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Professional Experience:

2006-present, Professor, Department of Agronomy, Kansas State University
2000-2006, Associate Professor, Kansas State University, Department of Agronomy, Manhattan, KS
1996-2000, Assistant Professor, Texas A&M University, Soil and Crop Sciences Department, College Station, TX

Education:

Ph.D., 1994. Kansas State University (wheat breeding).
M.S., 1991. Kansas State University (wheat breeding).
B.S., 1986. University of Nebraska-Lincoln (Agronomy-Crop Production).

Professional Societies:

American Society of Agronomy.
Crop Science Society of America
Gamma Sigma Delta

Professional Interests and Responsibilities:

Wheat Breeding and Genetics, Wheat Variety Development, Resistance of Fungal Diseases, Abiotic Stress Tolerance and Plant Breeding Teaching

Publications:

Barkley, A., J. Tack, L. Nalley, J. Bertold, R. Bowden and A. Fritz. 2014. Weather, Disease, and Wheat Breeding Effects on Kansas Wheat Varietal Yields, 1985 to 2011. *Agronomy J.* 106: 1: 227-235.
Martin, T.J. G.R. Zhang, A.K. Fritz, R. Miller and M.S. Chen. 2014. Registration of 'Clara CL' wheat. *Journal of Plant Registrations* 1:38-42.
Martin, T. J., G.R. Zhang, A.K. Fritz, R. Miller and M.S. Chen. 2013. Registration of 'Tiger' wheat. *Journal of Plant Registrations* 7:201-204.
Alexander, Lauren M., Francis M. Kirigwi, Allan K. Fritz and John P. Fellers. 2012. Mapping and Quantitative trait loci analysis of drought tolerance in a spring wheat population using amplified fragment length polymorphism and diversity array technology markers. *Crop Science* 52:253-261.
Pradhan, Gautum P., P.V.V. Prasad, A. K. Fritz, M.B. Kirkham and B.S. Gill. 2012. High temperature tolerance in *Aegilops* species and its potential transfer to wheat. *Crop Sci.* 52:292-304.
Pradhan, Gautum P., P.V.V. Prasad, A. K. Fritz, M.B. Kirkham and B.S. Gill. 2012. Response of *Aegilops* species to drought stress during reproductive stages of development. *Functional Plant Biol.* 39:51-59.
Rudd, Jackie C., Ravindra N. Devkota, Allan K. Fritz, Jason A. Baker, Don E. Obert, David Worrall, Russell Sutton, Lloyd W. Rooney, Lloyd R. Nelson, Yiqun Weng, Gaylon D. Morgan, Brent Bean, Amir M. Ibrahim, Arthur R. Klatt, Robert L. Bowden, Robert A. Graybosch, Yue Jin, and Brad W. Seabourn. 2012. Registration of 'TAM 401' wheat. *J. Plant Reg.* 6:60-65.

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- Bockus, W.W., M.A. Davis, A.K. Fritz, T.J. Martin. 2011. Reaction of the 2010 Kansas Intrastate Nursery to Fusarium head blight. Plant Disease Management Reports. Report No.5:CF010.
- Kolluru Vijayalakshmi, Allan K. Fritz, Gary M. Paulsen, Guihua Bai, Satchidanand Pandravada and Bikram S. Gill. 2010. Modeling and mapping QTL for senescence-related traits in winter wheat under high temperature. Molecular Breeding DOI 10.1007/s11032-009-9366-8.
- Bockus, W.W., A.K. Fritz, T.J. Martin. 2010. Reaction of the 2009 Kansas Intrastate Nursery to Fusarium head blight. Plant Disease Management Reports. Report No.4:CF010.
- Hall, M.D., A.K. Fritz and G.L. Brown-Guedira. 2009. Genetic analysis of resistance to soil-borne wheat mosaic virus derived from *Aegilops tauschii*. Euphytica 169:169-176.
- Friebe, B., L. Qi, D. Wilson, Z. Chang, D. Seifers, T.J. Martin, A. Fritz, and B. Gill. 2009. *Thinopyrum intermedium* recombinants resistant to *Wheat Streak Mosaic Virus* and *Triticum Mosaic Virus*. Crop Science 49:1221-1226.
- Bockus, W.W. A.K. Fritz and T. J. Martin. 2009. Reaction of the 2008 Kansas Intrastate Nursery to Fusarium head blight. Plant Disease Management Reports. Report No. 3:CF009.
- Prasad. P.V.V., S.R. Pisipati, Z. Ristic, U. Bukovnik and A.K. Fritz. 2008. Impact of nighttime temperature on physiology and growth of spring wheat. Crop Sci. 48:2372-2380.
- Bonwell, E.S., T.L. Fisher, A.K. Fritz and D.L. Wetzel. 2008. Determination of endosperm protein secondary structure in hard wheat breeding lines using synchrotron infrared microspectroscopy. Vibrational Spectroscopy 48:76-81.
- Kirigwi F.M., Van Ginkel M., Brown-Guedira G., Gill B.S., Paulsen G.M. and Fritz A.K. 2007. Markers associated with a QTL for grain yield in wheat under drought. Mol. Breeding 20:401-413.
- Bockus, W.W., Z. Su, K.A. Garrett, B.S. Gill, J.P. Stack, R.L. Bowden, A.K. Fritz, K.L. Roozeboom and T.J. Martin. 2007. Determining Wheat Disease Phenotypes; How Many Experiments Does it Take? Plant Disease 91:103-108.
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- Gill, B.S. B. Friebe, W.J. Raupp, D.L. Wilson, T.S. Cox, R.G. Sears, G.L. Brown-Guedira and A.K. Fritz. 2006. Wheat Genetic Resource Center: The first 25 years. Advances in Agronomy 85:73-135.
- Smail, V.W., A.K. Fritz and D.L. Wetzel. 2006. Chemical imaging of intact seeds with NIR focal plane array assists plant breeding. Vibrational Spectroscopy 42:42:215-221.
- Brown-Guedira G.L., J.H. Hatchett, X.M. Liu, A.K.Fritz, J.O. Owuochi, B.S. Gill, R.G. Sears, T.S. Cox, and M.S. Chen. 2005. Registration of KS99WGRC42 Hessian fly-resistant hard red winter wheat germplasm. Crop Sci. 45:804-805.
- Liu, X.M., A.K. Fritz, J.C. Reese, G.E. Wilde, B.S. Gill and M.S. Chen. 2005. Hessian fly resistance genes *H9*, *H10* and *H11* are mapped to the distal region of wheat chromosome 1AS. Theoretical and Applied Genetics 110:1473-1480.
- Obert, D.E., A.K. Fritz, J.L. Moran, S. Singh, J.C. Rudd and M.A. Menz. 2005. Identification and molecular tagging of a gene for PI 289824 conferring resistance to leaf rust (*Puccinia triticina*) in wheat. Theoretical and Applied Genetics 110:1439-1444. Fritz, A.K. and T.J. Martin. 2004. Application for Plant Variety Protection for Overlay wheat. Accepted for publication 7/20/2004, certificate number 200400205 issued.
- Zhu, L.C., C.M. Smith, A. Fritz, E. Boyko, P. Voothuluru and B.S. Gill. 2005. Inheritance and molecular mapping of new greenbug resistance genes in wheat germplasm derived from *Aegilops tauschii*. Theoretical and Applied Genetics. (In Press).
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- Lazar, M.D., W.D. Worrall, D.S. Marshall, L.Nelson, A.K. Fritz, M.E. McDaniel and L. Rooney, 2004. Registration of TAM-111 wheat. Crop Sci. 44:355-356.
- Cox, C.M., K.A. Garrett, R.L. Bowden, A.K. Fritz, S.P. Dendy and W.F. Heer. 2004. Cultivar mixtures for the simultaneous management of multiple diseases: Tan spot and leaf rust of wheat. Phytopath. 94:961-969.
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- Lopez, Y., H.L. Nadaf, O.D. Smith, C.E. Simpson and A.K. Fritz. 2002. Expressed variants of δ^{12} -fatty acid desaturase for the high oleate trait in spanish market-type peanut lines. *Molecular Breeding* 9:183-192.
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- Fritz, A.K., T.S. Cox, B.S. Gill, and R.G. Sears. 1995. Marker-based analysis of quantitative traits in winter wheat x *Triticum tauschii* populations. *Crop Sci.* 35:1695-1699.

Varieties Released (2000-present):

- 2145(released in 2001). Maximum Kansas acreage: 2.2% in 2005
- Overley (released in 2003). Maximum Kansas acreage: 23.3% in 2007. Leading variety in Kansas in 2007 and 2009, 2nd in 2008.
- Fuller (released in 2006). Maximum Kansas acreage: 11.8% in 2010. Leading variety in Kansas in 2010.
- Everest (released in 2009). Maximum Kansas acreage: 14.8% in 2013. Leading variety in Kansas in 2013.
- 1863 (released in 2012). Maximum Kansas acreage: N/A