic Farming Systems	P. Hayes, <u>L. Gutierrez</u> , et al.	USDA-OREI*	09/2017 08/2021	\$2,000,000
Transcriptomics and metabolomics to identify drivers of seed composition in oat	M. Sorrels, J.L.-Jannink, <u>L. Gutierrez</u> et al.	USDA-NIFA- FOOD*	03/2017 02/2021	\$1,000,000
Oat variety trial under organic management: increasing profitability for organic producers in the North Central Region	M Caffè, K Smith, <u>L. Gutierrez</u>	USDA-NIFA- SARE*	3/2017 3/2019	\$30,000
Collaborative release, testing, and development of public sector multi-use naked barley varieties for organic growers	Hayes, P. <u>L.Gutierrez</u> (c) et al.	USDA-NIFA- OREI*	2016	---

Other U.S. Funding sources				
Developing market-ready high yielding healthy oats	<u>L. Gutierrez</u>	WARF-WCIA	09/2023 12/2024	\$19,000
Developing market-ready high yielding healthy oats	<u>L. Gutierrez</u>	WARF-WCIA	09/2022 12/2023	\$27,000
Developing market-ready high yielding healthy oats through multi-year evaluation of advanced lines and production of breeder seed	<u>L. Gutierrez</u>	WARF-WCIA	10/2021 12/2022	\$27,000
Multi-year analysis of advanced organic winter wheat breeding lines for agronomic and quality characteristics and production of breeder seed for release	J. Dawson, <u>L. Gutierrez</u>	WARF-WCIA	10/2021 12/2022	\$15,000
Developing high-quality cereals for organic and perennial systems in the Upper Midwest	V. Picasso <u>L. Gutierrez</u> J. Dawson	CIAS	09/2020 08/2022	\$87,000
Speed breeding oats to provide high yielding healthy oats	<u>L. Gutierrez</u>	WARF-WCIA	10/2020 12/2021	\$22,000
Evaluation of advanced organic winter wheat breeding lines for agronomic and quality characteristics in preparation for release	J. Dawson, <u>L. Gutierrez</u>	WARF-WCIA	10/2020 12/2021	\$14,000
Multi-Environmental Trial Experimental Designs Based on Spatial and Genotype by Environment Interaction	<u>L. Gutierrez</u>	USDA-Hatch	09/2019 08/2022	\$137,000
Breeding for a Better Microbiome: Enhancing Oat Yield, Quality, and Companionship via Plant-Microbial Interactions	R. Lankau <u>L. Gutierrez</u>	USDA-Hatch	09/2019 08/2022	\$145,000
Evaluation of advanced organic winter wheat breeding lines for agronomic and quality characteristics in preparation for release	J. Dawson, <u>L. Gutierrez</u>	WARF-WCIA	10/2019 12/2020	\$10,000
Speed breeding oats to provide high yielding healthy oats	<u>L. Gutierrez</u>	WARF-WCIA	10/2019 12/2020	\$35,000
Evaluation of advanced organic winter wheat breeding lines for agronomic and quality characteristics in preparation for release	J. Dawson, <u>L. Gutierrez</u>	WARF-WCIA	10/2019 12/2020	\$10,000
Development of high yielding oat cultivars for animal and human consumption	<u>L. Gutierrez</u>	WARF-WCIA	10/2018 12/2019	\$18,000
Breeding for beneficial microbiomes	R. Lankau, <u>L. Gutierrez</u>	VCRGE Fall Competition, UW-Madison	09/2018 08/2019	\$60,000
Resource allocation optimization for multi-environment trials and genomic selection in oats	<u>L. Gutierrez</u> Hedtcke, J.	ARS Internship	2018	\$5,000

Development of high yielding oat cultivars for animal and human consumption	<u>L. Gutierrez</u>	WARF-WCIA	10/2017 12/2018	\$33,000
Resource allocation optimization for multi-environment trials and genomic selection in barley	<u>L. Gutierrez</u>	VCRGE Fall Competition, UW-Madison	Withdrawn (in favor of federal grant)	\$56,000
Building a multi-state dataset to support coordinated breeding of local malting barley	K. Smith, <u>L. Gutierrez</u> et al.	Brewer's Association*	2017	\$42,000
Resource allocation optimization for multi-environment trials and genomic selection in oats	<u>L. Gutierrez</u>	USDA-Hatch	04/2017 03/2020	\$97,000
Development of High Yielding Oat Cultivars	<u>L. Gutierrez</u>	WARF-WCIA	09/2015 12/2016	\$27,000
Granted while Assistant/Associate Professor at UdelaR, Uruguay				
Barley Breeding, Genomics, and Physiology	A. Castro <u>L. Gutierrez</u> et al.	CSIC I+D, Uruguay*	12/2015 11/2019	\$70,000
Genomic Selection in Barley	A. Castro, <u>L. Gutierrez</u> S. German	INNOVAGRO ANII, Uruguay*	01/2015 12/2018	\$291,000
Wheat stem rust genomics	S. German <u>L. Gutierrez</u> et al.	INNOVAGRO ANII, Uruguay*	06/2014 12/2016	\$270,000
Genomics for Soybean drought tolerance	V. Bonecarrere <u>L. Gutierrez (c)</u> et al.	INNOVAGRO ANII, Uruguay*	09/2014 08/2017	\$127,000
Statistical Analysis of molecular and biotechnology data support	N. Bonamico M. Balzarini <u>L. Gutierrez</u>	Education Ministry, Argentina*	09/2015 12/2016	\$5,000
Statistical Models for Genomic Data Analysis	<u>L. Gutierrez</u>	ANII Partners, Uruguay*	07/2014 12/2016	\$4,000
Yield constraint in Horticulture	S. Dogliotti <u>L. Gutierrez</u> et al.	FPTA, Uruguay*	01/2014 12/2017	\$140,000
Genetic basis of flooding tolerance in barley	A. Locatelli <u>L. Gutierrez (c)</u>	CSIC YSA, Uruguay	03/2014 05/2016	\$4,000
Genomic Selection in Wheat	J. von Zitzewick <u>L. Gutierrez (c)</u>	INIA, Uruguay*	03/2013 09/2015	\$120,000
Warm season grasses breeding	P. Speranza <u>L. Gutierrez (c)</u> et al.	FMV, ANIL, Uruguay*	03/2013 09/2015	\$38,000
Barley Breeding, Genomics, and Physiology	A. Castro <u>L. Gutierrez (c)</u> et al.	CSIC I+D, Uruguay	01/2012 12/2015	\$70,000
Site-specific management of Eucalyptus plantations	M. Perez, <u>L. Gutierrez</u>	CSIC Partners, Uruguay, RMK	08/2012 07/2015	\$24,000

Diversity of White Dent Maize in Uruguay	B. Porta <u>L. Gutierrez</u> (c)	CSIC YSA, Uruguay*	04/2014 06/2015	\$4,000
GWAS in Rice	V. Bonnacarrere <u>L. Gutierrez</u> et al.	INIA, Uruguay*	2012 2014	\$100,000
Wheat and Potato Genomics	M. Castro, J. von Zitzewick <u>L. Gutierrez</u> (consulting)	FONTAGRO*	2011 2012	\$500,000
Breeding for wheat leaf rust resistance	S. German <u>L. Gutierrez</u> (c)	INNOVAGRO Uruguay*	2010 2012	\$120,000
QTL Mapping in R	<u>L. Gutierrez</u>	GCP, WUR, Netherlands,* CSIC, Uruguay	2010 2012	\$40,000
Detecting QTL for malting quality in barley	<u>L. Gutierrez</u>	OSU, USA,* CSIC, Uruguay	2009 2012	\$4,000
Domestication of native warm season grasses	P. Speranza <u>L. Gutierrez</u> et al.	FPTA, Uruguay*	2009 2012	\$100,000
Durable disease resistance in barley	A. Castro <u>L. Gutierrez</u> (c)	FONTAGRO*	2008 2012	\$1,000,000
Granted while a graduate student at UdelaR, Uruguay and at ISU, USA				
Diversity of barley and their wild relatives	<u>L. Gutierrez</u> J.-L. Jannink	The Land Institute, USA*	2004 2007	\$8,000
Genotyping diversity in cultivated and wild Hordeum species	<u>L. Gutierrez</u> J.-L. Jannink	Monsanto*	2003 2005	\$100,000
Genetic diversity in cultivated and wild Hordeum species	J.-L. Jannink <u>L. Gutierrez</u>	ISU, USA, INIA, Uruguay	2002 2008	\$15,000
Linkage disequilibrium in maize	<u>L. Gutierrez</u> T.E. Abadie	CSIC YSA, Uruguay	2001 2002	\$4,000

HONORS AND AWARDS

OECD CRP Research Fellowship. 2023. OECD. \$17,000.

Vilas Associate Award. 2019-2021. VCRGE, UW-Madison, USA. \$39,000.

Alfred Toepfer Faculty Fellow Award. 2018. CALS, UW-Madison, USA. \$10,000.

Member of the National Researchers System in Uruguay. Since 2008. ANII, Uruguay. \$26,000.

G. O. Mott Scholarship for meritorious graduate student in Crop Science. 2006. CSSA. \$2,500.

C. R. Weber Award for Excellence in Plant Breeding at ISU. 2005. IA, USA. \$1,000.

Member of Gamma Sigma Delta Honor Society. 2005. IA, USA.

Natural Systems Agriculture Fellowship. The Land Institute. 2004-2006. KS, USA. \$8,000.

Junior Scientist Award. CSIC (Scientific Research Commission), Uruguay. 2001. \$4,000.

SYNERGISTIC ACTIVITIES

University service - committees

UW-Madison, Research committee for the biological sciences division (VCRGE 2023-present).
UW-Madison, Fall competition award committee (as part of VCRGE com. 2023-present).
UW-Madison, Vilas associate award committee (as part of VCRGE com. 2023-present).
UW-Madison, Undergraduate research fellowships committee at UW-Madison (2021, 2022).
UW-Madison, Senator for the Plant and Agroecosystem Science Department (2023-present)
CALs, Research advisory committee UW-Madison (RAC 2021-present).
CALs, Alfred Toepfer faculty fellow award committee UW-Madison (as part of RAC 2022).
CALs, Pound research excellence award committee UW-Madison (as part of RAC 2022).
CALs, Hatch grants review committee at UW-Madison (as part of RAC 2021-present).
CALs, Intellectual property committee (Chair) at UW-Madison (2019/21).
Plant and Agroecosystem Sciences budget and research support committee. UW-Madison (2023-p.)
Agronomy-Horticulture governance committee at UW-Madison (2021/22).
Agronomy search and screen committee forage systems agroecologist faculty position (2020/22).
Agronomy climate, equity, and diversity committee (Co-Chair). UW-Madison (2019/21).
Agronomy ad-hoc committee for research 5-year planning, UW-Madison (2018/21).
Agronomy ad-hoc committee for new faculty positions, UW-Madison (2017).
Agronomy West Madison, ARS and SPAL faculty committee. UW-Madison (2015 – present).
Agronomy graduate studies committee. UW-Madison (2015 – present).
Agronomy seed certification committee. UW-Madison (2015 – present).
Agronomy member of the executive committee (2019-present).
PBPG ad-hoc curriculum committee for quantitative training, UW-Madison (2017/21).
PBPG ad-hoc curriculum committee for prelims examinations, UW-Madison (2017/18).
FAGRO, biostatistics graduate program coordinator, UdelaR (2011-2015).
FAGRO, biostatistics graduate program seminar coordinator, UdelaR (2011-2015).
FAGRO, statistical genetics seminar coordinator, UdelaR (2011-2015).
FAGRO, statistics seminar coordinator, UdelaR (2010-2012).
FAGRO, search and screen com. three associates (G2) in Statistics, UdelaR (2010, 2013, 2014).
FAGRO, search and screen com. one assistant professor (G3) in Statistics, UdelaR (2013).
FAGRO, search and screen com. two assistants (G1) in Statistics, UdelaR (2010, 2012).
FAGRO, search and screen com. for one assistant in Plant Breeding, UdelaR (2009).
FAGRO, faculty delegate to the College budget committee, UdelaR (2014-2015).
FAGRO, member of the Statistics executive committee, UdelaR (2008-2013).
FAGRO, student delegate to the College coordinating committee, UdelaR (1998).
FAGRO, student delegate to the College library committee, UdelaR (1996-1998).

Other University service (since 2017)

Invited speaker at the *New Faculty Welcome*, Secretary of the Faculty, UW-Madison (2021).
Invited Faculty guest at Women in Science (WISE), UW-Madison (2018,2019).

Professional Editorial duties (since 2017)

Guest editor for a special edition of *Frontiers in Genetics* journal (2021–2023).
Associate Editor for *Crop Science* (2017 – 2020).
Ad-hoc reviewer for *Frontiers* (2021 – present).
Ad-hoc reviewer for *Biometrics* (2021 – present).

Ad-hoc reviewer for *In Silico Plants* (2021 – present).

Ad-hoc reviewer for *Plant Breeding* (2021 – present).

Ad-hoc reviewer for *The Plant Genome* (2021 – present).

Ad-hoc reviewer for *Plant, Cell, and Environment* (2021 – present).

Ad-hoc reviewer for *Journal of Agricultural, Biological and Env. Statistics* (2020 – present).

Ad-hoc reviewer for *G3* (2019 – present).

Ad-hoc reviewer for *Heredity* (2018 – present).

Ad-hoc reviewer for *Genetics and Selection Evolution* (2018 – present).

Ad-hoc reviewer for *Grass and Forage Science* (2018 – present).

Ad-hoc reviewer for *Scientia Agricola* (2018 – present).
Ad-hoc reviewer for *Agrociencia* (2018 – present).
Ad-hoc reviewer for *Theoretical and Applied Genetics* (2014 – present).
Ad-hoc reviewer for *BMC* (2014 – present).
Ad-hoc reviewer for *Crop Science* (2009 – present).

Professional Grant Review Panels

USDA Agricultural Genomes to Phenomes mini-grant program (multiple per year 2020/21/22).
USDA NIFA Fellows program (2020, 2021).
USDA NIFA Plant Breeding for Agricultural Production Program, AFRI (2018).
Ontario Agri-Food Innovation Alliance Research Program Tier I (calls 2020, 2021, 2022).
Canadian Field Crop Cluster from the Canadian Field Crop Research Alliance (2017).
UW-Madison Hatch Grants, UW-Madison (2017, 2020, 2021, 2022 calls).
ANII national research competition grants, Uruguay (multiple calls 2009, 2016).
CSIC graduate research fellowship program of the research council, Uruguay (2014/15).

Professional International Committees and Board of Directors membership

Oat Global Board of Directors Member (2022 – present).
International Oat Nursery Executive Committee (2022 – present).
International Oat Nursery Genomics Committee (2022 – present).
Chair of the best paper in Crop Science committee, Crop Science of America Society. 2022.
Chair (incoming, chair, and past) of the Crop Breeding and Genetics (C1) Division of the Crop Science Society of America (2020, 2021, 2022).
Steering Committee of the Agricultural Genomes to Phenomes Initiative (2020 – present).
Project Team Leader for the Breeding Committee of the Oat Rust Initiative (2016 – 2018).

Conference service

Chair and Organizer of 2 symposiums with 8 speakers at ASA-CSSA-SSSA Meeting, Salt Lake City, UT, USA, November 7-10 (2021).
Chair and Organizer of 6 oral sessions with 51 speakers at ASA-CSSA-SSSA Meeting, Salt Lake City, UT, USA, November 7-10 (2021).
Chair and Organizer of 5 poster sessions with 70 speakers at ASA-CSSA-SSSA Meeting, Salt Lake City, UT, USA, November 7-10 (2021).
Chair and Organizer of 2 virtual sessions with 22 speakers at ASA-CSSA-SSSA Meeting, Salt Lake City, UT, USA, November 7-10 (2021).
Chair and Organizer of the business meetings of the joint C1 and C7 divisions at ASA-CSSA-SSSA Meeting, Salt Lake City, UT, USA, November 7-10 (2021).
Chair and organizer of one oral and one poster student competition at ASA-CSSA-SSSA Meeting, Salt Lake City, UT, USA, November 7-10 (2021).
Chair of Ron Phillips Lectureship ASA-CSSA-SSSA Meetings. November, Virtual, USA (2020).
Chair of sessions at ASA-CSSA-SSSA Annual Meetings. November, Virtual, USA (2020).
Poster competition organizer ASA-CSSA-SSSA Annual Meetings. November, Virtual, USA (2020).
Chair of a session at the ASA-CSSA-SSSA Annual Meetings. November, TX, USA (2019).

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Chair of the session “Breeding and Germplasm” at the American Oat Workers Conference (AOWC), June 18-21, 2018, Seattle, USA (2018).

Master of Ceremony of a session at the “50 Years of PBPG: Past Achievements and Future Prospects” conference to celebrate the 50th Anniversary of the Plant Breeding and Plant Genetics Graduate Program at the UW–Madison. Madison, WI, USA, June 7-8 (2018).

Other Professional service

2019. Poster Jury at the ASA-CSSA-SSSA Annual Meetings. November, TX, USA.

2019. Poster Jury at the North American Plant Breeding Annual Meeting. August, GA, USA.

2017. Poster Jury at the North American Plant Breeding Annual Meeting. August, CA, USA.

Member of Crop Science Society of America, American Society of Agronomy, International Biometrics Society, National Association of Plant Breeders.