

Kendall R. Lamkey

General Information

Home Address: 5120 River Ridge Road
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Personal Information

Date of Birth: November 22, 1958
Place of Birth: Springfield, Illinois
Marital Status: Married, three children

Education

B.S. University of Illinois, Urbana-Champaign
Major: Agronomy
GPA: 4.18 (5.0 scale)
Received: 1980

M.S. University of Illinois, Urbana-Champaign
Major: Plant Breeding
GPA: 4.87 (5.0 scale)
Advisor: J. W. Dudley
Received: 1982

Ph.D. Iowa State University
Major: Plant Breeding and Cytogenetics
GPA: 3.88 (4.0 scale)
Advisor: A. R. Hallauer
Received: 1985

Professional Experience

1980-82, Graduate Research Assistant, University of Illinois
1982-85, Graduate Research Assistant, Iowa State University
1984-2002, Research Geneticist, USDA, ARS, Ames, Iowa
1987-present, Full member, Graduate Faculty, Iowa State University
2002-present, Professor of Agronomy, Iowa State University
2002-2012, Pioneer Distinguished Chair in Maize Breeding
2002-2006, Director, Raymond F. Baker Center for Plant Breeding
2006-2007, Interim Chair, Department of Agronomy, Iowa State University
2007-present, Chair, Department of Agronomy, Iowa State University

Administrative Responsibilities and Accomplishments

As chair of the Department of Agronomy, I provide leadership and direction to the department in the areas of education, research, and extension. I advocate for and sets priorities for the academic and research portfolio of the department through shared governance with the faculty. In cooperation with Associate Dean for Extension and Outreach in the College of Agriculture and Life Sciences, I also advocate for and set priorities for extension and outreach in crops, soils, and climatology. I have the responsibility of representing the department as I interact with public in Iowa and at the national and international level. I am responsible for understanding and being able to articulate the broad education, research, and extension capabilities of each of the faculty in the department.

Our department has 41 tenure track faculty, 15 non-tenure track faculty, and 15 USDA-ARS collaborators. We have 81 staff positions in agronomy, 10 of which report to me and support the department administratively, with the rest being research, teaching, and extension support, many paid primarily on external grants and contracts. We have 323 undergraduate students, 307 graduate students, and 23 postdocs. I am responsible for overseeing the departmental budget, evaluating faculty, setting salaries, hiring faculty, and providing faculty, staff, and students with the support they need to be successful. Our annual external grant expenditures have been running from \$8M to 12M per year, making us the largest externally funded department at ISU. I also provide leadership in the expenditure of approximately \$2.5M per year from earnings on an endowment in agronomy. The council that oversees this endowment is officially lead by the President of Iowa State University, but organized and presented by me and the faculty in agronomy. This council has given me incredible insight into the operations and leadership at the university level.

Leadership Accomplishments While Department Chair

- Developed, led, and supported, with key staff members, our “I’m an Agronomist” branding and marketing campaign to increase our enrollment. Our undergraduate enrollment in the fall of 2006 was 106 and our enrollment fall 2017 was 323.

- My passion and a major goal of the department is increasing the number of women in the agronomic sciences. Our college is 50% female, but our core agronomic and business majors are significantly less than 50% female. Since 2006, we have increased the percentage of women in the department from 24 to 36%. It is a modest increase, but we now have 116 women in agronomy, which is more women than we had students in 2006.
- I have refocused our core agronomic research and faculty hires around crop, soils, climate, and systems modeling. Modeling and data analytics fundamentally changes how we think about agronomic systems and this new focus is and will continue to have a huge impact on our department and the state of Iowa.
- I helped initiate, with a faculty member in plant pathology, the establishment of a new web presence for our extension program in crops and soils. I am no longer directly engaged in this, but the website (<https://crops.extension.iastate.edu/>) has continued to evolve as a single place where our stakeholders can find crop management information.
- We rebranded our traditional soybean and corn extension positions as cropping systems positions. The first one was filled with a cropping systems modeler (Archontoulis) and the second one was filled with cropping systems management (Licht).
- Since I have been chair, we have been successful in soliciting several important gifts. Most significant among them has been a \$2M bequest to endow and name the department chair position in agronomy, a \$500K gift to promote “Into the Field” activities in our undergraduate program, a \$1.5M gift to create the Iowa Corn Promotion Board Endowed Chair in Genetics, and a \$500,000 gift to establish the Monsanto Chair in Soybean Breeding.
- I have hired approximately 20 faculty during my tenure as chair and have handled numerous promotion and tenure packages.
- We have a very successful distance MS in Agronomy program and since I have been chair, we launched an equally successful MS in Plant Breeding program Fall 2011.
- During my tenure as chair, I have established 6 named faculty positions in agronomy.
- Instituted twice a month faculty meetings and an annual State of the Department address.
- I have been involved with leading our highly successful Farm Progress Show display beginning with the first show at the Boone site in 2008 and beginning with the 2010 show have co-chaired the planning committee with Dr. John Lawrence. I have been very instrumental in changing the style and the impact of this show, making it a showcase event for Iowa State University.
- I have maintained a strong focus on graduate education in the department. Agronomy currently has 307 graduate students accounting for approximately 41% of the graduate students in the College of Agriculture and Life Sciences. Agronomy accounts for 24% of all the Ph.D students in the College of Agriculture and Life Sciences.

The Department of Agronomy at Iowa State University is one of the premier agronomy departments in the United States, with a focus on the crop, soil, and environmental sciences. We are a top department in grant funding on the ISU campus. As the largest graduate program in the College of Agriculture and Life Sciences, our nationally recognized graduate program offers 4 Ph.D. majors, 2 distance M.S. majors, and have faculty who participate in 7 interdepartmental graduate

majors. Our premier undergraduate education program has tripled in enrollment in the last 9 years. Agronomy actively promotes and takes pride in our collegial culture among faculty, students, and staff.

Professional Associations

American Society of Agronomy
Crop Science Society of America
American Association for the Advancement of Science

Membership in Honor Societies

Gamma Sigma Delta
Mu Sigma Rho
Sigma Xi

Awards and Honors

Premium for Academic Excellence Award, Iowa State University, 1982-83
The C.R. Weber Award for Excellence in Plant Science, Iowa State University, 1984
T.A. Bancroft Statistics Award, Statistical Laboratory, Iowa State University, 1985
Research Excellence Award, Iowa State University, 1985
Certificate of Merit, USDA, 1990, 1992, 1995, 1998, 1999, 2000, 2001
Raymond and Mary Baker Award for Agronomic Excellence, Iowa State University, 1994
Outstanding Paper on Plant Genetic Resources, Crop Science Society of America, 2002
Elected Fellow of the Crop Science Society of America, 2002
Elected Fellow of the American Society of Agronomy, 2010

Teaching Experience

Courses: Agronomy 621, Advanced Plant Breeding, Iowa State University, 2002-2007
Agronomy 600A, Plant Breeding Seminar, Iowa State University, 1994-2002
Agronomy 410, Senior Forum, Iowa State University, 2006-present

International Experience

Invited to visit and review maize breeding program at the Maize Research Institute, Zemun Polje, Belgrade, Yugoslavia. September 25 to October 3, 1990.

Invited to visit and review corn breeding program at the Institute for Breeding and Production of Field Crops, University of Zagreb, Yugoslavia.

Invited keynote speaker at the 10th Australian Plant Breeding Conference, Gold Coast, Queensland, April 18-23, 1993.

Invited lecturer at the Advanced Maize Breeding Course for National Leaders, CIMMYT Headquarters, El Batan, State of Mexico, Mexico.

Invited to visit and review the maize breeding program at the Institute of Field and Vegetable Crops, Novi Sad, Yugoslavia, July 7 to 16, 1997.

Invited to visit and review the maize breeding program at the Maize Research Institute, Zemun Polje, Yugoslavia, July 14, 1997.

Member of Technical Committee and Editorial Board for the International Symposium on the Genetics and Exploitation of Heterosis in Crops, CIMMYT, Mexico City, August 17-22, 1997.

Invited to review corn breeding research by the Municipality of Yichang Foreign Affairs Office, China on June 15 to 29, 1999

Member of the planning committee for the Arnel R. Hallauer International Symposium on Plant Breeding, Mexico City, August 17-22, 2003.

Invited to review Monsanto's maize breeding program in South Africa, Monsanto Breeding Headquarters, Petrusburg, South Africa, March 7-13, 2004.

Invited to attend and lecture at the XX National Congress of Plant Breeding and Genetics in Mexico, Toluca, Mexico, September 19-24, 2004

Invited to attend and lecture at the 9th Asian Regional Maize Conference and the national maize workshop, September 5-14, 2005, Beijing, China.

Invited to attend and lecture at the International Maize Conference: Accomplishments and Perspectives on the occasion of the 60th anniversary of the Maize Research Institute, Zemun Polje October 26-26, 2005, Belgrade, Serbia.

Invited to attend and lecture at the South African Plant Breeding Association's 7th Plant Breeding Symposium, March 10-13, 2008, Northern Drakensburg, KwaZulu-Natal, South Africa.

Invited to visit Iowa State University's Center for Sustainable and Rural Livelihoods program in Uganda with ISU President Leath, July 15-25, 2013, Kamuli district, Uganda.

Member of the Makerere University Regional Center of Excellence in Crop Improvement (MaRCCI) advisory board, Kampala, Uganda, 2018 to 2023.

Research Interests

My research focused on the utilization and maintenance of genetic variation in plant breeding, but specifically in corn. My research can be divided into basic and applied research. On the basic side of my research program, we have been interested in understanding how the phenotypic variation in corn is inherited and structured in populations. We have used statistical, quantitative genetic, and molecular tools to understand this basic question. On the applied side, we conducted selection programs (many of them are long-term in nature and unique) in several maize populations and

develop and release corn inbred lines. The selection programs provided us with much of the experimental material we use in our basic research. These selection programs also strengthen and broaden the genetic base of corn and provide a novel source of improved germplasm for industry and public breeders. The need for this was evidenced in the hundreds of seed requests that we filled each year. The selection and inbred development programs were also an important part of our graduate education program in plant breeding.

I worked primarily on grain yield and agronomic traits. Over time, we transitioned to working with grain quality traits (primarily amino acid content and phytate content) and the utilization of corn stover as a source of cellulose in bioenergy applications.

Other Interests

Family activities, music, reading, hiking, running, camping.

Professional and Public Service

National

Presiding Chairman, Division C-1, C-4, C-7, Session 7-Biotechnology/RFLP, American Society of Agronomy Meetings, Anaheim, CA, December 1, 1989.

Invited participant and co-discussion leader (breeding methodology and cytogenetics) at the New ARS Cereal Scientists Workshop, Pocatello, Idaho, May 21-25, 1990.

Member, Local Arrangements Committee, First International Crop Science Congress (Sponsored by Crop Science Society of America and Iowa State University), 1992

Chairman, Crop Science Society of America Committee C711.07, CSSA/ASHA Plant Breeding Symposium, 1995-1996.

Associate Editor, *Crop Science*, 1991-1994

Technical Editor, *Crop Science*, 1999-2003

Associate Editor, *Journal of Heredity*, 1995-2002

Editor, *Crop Science*, 2004-2006

Program Chair, 63rd Corn & Sorghum Seed Research Conference, American Seed Trade Association, 2008.

Non-Resident Fellow, Forage Improvement Division, Noble Foundation, Ardmore, OK, 2011-2016.

Member, Department of Horticulture and Crop Science at the Ohio State University departmental review team, November 18-20, 2013

Commission Member, The Challenge of Change: Harnessing University Discovery, Engagement, and Learning to Achieve Food and Nutrition Security, Associate of Public and Land Grant Universities, 2016-2017 (<http://www.aplu.org/challengeofchange>).

Chair, Working Group on Sustainable Production Systems, The Challenge of Change: Harnessing University Discovery, Engagement, and Learning to Achieve Food and Nutrition Security, Associate of Public and Land Grant Universities, 2016-2017
(<http://www.aplu.org/challengeofchange>).

Member, Department of Agronomy, Horticulture, and Plant Science at South Dakota State University departmental review team, February 12-14, 2018.

Regional

Administrative Advisor to NCERA184 regional committee on Cereal Diseases, 2006-present.

Administrative Advisor to NCCC211 regional committee on cover crops, 2012-present.

Administrative Advisor to NCCC167 regional committee on corn breeding, 2015-present.

Representative to NC7 regional committee on Conservation, Management, Enhancement and Utilization of Plant Genetic Resources, 2007 to present

Representative to NCR-2 (now NCR-167) regional committee on corn breeding, 1985-present.

Representative to NCR-21 regional committee on quantitative genetics, 1992-1994.

Chairman, Uniform Tests for Inbred Lines Committee, NCR-2, 1985-1996

Chairman, NCR-2 Corn Quantitative Genetics Session, 1988

Chairman, NCR-167 Regional Corn Breeding Meetings, 1997

Member, Executive Committee of NCR-2, 1988-92

State

Board of Directors, Iowa Crop Improvement Association, 2006-present.

University

Board of Directors, Committee for Agriculture Development, 2006-present.

Department Chairs Cabinet, Iowa State University, 2007-2013

ISU RMM (Budget Model) Review Committee, Iowa State University, 2011 - 2012

Co-Chair (with John Lawrence, Associate Dean for Extension and Outreach) the planning committee for the ISU display at the Farm Progress Show, 2008, 2010, 2012, 2014, 2016, 2018

Enrollment Management Task Force, Faculty Senate, Iowa State University, 2016

Member, ad-hoc committee on Interdisciplinary Research Centers, Vice President for Research, Iowa State University, 2018

Member, College of Agriculture and Life Sciences Task Force on Human Resources, Iowa State University, 2018

Department

Plant Breeding Graduate Program, 1985-present

Uniform Written Preliminary Examination, 1986-87

Crop Variety Testing, Chairman, 1985-88; 2001-2006
Outlying Research Center, 1986-2000
Scholarship and Recognition, Graduate on Campus, 1986-2006
Plant Science Lectures, 1987-2002
C. R. Weber Award for Excellence in Plant Science, Chairman, 1988-2004
Uniform Written Preliminary Examination, Chairman, 1988-89; 1994-96; 2000
Green House and Growth Chamber, 1988-90
Publicity, 1988-89
Library, 1989-2002
Campus Physical Facilities-Building, 1990-2002

Continuing Education

Attended training course on Equal Employment Opportunity (EEO)-Fundamentals of EEO and Affirmative Action; 8 hours, Ames, IA, March 31, 1989.
Attended and received certificate of training for USDA-ARS Generic Training-Module 7 Supervision for Scientific Managers; 24 hours, Ames, IA, July 11-13, 1989.
Attended training course on Performance and Conduct; 2 hours, Ames, IA, November 27, 1990.
Attended and received certificate of training for USDA Multicultural Diversity Management Strategy Session; 6.5 hours, Ames, IA, September 11, 1991.
Attended and received certificate of instruction for Institute for Professional Education course in Analysis of Messy Data; 40 hours, Washington, DC, June 20-24, 1994.

Theses and Dissertations Directed

Completed

Julio H. Milla. Evaluation of selection indices in a recurrent selection program in corn (*Zea mays* L.). 1989. Ph.D. Employer: Unknown
Vichien Keeratinijakal. Evaluation of 11 cycles of reciprocal recurrent selection in BSSS and BSCB1 maize populations. 1990. Ph.D. Employer: Kasetsart University
David G. Pfarr. Evaluation of theory for identifying populations for use in genetic improvement of single-cross hybrids. 1990. M.S. Employer: Dupont Pioneer
Bruce J. Schnicker. Changes in genetic variance after eleven cycles of reciprocal recurrent selection in BSSS and BSCB1 maize populations. 1991. M.S. Employer: Monsanto
Kermit Bohning. Comparative testcross and per se performance of heterogeneous maize lines with their homozygous derivatives. 1991. Ph.D. Employer: Retired, Dow Agrosiences

- Kenneth A. Dallmier. Nitrogen-use efficiency in BS24, BS25, and populations representing seven eras of maize breeding. 1991. Ph.D. Employer: Syngenta
- Bruce J. Schnicker. Comparison of genetic variance in F2 and backcross populations of maize. 1992. Ph.D. Employer: Monsanto
- Thomas L. Gocken. Identification of quantitative trait loci (QTL) in maize on the basis of F3 and testcross progeny performance. 1993. Ph.D. Employer: Monsanto
- Joel F. Holthaus. Estimation of genetic variance components in two recurrently selected maize populations. 1994. Ph.D. Employer: Monsanto
- Roger A. Weyhrich. Comparison of responses to seven methods of recurrent selection in the BS11 maize population. 1998. Ph.D. Employer: Monsanto
- Peter S. Guzman. Effective population size, genetic variability, and gains from recurrent selection in the BS11 maize population. 1998. Ph.D. Employer: Monsanto
- Jode W. Edwards. Inbreeding depression and genetic drift in the BS13 maize population. 1999. Ph.D. Employer: USDA-ARS
- Lori L. Hinze. Epistasis for agronomic traits in elite maize hybrids. 2001. M.S. Employer: USDA-ARS
- Kebede Mulatu Ponta. Response to S1 recurrent selection and estimation of genetic parameters in effective population sizes of the BS11 maize population. 2001. Ph.D. Employer: Memorial Lutheran Church, Ames, IA as missionary in Ethiopia
- Paulo Evaristo de Oliveira Guimarães. Effects of a long-term recurrent selection program on the genetic structure of the BSSS maize population. 2001. Ph.D. Employer: EMBRAPA
- Lori L. Hinze. Molecular marker analysis of population genetic structure and progress from reciprocal recurrent selection in two Iowa maize (*Zea mays* L.). 2003. Ph.D. Employer: USDA-ARS
- Charles Thomas Foresman. Evaluation of 4 cycles of S1 recurrent selection in BSP1 and BSP2 popcorn populations. 2003. M.S. Employer: Monsanto
- Buppa Kongsamai. Marker-assisted selection and prediction of hybrid performance in maize. 2004. Ph.D. Employer: Kasetsart University, Kamphaeng Saen Campus
- James R. Rouse. Genetic diversity among progenitors and derived lines of two maize (*Zea mays* L.) populations. 2004. Ph.D. Employer: Iowa Crop Improvement Association
- Nicholas L. Bowser. The effect of seed treatments on data quality from small plots / by Nicholas Lee Bowser. 2005. M.S. Employer: Kansas Farmer
- Aaron J. Lorenz. The quantitative determination of phytate and available phosphorus for maize (*Zea mays* L.) breeding. 2005. M.S. Employer: University of Minnesota
- Elizabeth Popowski. Reliability of a microbial assay assessing lysine and methionine concentrations in maize (*Zea mays* L.) kernels. 2005. M.S. Employer: Unknown

- Thomas E. Scheffler. Evaluation of seven stiff-stalk and five non-stiff-stalk corn populations, hybrids, and S1's. 2006. Ph.D. Employer: Owner, Hancock Hybrid Seed Corn Co.
- Brandon M. Wardyn. The quantitative genetics of a non-stiff-stalk maize (*Zea mays* L.) population. 2006. Ph.D. Employer: Dupont Pioneer
- Clint Turnbull. Evaluation of long-term selection in the BS13 maize population. 2006. Ph.D Employer: Unknown
- Laurie Hyrkas. Heterosis in maize. 2008. M.S. Employer: Unknown
- Krystal Kirkpatrick. The evaluation of maize genotypes for potential use in cellulosic ethanol production. 2008. M.S. Employer: Monsanto
- Nikolas Bowden. The genetics of growing corn in living mulches. 2015. M.S. Employer: Iowa Farmer

Postdocs and Visiting Scientists

Postdocs

- E. Brent Godshalk, 1987, US
- Joanne Labate, 1995-1999, US
- Michael Zhang, 2004, US

Visiting Scientists

- Jovan Djordjevic, 1995-96, Serbia
- Goran Bekavac, 1998, Serbia
- Milosav Babic, 1998-99, Serbia
- Mathias Frisch, 1999-2000, Germany
- Sandra Hagdorn, 2000, Germany
- Jaoa Souza, 2003-2004, Brazil
- Goran Stankovic, 2004, Serbia
- Goran Drinic, 2005, Serbia
- Johan Reif, 2005, Germany

Publications

Journal Articles (80)

- Lamkey, K. R., and J. W. Dudley. 1984. Mass selection and inbreeding depression in three autotetraploid maize synthetics. *Crop Sci.* 24:802-806.
- Lamkey, K. R., and A. R. Hallauer. 1984. Comparison of populations improved by recurrent selection. *Maydica* 29:357-374.
- Lamkey, K. R., and A. R. Hallauer. 1986. Performance of high x high, high x low, and low x low crosses of lines from the BSSS maize synthetic. *Crop Sci.* 26: 1114-1118.
- Lamkey, K. R., and A. R. Hallauer. 1987. Heritability estimated from recurrent selection experiments in maize. *Maydica* 32:61-78.
- Lamkey, K. R., A. R. Hallauer, and A. L. Kahler. 1987. Allelic differences at enzyme loci and hybrid performance in maize. *J. Heredity* 78:231-234.
- Lamkey, K. R., and O. S. Smith. 1987. Performance and inbreeding depression of populations representing seven eras of maize breeding. *Crop Sci.* 27:695-699.
- Reeder, L. R., A. R. Hallauer, and K. R. Lamkey. 1987. Estimation of genetic variance components in two maize populations. *J. Heredity* 78:372-376.
- Lamkey, K. R., A. R. Hallauer, and D. S. Robertson. 1988. The contribution of the long arm of chromosome 10 to the total heterosis observed in maize hybrids. *Crop Sci.* 28:896-901.
- Lee, M., E. B. Godshalk, K. R. Lamkey, and W. W. Woodman. 1989. Association of restriction fragment length polymorphisms among maize inbreds with agronomic performance of their crosses. *Crop Sci.* 29:1067-1071.
- Kim, S. K., A. R. Hallauer, W. D. Guthrie, D. Barry, K. R. Lamkey, C. S. Hong. 1989. Genetic resistance of tropical inbreds to second generation European corn borer (Lepidoptera:Pyralidae). *J. Econ. Entom.* 82:1207-1211.
- Covarrubias Prieto, J., A. R. Hallauer, and K. R. Lamkey. 1989. Intermating F2 populations of maize. *Genetika* 21:111-125.
- Godshalk, E. B., M. Lee, and K. R. Lamkey. 1990. Analysis of the relationship of restriction fragment length polymorphisms with agronomic performance of maize hybrids. *Theor. Appl. Genet.* 80:273-280.
- Melchinger, A. E., M. Lee, K. R. Lamkey, and W. W. Woodman. 1990. Genetic diversity for restriction fragment length polymorphisms and its relationship to genetic effects estimated from generation means in four sets of maize inbreds. *Crop Sci.* 30:1033-1040.
- Melchinger, A. E., M. Lee, K. R. Lamkey, A. R. Hallauer, and W. W. Woodman. 1990. Genetic diversity for restriction fragment length polymorphisms and heterosis for yield and yield components in diallel sets of old and new maize inbreds. *Theor. Appl. Genet.* 80:488-496.

- Lamkey, K. R., P. A. Peterson, and A. R. Hallauer. 1991. Frequency of the transposable element Uq in Iowa Stiff Stalk Synthetic maize populations. *Genetical Research* 57:1-9.
- Walters, S. P., W. A. Russell, K. R. Lamkey, and P. R. White. 1991. Performance and inbreeding depression between a synthetic and three improved BSSS populations of maize. *Crop Sci.* 31:80-83.
- Walters, S. P., W. A. Russell, and K. R. Lamkey. 1991. Performance and genetic variance among S1 lines and testcrosses of Iowa Stiff Stalk synthetic maize. *Crop Sci.* 31:76-80.
- Walters, S. P., W. A. Russell, and K. R. Lamkey. 1991. Comparisons of correlations among S1 lines and their testcrosses from Stiff Stalk Populations of maize. *Maydica* 36:39-44.
- Melchinger, A. E., M. M. Messmer, M. Lee, W. L. Woodman, and K. R. Lamkey. 1991. Diversity and relationships among U.S. maize inbreds revealed by restriction fragment length polymorphisms. *Crop Sci.* 31:669-678.
- Messmer, M. M., A. E. Melchinger, M. Lee, W. L. Woodman, E. A. Lee, and K. R. Lamkey. 1991. Genetic diversity among progenitors and elite lines from the Iowa stiff stalk synthetic maize population: Comparison of allozyme and RFLP data. *Theor. Appl. Genet.* 83:97-107.
- Lamkey, K. R. 1992. Fifty years of recurrent selection in the Iowa stiff stalk synthetic maize population. *Maydica* 37:19-28.
- Pfarr, D. G. and K. R. Lamkey. 1992. Evaluation of theory for identifying populations for genetic improvement of maize hybrids. *Crop Sci.* 32:663-669.
- Pfarr, D. G. and K. R. Lamkey. 1992. Comparisons of methods for identifying populations for genetic improvement of maize hybrids. *Crop Sci.* 32:670-677.
- Russell, W. A., D. J. Blackburn, and K. R. Lamkey. 1992. Evaluation of a modified reciprocal recurrent selection procedure for maize improvement. *Maydica* 37:61-67.
- Sprague, G. F., and K. R. Lamkey. 1992. Arnel R. Hallauer: An appreciation. *Maydica* 37:1-6.
- Hallauer, A. R., K. R. Lamkey, W. A. Russell, and P. W. White. 1992. Registration of B95 parental inbred line of maize. *Crop Sci.* 32:1515.
- Hallauer, A. R., K. R. Lamkey, W. A. Russell, and P. W. White. 1993. Registration of B97 and B98 parental inbred lines of maize. *Crop Sci.* 33:(In press)
- Keeratinijakal, V. and K. R. Lamkey. 1993. Responses to reciprocal recurrent selection in BSSS and BSCB1 maize populations. *Crop Sci.* 33:73-77.
- Keeratinijakal, V. and K. R. Lamkey. 1993. Genetic effects associated with reciprocal recurrent selection in BSSS and BSCB1 maize populations. *Crop Sci.* 33:78-82.
- Schnicker, B. J., and K. R. Lamkey. 1993. Interpopulation genetic variance after eleven cycles of reciprocal recurrent selection in BSSS and BSCB1 maize populations. *Crop Sci.* 33:90-95.

- Graham, M. J., J. A. Hawk, R. B. Carroll, J. E. Ayers, K. R. Lamkey, and A. R. Hallauer. 1993. Evaluation of Iowa Stiff Stalk Synthetic for resistance to gray leaf spot. *Plant Disease* 77:382-385.
- Hallauer, A. R., K. R. Lamkey, W. A. Russell, and P. R. White. 1994. Registration of B97 and B98 parental inbred lines of maize. *Crop Sci.* 34:318-319
- Lamkey, K. R., B. S. Schnicker, and A. E. Melchinger. 1995. Epistasis in an elite maize hybrid and choice of generation for inbred line development. *Crop Sci.* 35:1272-1281.
- Holthaus, J. F. and K. R. Lamkey. 1995. Population means and genetic variances in selected and unselected Iowa stiff stalk synthetic maize populations. *Crop Sci.* 35:1581-1589.
- Reedy, M. E., A. D. Knapp, and K. R. Lamkey. 1995. Isozyme allelic frequency changes following maize (*Zea mays* L.) germplasm regeneration. *Maydica* 40:269-273.
- Holthaus, J. F. and K. R. Lamkey. 1995. Response to selection and changes in genetic parameters for 13 plant and ear traits in two maize recurrent selection programs. *Maydica* 40:357-370.
- Hallauer, A. R., K. R. Lamkey, W. A. Russell, and P. R. White. 1995. Registration of B99 and B100 inbred lines of maize. *Crop Sci.* 35:1714-1715.
- Dudley, J. W., K. R. Lamkey, and J. L. Geadelmann. 1996. Evaluation of populations for their potential to improve three maize hybrids. *Crop Sci.* 36:1553-1559.
- Labate, J. A., K. R. Lamkey, M. Lee, and W. W. Woodman. 1997. Genetic diversity after reciprocal recurrent selection in BSSS and BSCB1 maize populations. *Crop Sci.* 37:416-423.
- Lamkey, K. R. and A. R. Hallauer. 1997. Registration of selected BS11 maize populations. *Crop Sci.* 37:1992-1993.
- Hallauer, A. R., K. R. Lamkey, and P. R. White. 1997. Registration of B102, B103, B104, B105, and B106 inbred lines of maize. *Crop Sci.* 37:1405-1406.
- Weyhrich, R. A., K. R. Lamkey, and A. R. Hallauer. 1998. Responses to seven methods of recurrent selection in the BS11 maize population. *Crop Sci.* 38:308-321.
- Weyhrich, R. A., K. R. Lamkey, and A. R. Hallauer. 1998. Effective population size and response to S1- progeny selection in the BS11 maize population. *Crop Sci.* 38:1149-1158.
- Guzman, P.S. and K. R. Lamkey. 1999. Predicted gains from recurrent selection in the BS11 maize population. *Maydica* 44:93-99.
- Hallauer, A. R., K. R. Lamkey, and P. R. White. 1998. Registration of B107, B108, and B109 inbred lines of maize. *Crop Sci.* 38:1730.
- Labate, J. A., K. R. Lamkey, M. Lee, and W. L. Woodman. 1999. Temporal changes in allele frequencies in two reciprocally selected maize populations. *Theor. Appl. Genet* 99:1166-1178.

- Guzman, P.S. and K.R. Lamkey. 2000. Effective population size and genetic variability in the BS11 maize population. *Crop Sci.* 40:338-346.
- Labate, J. A., K. R. Lamkey, M. Lee, and W. Woodman. 2000. Hardy-Weinberg and Linkage Equilibrium Estimates in the BSSS and BSCB1 Random Mated Populations. *Maydica* 45:243-255
- Hallauer, A. R., K. R. Lamkey, and P. R. White. 2000. Registration of B110, B111, B113, and B114 inbred lines of maize. *Crop Sci.* 40:1518-1519.
- Hallauer, A. R., K. R. Lamkey, and P. R. White. 2001. Registration of B115 inbred line of maize. *Crop Sci.* 41:2012-2013.
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- Lamkey, K.R. and M. Lee (Eds). 2006. Plant Breeding: The Arnel R. Hallauer International Symposium. Blackwell Publishing, Ames, Iowa.

Chapters in Books: (5)

- Hallauer, A. R., W. A. Russell, and K. R. Lamkey. 1988. Corn Breeding. In G. F. Sprague and J. W. Dudley (eds.) Corn and Corn Improvement. Agronomy 18:463-564. Am. Soc. of Agron., Madison, WI.
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- Moore, Kenneth J., Douglas L. Karlen, and Kendall R. Lamkey. 2013. Future prospects for corn as a biofuel crop. pp. 331-352. In: Stephen L. Goldman (ed.) Compendium of Bioenergy Crops, Science Publishers, Taylor & Francis Group, LLC.

Letters to the Editor (1)

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- Russell, W. A., A. R. Hallauer, K. R. Lamkey, and P. R. White. 1988. Iowa Experimental Corn Trials. AG-127: 31p. Iowa State University.
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- Hallauer, A. R., K. R. Lamkey, W. A. Russell, and P. R. White. 2002. Iowa Experimental Corn Yield Trials. AG-152:75p. Iowa State University.
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- Lamkey, K.R., A.R. Hallauer, and P.W. White. 2004. Corn Breeding Research. Annual progress reports – 2003. Southeast research and demonstration farm, Crawfordsville, IA ISRF03-34.

- Lamkey, K.R., A.R. Hallauer, and P.W. White. 2004. Corn Breeding Research. Annual progress reports – 2003. Northeast research and demonstration farm, Nashua, IA ISRF03-13.
- Lamkey, K.R., A.R. Hallauer, J. R. Rouse, and P. R. White. 2004. Iowa Experimental Corn Yield Trials. AG-154:55p. Iowa State University (<http://www.plantbreeding.iastate.edu/corn.html>).
- Lamkey, K.R., L. Hyrkas, P.W. White, and A.R. Hallauer. 2005. Iowa Experimental Corn Yield Trials. AG-155:50P. Iowa State University (<http://www.plantbreeding.iastate.edu/corn.html>).
- Lamkey, K.R., L. Hyrkas, P.W. White, N.J. Bowden, and A.R. Hallauer. 2006. Iowa Experimental Corn Yield Trials. AG-156:57P. Iowa State University (<http://www.plantbreeding.iastate.edu/corn.html>).
- Lamkey, K.R., N.J. Bowden, P.W. White, and A.R. Hallauer. 2007. Iowa Experimental Corn Yield Trials. AG-157:40P. Iowa State University (<http://www.plantbreeding.iastate.edu/corn.html>).

Presentations

Invited

- Invited to present paper "Maize Synthetics: Their use in U. S. Corn Belt breeding programs" at Asgrow Seed Company, Inc., Ames, IA, January 13, 1987.
- Invited to present paper "Implications of transposable element activity in a maize improvement program" at Illinois Corn Breeders School, Champaign, IL, March 2, 1988.
- Invited to present paper "Implications of transposable element activity in a maize improvement program" at Osborn Research Club, Iowa State University, April 11, 1988.
- Invited to present paper "Effects of Transposable Elements on Quantitative Traits in Maize" at Gordon Research Conference on Quantitative Genetics and Biotechnology, Oxnard, CA, January 9-13, 1989.
- Invited to present paper "Quality of Experiments: Criteria for Determining when to Discard an Experiment" at Cargill, Inc., Breeders Conference, Aurora, IL, August 21, 1989.
- Invited to visit and review maize breeding program at the Maize Research Institute, Zemun Polje, Belgrade, Yugoslavia. September 25 to October 3, 1990. Presented the following invited lectures:
- "Frequency of the transposable element Uq in Iowa Stiff Stalk maize populations" at the Maize Research Institute, Zemun Polje, Belgrade, Yugoslavia. October 1, 1990.
 - "Evaluation of favorable allele identification theory" at the Maize Research Institute, Zemun Polje, Belgrade, Yugoslavia. October 1, 1990.
 - "Quality of experimental data and allocation of testing resources" at the International Advanced Course on Maize Breeding, Production, Processing, and Marketing in Mediterranean Countries, Maize Research Institute, Zemun Polje, Belgrade, Yugoslavia. October 3, 1990.

"Realized gains from recurrent selection" at the International Advanced Course on Maize Breeding, Production, Processing, and Marketing in Mediterranean Countries, Maize Research Institute, Zemun Polje, Belgrade, Yugoslavia. October 3, 1990

Invited to visit and review maize breeding program at the Institute for Breeding and Production of Field Crops, University of Zagreb, Yugoslavia. October 4 to 8, 1990. Presented the following invited lectures:

"Evaluation of favorable allele identification theory" at the Institute for Breeding and Production of Field Crops, University of Zagreb, Yugoslavia. October 5, 1990.

"Eleven cycles of reciprocal recurrent selection in BSSS and BSCB1" at the Institute for Breeding and Production of Field Crops, University of Zagreb, Yugoslavia. October 5, 1990.

"Population per se performance after 13 cycles of half-sib and S2 recurrent selection in BSSS" at the Institute for Breeding and Production of Field Crops, University of Zagreb, Yugoslavia. October 5, 1990.

Invited to present paper "RFLP analysis of heterotic patterns in maize" at the Workshop on Molecular Basis of Heterosis of Maize. University of Minnesota. March 20, 1991.

Invited to present paper "Challenges of marker-assisted breeding. Asgrow Seed Co. Inc., Ames, IA January 13, 1993.

Invited to present paper "Molecular marker analysis of recurrent selection in maize. Gordon Research Conference on Quantitative Genetics and Biotechnology, February 13 19, 1993, Ventura, CA.

Invited keynote speaker at the 10th Australian Plant Breeding Conference, Gold Coast, Queensland, April 18-23, 1993. Presented the following paper "Quantitative genetics, molecular markers, and plant improvement."

Invited lecturer at the Advanced Maize Breeding Course for National Leaders, CIMMYT Headquarters, El Batan, State of Mexico, Mexico. Presented the following two hour lectures:

"Recurrent selection and inbred-hybrid development programs." September 27, 1993.

"Quantitative genetics, molecular markers, and maize improvement." September 28, 1993.

"Choice of generation for initiating selection in inbred-hybrid development programs." September 28, 1993.

Invited to present paper "Molecular marker analysis of recurrent selection in maize. Plant Breeding and Plant Genetics Seminar Series, November 18, 1993. University of Wisconsin, Madison.

Invited to present paper "Choice of source populations for inbred line development. 48th Corn and Sorghum Research Conference, December 8-10, 1993, Chicago, IL.

Invited to present the paper "Genetic contributions to yield improvement in maize" at Crop Science Society of America Division C1 Symposia entitled "Genetic Contributions to Yield in Crop Plants." November 16, 1994. Seattle, WA.

Invited to present the paper "Phenotypic Selection: Theory and Application" at the Plant Science Lecture Series on "Genetic Gain and Selection," Iowa State University, January 9, 1997. Ames, IA.

Invited to present the paper "Phenotypic Selection: Theory and Application" at the University of Guelph, Guelph, Ontario, February 19, 1997.

Invited member of team that reviewed corn breeding and genetics research at the University of Illinois. A report was prepared and delivered to the Dean, Department Head, and the scientist. April 7-9, 1997.

Invited to visit and review the maize breeding program at the Institute of Field and Vegetable Crops, Novi Sad, Yugoslavia, July 7 to 16, 1997. Presented the following invited lectures:

"Phenotypic Selection: Theory" at the Institute of Field and Vegetable Crops, Novi Sad, Yugoslavia. July 10, 1997.

"BS11 Selection Methods Study" at the Institute of Field and Vegetable Crops, Novi Sad, Yugoslavia. July 11, 1997.

"Molecular marker analysis of reciprocal recurrent selection in BSSS and BSCB1" at the Institute of Field and Vegetable Crops, Novi Sad, Yugoslavia. July 11, 1997.

"Genetic contributions to yield gains in maize" at the Institute of Field and Vegetable Crops, Novi Sad, Yugoslavia. July 15, 1997.

"Overview of USDA-ARS maize research at Ames, IA" at the Institute of Field and Vegetable Crops, Novi Sad, Yugoslavia. July 15, 1997.

Invited to visit and review the maize breeding program at the Maize Research Institute, Zemun Polje, Yugoslavia, July 14, 1997. Presented the following invited lecture:

"Overview of USDA-ARS maize research at Ames, IA" at the Maize Research Institute, Zemun Polje, Yugoslavia. July 14, 1997.

Invited to present a plenary lecture entitled "The quantitative genetics of heterosis" at the International Symposium on the Genetic and Exploitation of Heterosis in Crop Plants, Mexico City, August 18, 1997.

Invited to present a lecture entitled "Genetic gain and new technology in maize" at Iowa State Universities Northeastern Research Farm Field Day, Doon, IA, August 27, 1997.

Invited to present lecture entitled "Heterosis: theory and estimation" at the 34th Annual Illinois Corn Breeders' Conference, Urbana, IL March 1-2, 1998.

Invited to present lecture entitled "Recurrent selection and inbred-hybrid development for developing countries" at, CIMMYT Headquarters, El Batan, State of Mexico, Mexico, March 12, 1999.

Invited to review corn breeding research by the Municipality of Yichang Foreign Affairs Office, China on June 15 to 29, 1999. Presented the following lectures:

“Phenotypic and molecular analysis of reciprocal recurrent selection” at Huazhong Agricultural University, June 18, 1999

“American agriculture and current trends in development” to the Agricultural Research Institute of Yichang, June 22, 1999 (3 hours)

“Maize breeding methodology” ” to the Agricultural Research Institute of Yichang, June 23, 1999 (6 hours)

Invited to present lecture entitled “Is sustainability attainable?” at the symposium on Complexity research and biotechnology in agriculture and medicine, Bozeman, MT, October 7, 1999

Invited to present lecture entitled “Nonlinearity in development of crop varieties” at the symposium on Complexity research and biotechnology in agriculture and medicine, Bozeman, MT, October 7, 1999

Invited to serve on National Research Initiative Competitive Grants Program (NRICGP) grant review panel. Participated in ranking and evaluating 94 grant proposals. Washington, D.C., May 1-5, 2000.

Invited to present lecture on “Reciprocal recurrent selection: phenotypic and molecular analyses” at the University of Michigan, Department of Human Genetics, Ann Arbor, MI, November 3, 2000

Invited to present lecture on “Peer review of manuscripts for publication in crop science” at the ASA-CSSA-SSSA Annual meetings, Minneapolis, MN, November 6, 2000

Invited to present lecture on ‘Mechanisms of heterosis’ at Cornell University Department of Plant Breeding Seminar, Ithaca, NY, November 13, 2000

Invited to present lecture on “Mechanisms of Heterosis” at the 55th Corn and Sorghum Seed Research Conference, Chicago, IL, December 7, 2000.

Invited to present lecture entitled “Breeding and evaluation of open-pollinated varieties of corn” at the annual meetings of the Northern Plains Sustainable Agricultural Society, Aberdeen, ND, February 3, 2001.

Invited to present lecture entitled “Conventional breeding versus molecular breeding” at the VII National Maize Conference. Pergamino, Argentina, November 7-9, 2001. (Declined for personal reasons).

Invited to present lecture entitled “GMOs and Organics Update” at the Iowa Organic Conference. Ankeny, IA, November 29, 2001.

Invited to present lecture entitled “Growing GMO corn unintentionally” at the Upper Midwest Organic Farming Conference 2002, La Crosse, WI, March 2, 2002.

Invited to present lecture entitled “Long-term selection in the Iowa Stiff Stalk Synthetic maize population” at the symposium Long-term selection: A celebration of 100 generations of selection for oil and protein in maize, Urbana, IL, June 18, 2002.

Invited to present lecture entitled "GMO's and Gene Flow: A plant breeding perspective" at the Agricultural Summit (Purdue University), Indianapolis, IN, September 13, 2002.

Invited to present lecture entitled "Why the is a Practical Farmers of Iowa?" at the Biotechnology and Complexity in Agriculture and Medicine, Bozeman, MT October 8, 2002.

Invited to present lecture entitled "GMO's and Gene Flow: A plant breeding perspective" at the ISU Extension Integrated Crop Management Conference, Ames, IA, December 4, 2002.

Invited to present lecture entitled "Contamination from Pollen Movement in Corn" at a special seminar series sponsored by the Plant Sciences Institute for the Iowa Cooperative, Ames, IA. May 29, 2003.

Invited to present lecture entitled "Genetic Structure in Open-pollinated Populations of Corn-Belt Dent Maize" at the Arnel R. Hallauer International Symposium on Maize Breeding, Mexico City, August 21, 2003.

Invited to present lecture entitled "Public Plant Breeding: Research and Education Agenda" at the Plant Breeding Summit, Washington, D.C. September 8, 2003.

Invited to present lecture entitled "The future of public corn breeding: Iowa State as a case study" at the 57th Corn and Sorghum Seed Research Conference, Chicago, IL, December 11, 2003.

Invited to present lecture entitled "Long-term selection in the Iowa stiff stalk synthetic maize population" at Monsanto Breeding Headquarters, Petrus, South Africa. March 8, 2004.

Invited to present lecture entitled "The future of public plant breeding: Iowa State as the case study" at the University of the Free State, Bloemfontein, South Africa, March 9, 2004.

Invited to present lecture entitled "Long-term selection in the Iowa stiff stalk synthetic maize population" at the University of the Free State, Bloemfontein, South Africa, March 9, 2004.

Invited to present lecture entitled "The future of state variety performance trials" at the Annual North Central Crop Evaluation Committee meeting, Ames, IA August 10, 2004.
(<http://www.ksu.edu/kscpt/nccec/#Minutes>).

Invited to present lecture entitled "Genetic contributions to yield gains in maize" at the XX National Congress of Plant Breeding and Genetics in Mexico, Toluca, Mexico, September 19-24, 2004.

Invited to present lecture entitled "The Journal Crop Science: Who we are, Where we are going" at the XX National Congress of Plant Breeding and Genetics in Mexico, Toluca, Mexico, September 19-24, 2004.

Invited to present lecture entitled "Public versus private approaches to crop improvement" at the conference on Evidence Based, Opinion Based, and Real World Agriculture and Medicine, Emigrant, MT. October 12, 2004.

Invited to present lecture entitled "Developing corn hybrids with new traits" at the Indiana Certified Crop Advisor Conference, Indianapolis, IN. December 14, 2004. Delivered the lecture twice.

Invited to present lecture entitled “The future of state variety performance trials” at Seeds of Success – the 2005 ICIA Annual Meeting, Ames, IA February 10, 2005.
(<http://www.ksu.edu/kscpt/nccec/#Minutes>).

Invited to present lecture entitled “Breeding for grain yield and grain quality in sustainable farming systems.” 41st Illinois Corn Breeders School, Urbana, IL March 7-8, 2005.

Invited to present keynote lecture entitled “Population genetics & progress of maize populations under reciprocal recurrent selection” at the 9th Asian Regional Maize Conference and the national maize workshop, September 5-14, 2005, Beijing, China.

Invited to present keynote lecture entitled “Population genetics & progress of maize populations under reciprocal recurrent selection” at the International Maize Conference: Accomplishments and Perspectives on the occasion of the 60th anniversary of the Maize Research Institute, Zemun Polje October 26-26, 2005, , Belgrade, Serbia.

Invited to present lecture entitled “Genetics and breeding issues for maize as a feedstock – both grain and fiber” at the Agribusiness Association of Iowa Visioning Session, Ames, IA, December 14, 2006.

Invited to present an 18 hour and one-half lectures on quantitative genetics and maize breeding at the Chinese Agricultural Academy of Sciences, July 10-14, 2007, Beijing, China.

Invited to present two lectures at the Sichuan Agricultural Academy of Sciences, July 17, 2007, Ya’an, Sichuan.

Invited to present a talk on “Professionalism in Agronomy” at the American Society of Agronomy Board Retreat, 14-16, April 2008, Chicago, IL.

“Genetic Approaches to Accelerated Yield Gains in Corn” at the Crop Science Society of America symposia on Accelerated Yields: Meeting Increasing Demands. Houston, TX October 7, 2008.

“Genetic Approaches to Accelerated Yield Gains in Corn” at the Breeding 08 conference on Conventional and Molecular Breeding of Field and Vegetable Crops, Novi Sad, Serbia, November 24-27, 2008.

“Sustainable Cropping Systems for Harvesting Corn Stover for Biomass” Sun Grant Regional Meeting, Minneapolis, MN January 15, 2009.

“Scientists as Communicators” Iowa Learning Farm symposium on Culture of Conservation, Ames, IA January 13, 2010.

“Agronomic Innovations for Sustainable Row Crop Productivity” Iowa Crop Improvement Association Annual Meeting, Ames, IA, February 25, 2010.

“Agronomic Innovations for Sustainable Row Crop Productivity” Illinois Corn Breeders School, Urbana, IL, March 1, 2010.

“Agronomic Innovations for Sustainable Row Crop Productivity” Iowa Water Conference, Ames, IA, March 8, 2010.

"The Origin, Production, and Utilization of Corn" at the symposium Corn Belts: Iowa and International Agriculture, Grinnell College, Grinnell, IA November 16, 2010.

"Prospects and Challenges to Raising a 300 Bushel Corn Crop" at the Farm News Ag Show 2011, Iowa Central Community College, Fort Dodge, IA December 1, 2011.

"Prospects and Challenges to Raising a 300 Bushel Corn Crop" at the Chinese Agriculture University – Iowa State University Workshop, Beijing, China, August 12, 2012.

"Phenotypic Estimators of Heterosis" at the International Conference on Utilization of Heterosis in Crops, Xi'an, China, August 19-22, 2012.

"Prospects and Challenges to Increasing Heterosis In Maize" at the Top Level Forum on Heterosis, Xi'an, China, August 21, 2012.

"Iowa Agriculture in the Big Picture" at Monsanto's "Breeding for Changing Environments" 2012 MFPP Professional Development IV, Ankeny, IA, September 9, 2012.

"Environmental and Genetic Bioenergy Traits in Corn Stover" at the Roadmap to Commercialize Thermochemical Biofuels and Bio-Products Processing in the Midwest Workshop, Ames, IA, December 11, 2012.

"The Future of Agronomy: A Systems Perspective" at Sustainable Corn Webinar Series, Ames, IA, January 29, 2014.

"Contribution of the Corn Belt to Food Security" at the NC ANR Academy for the 21st Century Extension Professional Educational Plan, Des Moines, IA, December 2, 2014.

"New Animal and Plant Breeding Technologies" at the 1st U.S.-China Strategic Agricultural Innovation Dialogue, U.S. Chamber of Commerce, Washington, D.C. September 24, 2015.

"A Plant Breeder's Perspective on the Future of Corn Production and its Impact on the Landscape" at the Sustainable Agriculture Colloquium, Iowa State University, Ames, IA March 29, 2016.

"Breaking Down Silos: Encouraging Transdisciplinary Problem Solving for Global Food and Nutrition Security" at the 2017 World Food Prize Borlaug Dialogue, Des Moines, IA, October 20, 2017.

Contributed

Contributed the paper "Population per se performance after thirteen cycles of half-sib and S2 recurrent selection in BSSS" at the North Central Corn Breeding Research Committee (NCR-2) Meetings. Des Plaines, IL. February 21-22, 1990.

Contributed the paper "Evaluation of 11 cycles of reciprocal recurrent selection in BSSS and BSCB1" at the North Central Corn Breeding Research Committee (NCR-2) Meetings. Des Plaines, IL. February 20-21, 1991.

Contributed the paper "Frequency of Uq in Iowa Stiff Stalk Synthetic populations" at the North Central Corn Breeding Research Committee (NCR 2) Meetings. Des Plaines, IL. February 22 23, 1989.

Contributed the paper "Molecular marker analysis of long-term selection in maize" at the North Central Regional Quantitative Genetics Committee Meeting (NCR-21). April 24-25, 1992, Clemson, SC.

Contributed the paper "Molecular marker analysis of recurrent selection in maize" at the North Central Corn Breeding Research Committee (NCR-167) Meetings. Bettendorf, IA. February 23-24, 1993.

Contributed the paper "Quantitative analysis of genetic gain in maize" at the North Central Corn Breeding Research Committee (NCR-167) Meetings. Des Moines, IA. February 24-25, 1997.

Contributed the paper "Quantitative analysis of genetic gain in maize" at the Interdepartmental Genetics Program Faculty Seminar Series at Iowa State University, February 26, 1997.

Contributed the paper " Nonlinearity in the development of crop varieties" at the North Central Corn Breeding Research Committee (NCR-167) Meetings. Baltimore, MD. February 21-23, 2000.

Contributed the paper " Intellectual Property Rights (IPR) And Corn Germplasm At Iowa State Univeristy" at the North Central Corn Breeding Research Committee (NCR-167) Meetings. Madison, WI. February 18, 2003.

Contributed the paper " The future of pubic plant breeding: Iowa State as the case study" at the 9th Inter-regional Corn Breeding Conference (NCR-167, NE-29) Meetings. St. Louis, MO February 10, 2004.

Field Day and Extension Presentations

"Breeding open-pollinated varieties of corn" at the 1999 Winter Workshops of the Practical Farmers of Iowa, Ames, IA, January 15, 2000.

"PFI OP and synthetic research" at the 2000 Spring Planning Meeting of the Practical Farmers of Iowa, Ames, IA February 11, 2000.

"Open-pollinated corn" at the Iowa State University Neely-Kinyon Field Day, Greenfield, IA, August 24, 2000.

Invited to present lecture entitled "Breeding for grain quality (feeding value) in corn" at the Rhodes Research/Demonstration Farm Field Day, Rhodes, IA, July 9, 2002.

Co-organized a PFI field day hosted by Full-Circle Farm, Luther, IA on Participatory Corn Breeding. Presented a talk on "ISU corn breeding and germplasm" and performed demonstrations on how to select corn. October 4, 2003.

Co-organized (with Linda Pollak, Walter Goldstein, and Rick Exner) and hosted a corn breeding workshop for farmers at the Northeast Research Farm, Nashua, IA. Presented the talk: "The Iowa State Breeding Program; its history, where is it at, what it is doing and what it has to offer; delivery models; breeding together; ownership issues" December 17, 2003

"History of Corn Breeding" at the 50th Anniversary of the Northwest Research and Demonstration Farm, Doon, IA August 25, 2004. (Presented talk 3 times).

Co-organized and presented at an organic corn breeding field day hosted by the USDA-ARS, Michael Fields Agricultural Institute, and Iowa State University. Presented a talk on “ISU corn breeding and germplasm” and walked through demonstration plots with farmers. September 15, 2004 (50 Participants).

Hosted the 2004 Central Iowa Corn Breeding Field Day. Presented demonstration plots of ISU corn germplasm. Bruner Farm, September 29, 2004 (50 Participants).

“An overview of ISU agronomy research with emphasis on corn breeding activities” at the Northeast Iowa Research Farm Spring Field Day, Nashua, IA June 28, 2006.

“High Corn Yields: The Sky is the Limit” at the Corn Production, Winter 2008 Crop School hosted by Roger Elmore and Lori Abendroth, Memorial Union, Ames, IA, February 5, 2008.

“High Corn Yields: The Sky is the Limit” at the 2008 Spring Professional Development conference for Field Agronomists 4H Extension Building, Ames, IA, March 25, 2008.

“State of the Iowa Crop Industry” at the 2008 Spring Extension Development Conference, Memorial Union, Ames, IA March 26, 2008.

“What will it take to produce 300 Bushel Corn” at the North Central Iowa Crop and Land Stewardship Clinic, Iowa Falls-Alden High School, Iowa Falls, IA January 2, 2009.

“What will it take to produce 300 Bushel Corn” at the Crop Advantage Series, Burlington, IA January 9, 2009.

“Agronomic Innovations for Sustainable Row Crop Productivity” Mitchell County Corn and Soybean Growers Association, Osage, IA, March 31, 2010.

“Breeding for Drought Resistance” Southeast Research and Demonstration Farm, Crawfordsville, IA, September 8, 2011.

“Prospects and Challenges to Raising a 300 Bushel Corn Crop” Farm News Ag Show 2011, Fort Dodge, IA, December 1, 2011.

“GMOs: Research & Technology, A Plant Breeders Perspective” Agriculture and Natural Resources Extension Noon Webinar, Ames, IA, August 30, 2013.

Administrative Presentations

Invited to present lecture entitled “Department of Agronomy and Corn Breeding” at the Field Crop Specialists In-Service Training, Johnston, IA, March 15, 2006.

Invited to present lecture entitled “ISU Agronomy Department: An Overview” at the Iowa Soybean Association Board of Directors Meeting, West Des Moines, IA, June 27, 2006.

Met with representatives from Vermeer Manufacturing to discuss research in biorenewables on the ISU campus, March 16, 2007.

Met with scientists from CERES to discuss research in biorenewables on the ISU campus, April 5 2007.

Met with and led a tour of agronomy and plant sciences for Senator Chris Dodd, April 12, 2007.

Presented welcome and thanks at the groundbreaking for the Borlaug Learning Center in Nashua, IA. September 6, 2007.

Participated as a Faculty Expert in the World Food Prize Youth Institute, Carver Center, Pioneer Hi-Bred Intl., Johnston, IA. October 20, 2007.

Presented a graduate student recruiting talk at Cornell College, Mt. Vernon, IA on 17, March 2008.

Presented keynote at Students of Agronomy, Soils, and Environmental Sciences 40th Annual Regional Meeting, Ames, IA, March 23, 2012.

Presented the talk "ISU Agronomy Going the Distance" at the Celebrating 100 Graduates Agronomy Distance Programs, Ames, IA, July 26, 2012.

Visited the University of Kentucky to visit and discuss our success in recruiting undergraduates.

Presented a seminar with Tyler Teske on our undergraduate recruitment program, Lexington, KY, September 20-21, 2012.

"Future of Soybean Breeding @ Iowa State University" at the Iowa Soybean Association Board of Directors meeting, Ankeny, IA, June 19, 2013.

"Sustainable Development of Grain Production" at the Hebei-Iowa – Forum on Agriculture, Des Moines, IA, October 22, 2013.

Presented "Annual Update" to the Department of Agronomy, Iowa State University, 2007 - 2012

Presented "Annual State of the Department" address, Department of Agronomy, Iowa State University, 2006 – Present

Presented "I'm an Agronomist" to the Rotary Club as part of their annual Rural-Urban Ag Day, Nevada, IA, March 2, 2016.

Panelist on Postdoctoral Academic Career Panel for the Iowa State University Postdoctoral Association, February 22, 2018

Intellectual Property

Germplasm Release

Participated in the release of maize inbreds B95 (1992), B97 (1992), B98 (1992), B99 (1993), and B100 (1993).

Released the maize populations BS11(5-S1)C5, BS11(10-S1)C5, BS11(20-S1)C5, BS11(30-S1)C5, BS11(S2)C5, BS11(FS)C5, BS11(HI)C5, and BS11(MER)C5.

Grants, Contracts, and Gifts Received

Peterson, P. A., K. R. Lamkey, and A. R. Hallauer. Plant breeding, genetic, and molecular approaches to the study of transposon-driven variability in corn breeding. Iowa State University Biotechnology Council. Grant No. 85-1193. 1/1/87 to 12/31/90. T=\$80,000. Funded.

Hallauer, A. R., and K. R. Lamkey. Selection methods for germplasm enhancement in corn. USDA Competitive Research Grants Program. Grant No. 85-CRCR-1-1567. 10/1/85 to 9/30/90. T=\$100,000. Funded.

Lamkey, K. R. Comparison of methods designed to identify populations containing favorable alleles not present in elite populations. University Research Grants, Iowa State University. 7/1/87 to 6/30/88. T=\$1,285. Funded.

Hallauer, A. R., and K. R. Lamkey. Characterization of genetic variability as affected by selection in BSSS. Pioneer Hi-Bred International, Inc. 10/1/86 to 9/30/88. T=\$20,000. Funded.

Lee, M., K. R. Lamkey, and L. M. Pollak. Molecular classification of heterotic patterns in maize. Pioneer Hi-Bred International, Inc. 4/1/87 to 3/31/90. T=\$60,000. Funded.

Lamkey, K. R., P. A. Peterson, and A. R. Hallauer. The effects of transposable elements on genetic variation in the Iowa Stiff Stalk Synthetic corn population. USDA Competitive Research Grants Program. Grant No. 87-CRCR-1-2370. 10/1/87 to 9/30/90. T=\$100,000. Funded.

Lamkey, K. R. Molecular analysis of genetic variation among widely used corn inbreds. USDA Postdoctoral Research Associate Program. 11/1/87 to 10/30/89. T=\$40,000. Funded. This two year postdoc position was filled effective 11/1/87 by Dr. E. Brent Godshalk and vacated 10/30/88.

Lee, M., K. R. Lamkey, and A. R. Hallauer. Effect of recombination on associations between molecular markers and quantitative trait loci. USDA Competitive Grants Program. 7/1/88 to 6/30/92. T=\$308,746. Denied.

Lamkey, K. R., and J. H. Milla. The evaluation of selection indices for use in recurrent selection programs of maize. World Food Institute Project Grant #138. 7/1/88 to 6/30/89. T=\$5,175. Funded. Grant was renewed for the period 7/1/89 to 10/30/89. T=\$1,896.

Lamkey, K. R., A. R. Hallauer, and V. Keeratinijakal. Evaluation of 11 cycles of reciprocal recurrent selection in Iowa Stiff Stalk Synthetic and Iowa Corn Borer Synthetic #1. World Food Institute Project Grant. 7/1/88 to 6/30/89. T=\$4,788. Denied.

Hallauer, A. R. and K. R. Lamkey. Selection methods for germplasm enhancement in corn. USDA Competitive Research Grants Program. 7/1/91 to 6/30/95. T=\$135,619. Funded.

Lamkey, K. R. and M. Lee. Molecular marker analysis of long-term selection programs in maize. Pioneer Hi-Bred Intl. Inc. 10/1/92 to 9/30/95. T=\$60,000. Funded.

Lamkey, K. R. and M. Lee. Molecular marker analysis of maize recurrent selection programs. USDA-CSRS-NRI. 10/1/93 to 9/30/96 T=\$282,715. Denied.

Lamkey, K. R. Molecular marker evaluation of recurrent selection in corn. USDA Postdoctoral Research Associate Program. 7/1/95 to 6/31/97. T=\$50,000. Funded. This two year postdoc position was filled by Dr. Joanne Labate.

Lamkey, K. R. and J. Edwards. Molecular marker analysis of random genetic drift in maize. USDA-CSREES-NRI-CGP. 6/1/96 to 5/31/99. T=\$169,125. Denied.

Lamkey, K. R., J. A. Labate, and S. Kresovich. A Survey of microsatellite variation in U.S. Corn Belt germplasm. USDA-NRI. 10/99 to 9/02. T=\$340,000. Funded.

Schnable, P. S., D. A. Ashlock, G. A. Churchill, X. Gu, M. Lee, G. Naylor, K. R. Lamkey. High-throughput mapping tools for maize genomics. NSF Plant Genome. 9/99 to 8/02. T=\$2,900,000. Funded.

Lamkey, K.R. Combinatorial Partitioning Method analysis of Pioneer's MARS data for improved detection of quantitative trait loci. Pioneer Hi-Bred Intl. 9/2002 to 9/2005. T=\$101,056. Funded

Richards, T.R. et al. Integrated feedstock supply systems for corn stover biomass. DOE. 12/2004 to 11/2007. T=\$2,738,163. Funded.

Moore, K., K. R. Lamkey, and J. Singer. Sustainable Cropping Systems for Harvesting Corn Stover for Biomass. Sungrant. 12/2007 to 11/2010. T=\$700,000. Funded

Moore, K, A. Lenssen, D. Laird, and K.R. Lamkey. Managing Perennial Cover Crops for Sustainable Corn Stover Biomass Production. Sungrant. 12/2013 to 11/2016. T=\$205,146.