

Biographical Sketch

Kimberly Garland Campbell

Education and Training

1991 Ph.D. Crop Science, North Carolina State University
1988 M.S. Crop Science, North Carolina State University
1985 M.A. Theology, The Lutheran Theological Seminary at Philadelphia
1985 B.S. Agronomy, Colorado State University

Research and Professional Experience

1999 - USDA-ARS Research Geneticist Plants, Wheat Breeding GS15
1999 - Adj. Faculty Crop and Soil Sciences, Washington State Univ.
2000 - Faculty, Molecular Plant Sciences Graduate Program, Washington State Univ.
1991-1999 Asst. Professor, Dept. Horticulture and Crop Science, The Ohio State Univ.

Honors and Awards

Incoming President Elect, Crop Science Society of America, 2022
Woman of Distinction, Washington State Univ. 2016
Mentoring Award, Graduate and Professional Student Association, Washington State Univ., 2016
Honored Alumni Award, Dept. of Soil and Crop Sciences, Colorado State Univ., 2014
Fellow, Crop Science Society of America, 2012
Fellow, American Society of Agronomy, 2012

Collaborators and Affiliations

Graduate Students and Postdoctoral Researchers Advised/Current Affiliation:

Abellera, J, Phillipines; Ayegbidun, Olufunke, Washington State Univ.; Carle, Scott, Washington State Univ.; Del Blanco, A, Univ. of CA-Davis; Gupta, A., Bayer Crop Sci; Djibo Waziri, A, Washington State. Univ.; Horgan, A, Texas A&M Univ.; Jernigan, K, Texas A&M Univ.; Kiszonas, A, USDA-ARS; Klarquist, E, Washington State Univ.; Kruse, E, UC Riverside; Lamkey, J, Becks Hybrids; Larkin, D, Limagrains; Loladze, S, Syngenta, Germany; Manning-Thompson, Yvonne, The Land Institute; Martinez, S, HM Klaus.; Murphy, L, Bayer Crop Sci; Naruoka, Y, Syngenta USA; Reddy, L, Bayer Crop Sci; Piaskowski, J, Univ of Idaho.; Poole, G, Thermo-Fisher; Santra, D. Univ of Nebraska; Shamseldin, C., Washington State Univ.; Siritunga, D. Univ. of Philippines; Strauss, N, Bayer Crop Sci; Swannack, C, USDA-ARS; Thompson, A, USDA-ARS; Walker, C.A, Corteva; Wen, N, Washington State Univ.; White, Washington State Univ.; M. Zhu, Jie, China

Synergistic Activities

USDA-ARS, Member, RPES panel, 2018, 2021, 2022
USDA-NIFA, Member, Grant Panel: AFRI-Foundation Plant Breeding, 2014-16 (Chair, 2015, 2016)
NSF, Member, Grant Panel: Plant Genome, 2014
BTF, Board Member, Borlaug Training Foundation, since 2019.
CIMMYT, Member, Wheat Science and Technical Steering Committee, Accelerating Genetic Gains in Maize and Wheat for Improved Livelihoods, since 2020.
Crop Science Society of America (CSSA) Member, 39 years
American Society of Agronomy (ASA) Member, 34 years

Relevant Publications

Mustahsan, W., Guttieri, M. J., Bowden, R. L., Garland-Campbell, K., Jordan, K., Bai, G., & Zhang, G. (2023). Mapping the quantitative field resistance to stripe rust in a hard winter wheat population “Overley”×“Overland”. *Crop Science*, 63(4), 2050-2066. <https://doi.org/10.1002/csc2.20977>
Zhang, B., Huang, H., Tibbs, L.E., Zhang, Z., Sanguinet, K., Vanous, A.E., Garland Campbell, K.A., Yu, J., Li, X. (2023). Streamline unsupervised machine learning to survey and graph indel-based haplotypes from pan-genomes. *Molecular Plant*. 16(6):975-978.<https://doi.org/10.1016/j.molp.2023.05.005>.

- Shrestha, S.L., Garland-Campbell, K.A., Steber, C.M., Pan, W.L. and Hulbert, S.H., (2023). Association of canopy temperature with agronomic traits in spring wheat inbred populations. *Euphytica*, 219(1), p.7. <https://doi.org/10.1007/s10681-022-03135-4>
- Garland-Campbell, K. A. (2022). Club Wheat—A Review of Club Wheat History, Improvement, and Spike Characteristics in Wheat. *Plant Breeding Reviews*, 46, 421-465. <https://doi.org/10.1002/9781119874157.ch7>
- Garland-Campbell, K. A., Bellinger, B.S., Carter, A. H., Chen, X., DeMacon, P., Engle, D., Hagerty, C., Kiszonas, A., Klarquist, E. F., Murray, T., Morris, C., Neely, C., Odubyi, S., Rashad, A., See, D., Steber, C., Wen, N., (2022). Registration of ‘Cameo’ soft white winter club wheat. *Journal of Plant Registrations*, 16(3), 585-596. <https://doi.org/10.1002/plr2.20234>.
- Kellogg, J. A., Klarquist, E. F., Waziri, A. D., Luftig, D., Carbonero, F., Solverson, P., ... & Murphy, K. M. (2022). Developing a definition of biofortification through the synthesis of food biofortification publications: a scoping review protocol. *JBI Evidence Synthesis*, 20(8), 2109-2116. DOI: 10.11124/JBIES-21-00297
- Li, X., Guo, T., Bai, G., Zhang, Z., See, D., Marshall, J., Garland-Campbell, K. A., & Yu, J. (2022). Genetics-inspired data-driven approaches explain and predict crop performance fluctuations attributed to changing climatic conditions. *Molecular Plant*. <https://doi.org/10.1016/j.molp.2022.01.001>
- Shamseldin, C., Bruggeman, R., Paulitz, T., Garland-Campbell, K., (2022). Susceptibility of wheat to stem rust in the Pacific Northwest, 2021. Plant Disease Management Reports. Report No. 16:CF117. <https://www.plantmanagementnetwork.org/pub/trial/pdmr/volume16/abstracts/CF117.asp>
- Garland Campbell, K., Allan, R., Burke, A., Chen, X., DeMacon, P., Higginbotham, R., Engle, D., Johnson, S., Klarquist, E., Mundt, C., Murray, T., Morris, C., See, D., & Wen, N. (2021). Registration of ‘ARS Crescent’ soft white winter club wheat. *Journal of Plant Registrations*, 15(3), 515–526. <https://doi.org/10.1002/plr2.20135>
- Garland Campbell, K., Allan, R. E., Carter, A. H., DeMacon, P., Klarquist, E., Wen, N., Chen, X., Steber, C. M., Morris, C., See, D., Esser, A., Engle, D., Higginbotham, R., Mundt, C., & Murray, T. D. (2021). Registration of ‘Castella’ soft white winter club wheat. *Journal of Plant Registrations*, 15(3), 504–514. <https://doi.org/10.1002/plr2.20132>
- Hagerty, C. H., Lutchter, L., McLaughlin, K., Hayes, P., Garland-Campbell, K., Paulitz, T., ... & Kroese, D. (2021). Reaction of winter wheat and barley cultivars to *Fusarium pseudograminearum*-inoculated fields in the dryland Pacific Northwest, USA. *Agroecosystems, Geosciences & Environment*, 4(2), e20173. <https://doi.org/10.1002/agg2.20173>
- Horgan, A. M., Garland Campbell, K. A., Carter, A. H., & Steber, C. M. (2021). Seedling elongation responses to gibberellin seed treatments in wheat. *Agroecosystems, Geosciences & Environment*, 4(1), e20144. <https://doi.org/10.1002/agg2.20144>
- Liu, C., Parveen, R. S., Revolinski, S. R., Campbell, K. A. G., Pumphrey, M. O., & Steber, C. M. (2021). The genetics of late maturity alpha-amylase (LMA) in North American spring wheat (*Triticum aestivum* L.). *Seed Science Research*, 31(3), 159–168. <https://doi.org/10.1017/S0960258521000064>
- Liu, C., Tuttle, K. M., Campbell, K. A. G., Pumphrey, M. O., & Steber, C. M. (2021). Investigating conditions that induce late maturity alpha-amylase (LMA) using Northwestern US spring wheat (*Triticum aestivum* L.). *Seed Science Research*, 31(3), 169–177. <https://doi.org/10.1017/S0960258521000052>
- Sjoberg, S. M., Carter, A. H., Steber, C. M., & Garland Campbell, K. A. (2021). Application of the factor analytic model to assess wheat falling number performance and stability in multi-environment trials. *Crop Science*, 61(1), 372–382. <https://doi.org/10.1002/csc2.20293>
- Strauss, N. M., Wiersma, A., DeMacon, P., Klarquist, E., Carter, A., Campbell, K. A. G., & Olson, E. (2021). Registration of the wheat D-genome nested association mapping (DNAM) population. *Journal of Plant Registrations*, 15(1). <https://doi.org/10.1002/plr2.20078>
- Griffey, C., Malla, S., Brooks, W., Seago, J., Christopher, A., Thomason, W., ... & Sperry, E. (2020). Registration of ‘Hilliard’ wheat. *Journal of Plant Registrations*, 14(3), 406-417. <https://doi.org/10.1002/plr2.20073>

- Shrestha, S. L., Garland-Campbell, K. A., Steber, C. M., & Hulbert, S. H. (2020). Carbon isotope discrimination association with yield and test weight in Pacific Northwest–adapted spring and winter wheat. *Agrosystems, Geosciences & Environment*, 3(1), e20052. <https://doi.org/10.1002/agg2.20052>
- Sjoberg, S. M., Carter, A. H., Steber, C. M., & Garland-Campbell, K. A. (2020). Unraveling complex traits in wheat: Approaches for analyzing genotype × environment interactions in a multienvironment study of falling numbers. *Crop Science*, 60(6), 3013–3026. <https://doi.org/10.1002/csc2.20133>
- Nielsen, N. S., Stubbs, T. L., Garland-Campbell, K. A., & Carter, A. H. (2019). Rapid estimation of wheat straw decomposition constituents using near-infrared spectroscopy. *Agronomy*, 9(8), 462. <https://doi.org/10.3390/agronomy9080462>
- Ward, K., Wolf-Wendel, L., Marco, L. A., Camp, S., Sams, K., Dixon, L. Z., ... & Pilgeram, R. (2019). *Mothering from the field: The impact of motherhood on site-based research*. Rutgers University Press.
- Wen, N., Manning-Thompson, Y., Garland-Campbell, K., & Paulitz, T. (2019). Distribution of cereal cyst nematodes (*Heterodera avenae* and *H. filipjevi*) in Eastern Washington State. *Plant disease*, 103(9), 2171-2178. <https://doi.org/10.1094/PDIS-10-18-1881-SR>