Amanda Christine Easterly

EDUCATION

Ph.D., University of Nebraska-Lincoln (December 2017, GPA 3.827/4.0)

Major: Agronomy, emphasis on Plant Breeding and Genetics

Thesis: Developing hybrid wheat for the Great Plains: Addressing hybridization,

heterosis, and heterotic pool development

Minor: Statistics Advisor: P.S. Baenziger

M.S., Purdue University (August 2014, GPA 3.55/4.0)

Major: Plant Breeding and Genetics

Thesis: Agronomic and genetic characterization of aluminum tolerance in a recombinant inbred line population of sorghum [Sorghum bicolor (L.)

Moench]

Advisors: G. Ejeta and S.M. Brouder

B.S., University of Nebraska-Lincoln (May 2011, with honors, GPA 3.733/4.0)

Major: Plant Biology, emphasis on Biotechnology Minors: Mathematics, Diversified Agricultural Studies Thesis: Arabidopsis mutants defective in *DJ-1* homologs

Advisor: J.M. Stone

EXPERIENCE

Research Assistant Professor-Dryland Cropping Systems

2019-present

University of Nebraska, Sidney, NE

- Conduct research projects at the High Plains Agricultural Lab near Sidney, NE evaluating agronomic practices for dryland cropping systems
- Manage state variety testing for winter wheat
- Analyze, prepare, and present research results and grant applications for scientific and extension presentations/publications
- Provide technical and statistical support for Dryland Cropping Systems Specialist
- Mentor graduate and undergraduate researchers at the High Plains Agricultural Lab
- Develop data management practices and pipelines

Research Lab Manager II

2018-2019

University of Nebraska, Sidney, NE

- Coordinate and execute research projects at the High Plains Agricultural Lab near Sidney, NE
- Train graduate and undergraduate researchers in good laboratory and field practices
- Organize, annotate, and store data for research projects

Graduate Teaching Assistant

2017

University of Nebraska, Lincoln, NE

- Manage online course materials and grading for graduate level introductory plant breeding course
- Provide tutoring for on-campus and online students with mastering material necessary for course
- Assist professor in development of new materials for course content

Graduate Research Assistant

2014-2017

University of Nebraska, Lincoln, NE

- Conduct primary research on hybrid wheat development for the Great Plains
- Assist in grant-writing to support hybrid wheat research program at the University of Nebraska, Texas A&M University and CIMMYT
- Lead and mentor team of graduate student researchers in hybrid wheat and conventional wheat breeding program
- Manage field research equipment, supplies, and ordering/budgeting for research team
- Develop new methods for analyzing complex experiments and field trials in small, targeted bioinformatics team

Farm Hand 2014

Easterly Land and Cattle, Sidney, NE

- Perform necessary field operations for field crop production of wheat, corn, millet, and summer fallow of dryland farm
- Assist in selection of management practices for farm operations

Graduate Research Assistant

2011-2014

Purdue University, West Lafayette, IN

- Developed and optimized soil and genetic screening methods for acid soil/aluminum tolerance in grain sorghum
- Coordinate field operations for grain and forage sorghum breeding program under supervision of primary investigator and field technician
- Mentor fellow graduate and undergraduate students

REFEREED PUBLICATIONS

Easterly AC, Garst N, Belamkar V, Souza E, Stroup WW, Eskridge KE, Baenziger PS 2018. Statistical approaches for testing efficacy of a chemical hybridizing agent in wheat. (In revision).

Easterly AC, Garst N, Belamkar V, Eskridge KE Rodriguez O, Souza E, Rudd JC, Ibrahim AMH, Baenziger PS. 2018. Evaluation of hybrid wheat performance in Nebraska. (In preparation).

- Kariywasam G, Hussain W, **Easterly A**, Guttieri M, Belamkar V, Poland J, Venegas J, Baenziger S, Marias F, Rasmussen JB, and Liu Z. 2018. Identification of quantitative trait loci conferring resistance to tan spot in a biparental population derived from two Nebraska hard red winter wheat cultivars. *Molecular Biology*. (In press).
- Liu C, Guttieri MJ, Eskridge KE, Waters BM, **Easterly AC**, Baenziger PS. 2018. Cadmium concentration in terminal tissues as tools to select low-cadmium wheat. *Plant and Soil*, 1-12.
- Hussain W, Baenziger PS, Belamkar V, Guttieri MJ, Venegas JP, **Easterly A**, Sallam A, Poland J. 2017. Genotyping-by-Sequencing derived high-density linkage map and its application to QTL mapping of flag leaf traits in bread wheat. *Scientific reports*, 7(1), p.16394.

SELECTED CONFERENCE PRESENTATIONS

- **Easterly AC**, Garst N, Belamkar V, Baenziger PS. 2017. Modeling male sterility induced by chemical hybridization of wheat (*Triticum aestivum*). Poster at Kansas State Conference for Applied Statistics in Agriculture, Manhattan, KS.
- **Easterly A**, Garst N, Belamkar V, Rudd J, Ibrahim A, Adhikari A, Baenziger PS. 2017. Performance of hybrid wheat in the Great Plains. Poster at ASA/CSSA/SSSA Annual Meeting, Tampa, FL.
- **Easterly A**, Garst N, Belamkar V, Rudd J, Ibrahim A, Baenziger PS. 2016. Diversity and performance of wheat hybrids in the Great Plains. Presentation and poster at ASA/CSSA/SSSA Annual Meeting, Phoenix, AZ.
- **Easterly A**, Garst N, Ibrahim A, Rudd JC, Belamkar V, Baenziger PS. 2016. Diversity analysis and hybrid wheat production for the Great Plains. Poster at ASTA Summer Meeting, Portland, OR.
- **Easterly A**, Belamkar V, Lorenz A, Garst N, Ibrahim A, Rudd J, Poland J, Baenziger PS. 2015. Breeding for hybrid wheat: addressing heterosis, hybridization and commercial production practices, and potential for heterotic pool development. Poster at ASA/CSSA/SSSA Annual Meeting, Minneapolis, MN.
- **Easterly AC**, Brouder SM, Ejeta G. 2014. Agronomic and genetic characterization of aluminum tolerance in *Sorghum bicolor*. Poster at NIFA-AFRI Graduate Seminar, West Lafayette, IN.

SELECTED AWARDS

- Undergraduate Creative and Research Experiences Grant, University of Nebraska-Lincoln 2008-2010
- Summer Undergraduate Research Fellowship Recipient, American Society of Plant Biologists, 2010
- Agricultural Research Division Fellowship, University of Nebraska-Lincoln, USDA, 2010-2011
- John D. Axtell Graduate Student Award in Plant Breeding and Genetics, Purdue University, 2014
- Othmer Graduate Fellowship, University of Nebraska-Lincoln, 2014-2017
- Operation Student Connection, American Seed Trade Association, 2016
- Al Moseman International Fellowship, University of Nebraska-Lincoln, 2016-2017
- Water for Food Institute Graduate Student Support Fellowship, University of Nebraska-Lincoln, 2016-2017
- Larrick Student Travel Fund, University of Nebraska-Lincoln, 2017
- Henry Beachell Fellowship, University of Nebraska-Lincoln, 2017

PROFESSIONAL, LABORATORY, & COMPUTING QUALIFICATIONS

- Statistical Software: SAS, R, RStudio, and AS-ReML
- Data Management Software: Agrobase SQL Database and ARM
- Private Pesticide Applicator's License for Nebraska with certification for Demonstration/Research plot application and Plant Pest Control
- Certified to use Am-Be neutron probe for soil moisture monitoring

PROFESSIONAL SOCIETIES

- Alpha Zeta, initiated at UNL
- Gamma Sigma Delta, initiated at UNL
- Crop Science Society of America (2009, 2014-present)
- American Society of Agronomy (2014-present)
- National Association of Plant Breeders (2014-2016)
- PEO International (2016-present)