Luke A. Farno, Ph.D.
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EXPERIENCE

Research Assistant Professor – Crop Science and Applied Genetics
Central State University Wilberforce, OH – September 2023 - Present
Responsible for research into new varieties of field crops, cover crops, and other emerging plants of interest suitable for the Midwest climatic zone. Work with farmers and agricultural industrial partners in the State of Ohio in developing and breeding crops based on molecular and classical techniques. Collaboration with other appropriate researchers at CESTA, to explore extensions of research in the impacts of crops of interest to farmers and agricultural industry in Ohio, including natural products. Develop an independent extramurally funded research program that is relevant to farmers and other stakeholders in Ohio and beyond.

Research Technician – Plant Breeding
Central State University, Wilberforce, OH – September 2020 – September 2023
Asist in the development of corn hybrid varieties with the emphasis on optimizing grain starch quality. Using conventional breeding techniques our goal is to serve area producers with an opportunity to expand their choice with unique value-added corn hybrids to meet the needs of food and industrial applications. Assist the lead breeder with seasonal routine activities, including preparation of seed for planting and harvesting research trails, developing parental inbred lines in breeding nurseries, and other fields, greenhouse, and laboratory experiments.

Assembler
Parker Hannifin Corp. Eaton, OH – February 2019 – August 2020
Assembler is responsible for preparing parts for final assembly and packaging parts for shipment to customers. Part assembles may include installation of O-rings, face seals, or retaining rings. Final assembly includes installation of caps over any threaded pieces or insertion of plugs into any needed orifices. Once parts are properly assembled, they are then packaged, boxed, and labeled for shipment. Daily recorded keeping of jobs done and number of parts assembled per job is also tracked. Assemblers also have ability to print proper paperwork and create the necessary labels for shipment.

Onion Breeder
EWSY, Inc. Yuma, AZ – June 2016 – May 2018
Responsible for the development of competitive white, yellow, and red short-day onion hybrids. Implement and manage the onion breeding activities at the East-West Seed Yuma (EWSY, Inc.) Breeding Station in Yuma, AZ under the guidance of the Onion Crop Breeding Manager. Helped with managing breeding trials that will take place in Davis, CA. Also lead in the recruitment, management, and training of the field support staff. Breeders will be breeding for the East-West Seed global tropical markets in Asia, Latin America, and Africa. The EWSY, Inc. group will also lend breeding support to the East-West Seed breeding group in India. Reporting into the EWS Group R&D function, the position shall collaborate with other EWS R&D and other functional resources globally, to drive the success of introducing short-day onion hybrids.

Global Seeds/Traits Account Manager/Research Biologist
SynTech Research, Inc., Sanger, CA - January 2012 – November 2015
Manage applied research programs in the field, laboratory, and greenhouse to provide research, development, registration, or re-registration information for seeds, both conventional and genetically modified, and trait development. The Global Seeds/Traits Account Manager is the prime contact with the Sponsor for programs that require global (multi-Regional or multi-country) planning and management and is accountable for the sound execution of the program including technical approach and budgetary aspects of the contract as well as sponsor communication and satisfaction. Research biologists are responsible for managing, recruiting, and assigning tasks to his/her team. To communicate and update staff and other support groups of ongoing activities. Responsible for the planning, design, and execution of GLP (Good Laboratory Practices) field studies. Perform all tasks as required for each research trial, including planting of test crops, calibration of spray equipment, pesticide applications, collecting crop and soil samples and conducting evaluations of crops and pests. Be able to clearly document all research activity both on the computer and in paper notebooks.

Corn Breeder
Beck's Superior Hybrids, Atlanta, IN – December 2006 – May 2011
Responsible for the development of inbred lines for the 100 to 115 Relative Maturity Day range. Assist in the development of both nurseries and isolated crossing blocks. Utilize crossing and backcrossing techniques to develop new populations and utilize selfing and dihaploid breeding techniques to advance superior populations. Keep detailed records for nursery and replicated testing plots to support the advancement of new inbred lines. Travel to winter nursery sites and conduct pollinating and selection. Ensured compliance with any USDA or EPA regulations that are part of any regulated trait/material trials we conduct. Responsible for the paperwork and compliance for all shipments going to winter nurseries.

Postdoctoral Associate
Mississippi State University, Mississippi State, MS – June 2005 – December 2006
Headed a research effort to look at the genetic variability certain weed species have to the herbicide glyphosate. Specifically, Palmer amaranth (*Amaranthus palmeri* S.) and pitted morningglory (*Ipomoea lacunosa* L.). Studied these two weed species in the greenhouse and in growth chambers set to specific environmental conditions (high/low temperature and high/low relative humidity). Assisted in conducting additional weed research at the university including completing a survey of Mississippi cotton producers on the influences Roundup Ready technology has had on their farming practices.

Assistant Corn Breeder/Team Leader II
Garst Seed Company, Marshall, MO – April 2003 – June 2005
Assisted the breeding project manager in the development of improved products. Supported organizing, planting, harvesting and other agronomic operations of nursery, top crosses and yield trials that were planted at the station and at cooperator locations. Collected and compiled data, managed computer entry, and analysis. I also assisted in the organization and maintenance of inventory stocks and helped in organizing seed shipments to other research stations and companies.

EDUCATION

Doctor of Philosophy, Crop Science
Oklahoma State University, Stillwater, OK 74078 – July 2005
Thesis: Oil and fatty acid profiles of soybeans (Maturity groups IV, V, and VI)

Master of Science, Plant and Soil Sciences
Oklahoma State University, Stillwater, OK 74078 – May 1999
Thesis: Agronomic and economic analyses of soybean-wheat cropping systems

Bachelor of Science, Agriculture with Chemistry Minor
Eastern Kentucky University, Richmond, KY 40475 – December 1996

TEACHING

AGR 3250. Grain Crops – Central State University Wilberforce, OH
Fall 2023
This course presented a study of the history, adaptation, and distribution of cereal, forage, and miscellaneous crops around the world with emphasis on botany, physiology, and sustainable crop production. Major cereal grain crops such as corn, wheat, rice, barley, sorghum, millet, triticale, rye, and oats; grain legumes such as soybean and black-eyed pea; and pseudo grains such as amaranth and quinoa. The class focused on the production principles of grain crops (corn, soybeans, and wheat); postharvest handling; utilization options including food, feed, and biofuel; and international trade. This class consisted of three, one-hour lectures and one, three-hour lab per week.

AGR 1150 Introduction to Sustainable Agriculture – Central State University Wilberforce, OH
Fall 2021 and 2022
This course introduces conservation techniques to produce food, fiber and other plant and animal products using farming techniques that protect the environment, public health, human communities, and animal welfare. Both local and global issues of agricultural and food production sustainability are explored from environmental, social, political, and economic aspects.

PUBLICATIONS

Campbell, M., A. Karn, M. Scott, and L. Farno. 2026. The High-Amylose Maize Line GEMS-0067 Is Associated with an Intron 8 Insertion in *Sbe1a*, Altered Native PAGE Zymogram Patterns, and Development of PCR Markers for Breeding Applications. Plants. 15(20): 3157.

Farno, L., K. R. Keim, and L. H. Edwards. 2003. Registration of 'Catoosa' soybean. Crop Sci. 43(3): 1125.

Farno, L., K. R. Keim, and L. H. Edwards. 2003. Registration of 'Washita' soybean. Crop Sci. 43(3): 1124-1125.

Dinkins, R. D., K. R. Keim, L. Farno, and L. H. Edwards. 2003. Expression of the narrow leaflet gene for yield and agronomic traits in soybean. J. Hered. 93: 346-351.

Farno, L. A., Edwards, L. H., Keim, K., and Epplin, F. M. 2002. Economic analysis of soybean-wheat cropping systems. Online. Crop Management
http://www.plantmanagementnetwork.org/pub/cm/research/soywheat/.

L.A. Farno and E.H. Edwards. 2000. Agronomic and Economic Analysis of Soybean-Wheat Cropping Systems. Pg. 127. *In* Abstracts, Annu. Meet. ASA-CSSA-SSSA, Minneapolis, MN. 5-9 Nov. 2000. ASA-CSSA-SSSA, Madison, WI.

PRESENTATIONS

Eliodor, E., M. Campbell, and L. Farno. 2026. Variation in starch-iodine spectra of maize inbreds within and between ae and ae waxy genotypes across two years. 2026 ARD Research Symposium, New Orleans, LA, USA, March 28-31, 2026.

Hutcheson, T., M. Campbell, and L. Farno. 2024. Exploring candidate loci for developing high amylose maize from bioinformatic data bases. 2024 ARD Research Symposium, Nashville, TN, USA, April 6-9, 2024.

Jackson, W., M. Campbell, and L. Farno. 2024. Establishment and analysis of a replicated yield trial of experimental high amylose hybrid maize. 2024 ARD Research Symposium, Nashville, TN, USA, April 6-9, 2024.

McCown, N., M. Campbell, and L. Farno. 2024. Comparison of starch isolation methods for determining starch amylose in maize. 2024 ARD Research Symposium, Nashville, TN, USA, April 6-9, 2024.

Farno, Luke A., David R. Shaw, and M. Cade Smith. "Attitudes towards the Roundup Ready system in cotton: A 2002 survey" Poster, 46th Meeting of the Weed Science Society of America, February 15, 2006, New York, NY.

L.A. Farno, D.R. Shaw, and W.A. Givens. "Assessing Variability in Control of *Amaranthus palmeri* and *Ipomoea lacunosa* by Glyphosate" Poster, 2006

Proceedings, Southern Weed Science Society, January 24, 2006, San Antonio, TX. J.M. Prince, D.R. Shaw, L.A. Farno, D.H. Poston, C.H. Koger, T.W. Eubanks, and C.J. Gray. "Post-applied Residual Herbicides in an Early-planted Glyphosate-resistant Soybean System" Poster, 2006 Proceedings, Southern Weed Science Society, January 24, 2006, San Antonio, TX.

Farno, L.A., L.H. Edwards, and K. Dashiell. "Oil and Fatty Acid Profiles of Soybeans (Maturity Groups IV, V, and VI) Grown in Oklahoma" Poster, Annual American Society of Agronomy Meetings, November 12, 2002, Indianapolis, IN.

Farno, L.A. and L.H. Edwards. "Agronomic and Economic Analyses of Soybean-Wheat Cropping Systems" Poster, Annual American Society of Agronomy Meetings, November 6, 2000, Minneapolis, MN.