CURRICULUM VITA Richard K. Perrin

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EDUCATION

Ph.D., Agricultural Economics, Iowa State University, 1968 B.S., Agricultural Business, Iowa State University, 1960

EMPLOYMENT

1960-1963	U.S. Marine Corps: Quantico, VA; Okinawa; Washington, DC
1963-1966	Campus Coord., Foreign Contracts, College of Agriculture, Iowa State U.
1966-1968	Research Associate, Department of Economics, Iowa State U.
1968-1972	Assistant Professor of Economics and Business, North Carolina State U.
1972-1977	Associate Professor of Economics and Business, North Carolina State U.
1975-1976	Economist, International Maize and Wheat Improvement Center
	(CIMMYT), Mexico City
1977-1990	Professor of Economics and Business, North Carolina State U.
1982-1987	Associate Head for Agricultural Research and Teaching Programs,
	Department of Economics and Business, North Carolina State U.
1990-1993	Professor, Department of Agricultural and Resource Economics, NCSU.
1991-1992	Visiting Professor, Department of Economics, Iowa State University
1993-	Jim Roberts Professor of Agricultural Economics, University of Nebraska.

TEACHING EXPERIENCE

Graduate: Production Economics

Agricultural Production and Supply

Applied Welfare Economics and Public Policy

Undergraduate: Economic Principles

Economics of Agriculture (principles level)

Intermediate Microeconomic Theory

Managerial Economics Farm Management

Agribusiness Management

Energy and the Environment - Economics and Policy

GRADUATE STUDENT COMMITTEE CHAIRMANSHIPS/CO-CHAIRMANSHIPS:

Master's

Farid Taher (1980) - non-thesis

Uma Ramakrishnan (1983) "Supply analysis of North Carolina agriculture"

John Beghin (1984) "Food production and price policy in Senegal: A displacement model"

Carlos Gargiulo (1988) "Social cost analysis of alcohol production"

Kevin Bernhardt (1989) "Predicting supply shifts from new technology: Diethylstilbestrol"

Abiola Owokoniran (1989) - non-thesis

Sri Ernawati (1990) - non-thesis

Tri Rini Wulan (1991) "Supply response and input demand for paddy rice in Indonesia"

Rohan Perera (1993) "Genetic contribution to productivity gain in soybeans"

Avinash Alok (2006) "Rural vs Urban Food Stamp Participation in Nebraska"

Justin Van Wart (2007) "Spatial economic impacts of ethanol plants"

Dereje Bacha Megeressa (2011) non-thesis

Edwin Rubin (2013) non-thesis

Ana Stepanovic (2014) "Hay Supply in the U.S. Midwest"

Ann Hunter-Pirtle (2014) "Economic Impacts of Increased Corporate Average Fuel Economy (CAFÉ) Standards"

Ph.D.

James Ryan (1972) "A generalized crop-fertilizer production function"

Bala Batavia (1973) "Specification errors and empirical estimation of generalized crop-fertilizer functions using cross-section data"

George Ecker (1974) "Optimal replacement pattern of standard apple trees with dwarfs"

Seok Jung Chang (1976) "An economic analysis of the adoption of new wheat varieties under uncertainty in Ferozepur District (India)

Nelson Updaw (1979) "Market analysis of the component pricing of soybeans"

Cicely Amaral (1984) "Information in United States agriculture: the farm press"

Robert F. Brooker (1984) "A characteristics approach model applied to analysis of multiple component milk pricing"

Mellie Warner (1984) "A portfolio model of wheat acreage"

James Leiby (1985) "An analysis of farm size and growth: the case of southern dairy farms"

Lilyan Fulginiti (1986) "Argentine agricultural policies in a multiple output, multiple input framework"

Bruce Ahrendson (1990) "Optimal capital structure for the proprietary firm: An empirical analysis of North Carolina dairy farms"

Jirong Wang (1993) "Government price policy, output price uncertainty and measurement of productivity in U.S. agriculture"

Joan Poor (1997) "A Contingent Evaluation of Wetlands in the Rainwater Basin of Nebraska"

Saleem Shaik (1998) "Environmentally-corrected productivity measures for U.S. agriculture"

Jason Duarte (2001) "Effects of biotechnology and intellectual property rights law in the seed industry"

Saeed Ahmad (2001) "Tradeoffs between nitrate pollution of groundwater and economic returns to irrigated agriculture"

Bingxin Yu (2005) "Agricultural productivity in Sub-Saharan Africa"

- Kassu Wamisho (2012) "Essays on the U.S. Biofuel Policies: Welfare Impacts and the Potential for Reduction of Greenhouse Gases"
- Dereje Megeressa (2013) "Impact of Biofuel Demand on Land and Water Use in the Great Plains"
- Subir Bairagi (2015) "Ex-Ante Economic Assessment of Research: High Omega-3 Soybean Oil for Mariculture"
- Silva, Felipe de Figueiredo. (2018) "Tradeoff Between Agriculture and Forest Preservation in the Brazilian Amazon"

REFEREED JOURNAL ARTICLES:

- Perrin, R. K. "Asset Replacement Principles," *American Journal of Agricultural Economics* 54(1):60-67, February, 1972.
- Perrin, R. K. "Optimal Levels of Fertilization Under Risk: Comment," *American Journal of Agricultural Economics* 54(4):683-685, November 1972.
- Perrin, R. K. "Linear Programming and Sensitivity Analysis for Hardwood Dimension Production," *Forest Products Journal* 23(11):47-50, November 1973.
- Ryan, James G. and R. K. Perrin. "Fertilizer Response Information and Income Gains: the Case of Potatoes in Peru," *American Journal of Agricultural Economics* 56(2), May 1974.
- Perrin, Richard K. "The Value of Information and the Value of Theoretical Models in Crop Response Research," *American Journal of Agricultural Economics* 58(1):54-61, February 1976.
- Perrin, Richard K. and Donald L. Winkelmann. "Impediments to Technical Progress on Small vs. Large Farms," *American Journal of Agricultural Economics* 58(5):888-894, December 1976.
- Perrin, Richard K. "The Impact of Component Pricing of Soybeans and Milk," *American Journal of Agricultural Economics* 62(3):445-555, August 1980.
- Perrin, Richard K. and Grant M. Scobie. "Market Intervention Policies for Increasing the Consumption of Nutrients of Low Income Households," *American Journal of Agricultural Economics* 63(1):73-82, February 1981.
- Fulginiti, Lilyan and Richard K. Perrin. 1990. "Argentine Agricultural Policy in a Multiple-input, Multiple-output Framework", *American Journal of Agricultural Economics* 72(2):279-88, May 1990.
- Perrin, Richard K. 1990. "Economic Analysis of Biotechnology Research", *Southern Journal of Agricultural Economics* 22(2):73-76, July 1990.
- Fulginiti, Lilyan and Richard K. Perrin. 1993. "The Theory and Measurement of Producer Response Under Quotas", *Review of Economics and Statistics*, 75(1):97-106, February 1993.
- Fulginiti, Lilyan and Richard K. Perrin. 1993. "Measures of Waste Due to Quotas", *American Journal of Agricultural Economics* 75(3):776-781, August 1993.
- Fulginiti, Lilyan and Richard K. Perrin. 1993. "Prices and Productivity in Agriculture", *Review of Economics and Statistics*, 75(4):471-482, November 1993.
- Fulginiti, Lilyan and Richard K. Perrin. 1994. "Taxation and Production Sector Waste in LDC Agriculture", *Journal of Agricultural and Resource Economics* 19(2):327-336, December 1994.

- Fulginiti, Lilyan and Richard K. Perrin. 1996. "An Allais Measure of Production Sector Waste Due to Quotas", *American Journal of Agricultural Economics*, 77(4):865-874, November, 1995.
- Perrin, Richard K. and Lilyan Fulginiti. "Measuring Productivity with Poorly-Priced Goods", *American Journal of Agricultural Economics*, 78(4):620-628, December, 1996.
- Fulginiti, Lilyan E. and Richard K. Perrin. 1997. "LDC Agriculture: Nonparametric Malmquist Productivity Indexes", *Journal of Development Economics* 53(2):373-390, August, 1997.
- Perrin, Richard K. 1997. "The Impact of Technological Change on a Competitive Industry", *Journal of Agricultural and Resource Economics*, 22(2):345-355, December, 1997.
- Fulginiti, Lilyan E. and Richard K. Perrin. 1998. "Agricultural Productivity in Developing Countries", *Agricultural Economics* 19(1-2):45-51, September, 1998.
- Fulginiti, Lilyan E. and Richard K. Perrin. 1999. "Have Price Policies Damaged LDC Agricultural Productivity?", *Contemporary Economic Policy*, 17(4):469-475, October, 1999.
- Perrin, Richard K. "Intellectual Property Rights and Developing Country Agriculture", *Agricultural Economics* 21(3):219-227, December, 1999.
- Perrin, Richard K. and Lilyan E. Fulginiti. 2001. "Technological Change and Welfare in an Open Economy with Distortions" *American Journal of Agricultural Economics* 83(2):455-464, May, 2001.
- Rezek, Jon and Richard K. Perrin.2004. "Environmentally Adjusted Agricultural Productivity in the Great Plains", *Journal of Agricultural and Resource Economics* 29(2):346-369, August, 2004. http://www.highbeam.com/doc/1P3-701479341.html
- Fulginiti, Lilyan, Richard K. Perrin and Bingxin Yu. 2004. "Institutions and Agricultural Productivity in Sub-Saharan Agriculture", *Agricultural Economics* 31/2-3:169-180, 2004. http://www3.interscience.wiley.com/journal/119921700/abstract
- Fulginiti, Lilyan E, and Richard K. Perrin. 2005. "Productivity and Welfare", *The Journal of Productivity Analysis* 49(2):133-155, October, 2005. http://www.springerlink.com/content/k8tt42311g82/?p=fa82c21420174151b5dacc3d69819ceb&pi=22
- Schmer, M.R., K.P. Vogel, R.B. Mitchell, L.E. Moser, K.M. Eskridge, and R.K. Perrin. 2006. "Establishment Stand Thresholds for Switchgrass Grown as a Bioenergy Crop." *Crop Sci.* 46(1):157-161, (Jan-Feb 2006).
- Schmer, M.R., K.P. Vogel, R.B. Mitchell, and R.K. Perrin. 2008. "Net Energy of Cellulosic Ethanol from Switchgrass." *Proc. Nat. Academy of Sciences* 105 (2):464-469, Jan 15, 2008. http://www.pnas.org/content/105/2/464.full
- Perrin, Richard, Kenneth Vogel, Marty Schmer and Rob Mitchell. 2008. "Farm-Scale Production Cost of Switchgrass for Biomass." *BioEnergy Research* 1(1):91-97, March, 2008.
 - http://www.springerlink.com/content/f85977006m871205/?p=a6dc7a5343ef4e7c8ebe446a7 20b6214&pi=8
- Perrin, R.K., & Fulginiti, L.E. 2008. Pricing and welfare impacts of new crop traits: The role of IPRs and Coase's conjecture revisited. *AgBioForum*, 11(2), 134-144, 2008. Available at: http://www.agbioforum.org.
- Perrin, R.K., Nickolas F. Fretes and Juan Pablo Sesmero. 2009. Efficiency in Midwest US corn ethanol plants: A plant survey. *Energy Policy* 37(4):1309-1316, April, 2009. http://digitalcommons.unl.edu/ageconfacpub/86/.

- Liska, Adam J. and Richard K Perrin. 2009. "Indirect land use emissions in the life cycle of biofuels: regulations vs science." *Biofuels, Bioproducts and Biorefining* 3(3):318-328, May/June 2009. DOI: 10.1002/bbb.153
 http://www3.interscience.wiley.com/journal/122327350/abstract.
- Liska, Adam J. and Richard K Perrin. 2010. "Securing Foreign Oil: A Case for Including Military Operations in the Climate Change Impact of Fuels" *Environment*, 52(40):9-22 July-August, 2010. http://www.environmentmagazine.org/Archives/Back%20Issues/July-August%202010/securing-foreign-oil-full.html.
- Perrin, R., J. Sesmero, K. Wamisho and D. Bacha. 2012. "Biomass supply costs for Great Plains delivery points". *Biomass and Bioenergy*, *37(Feb)*:213-220. DOI: 10.1016/j.biombioe.2011.12.010.
- Sesmero, J., Perrin, R., and Fulginiti, L. 2012. "Environmental Efficiency Among Corn Ethanol Plants", *Biomass and Bioenergy* 46:634–644. DOI: <u>10.1016/j.biombioe.2012.06.033</u>.
- Sesmero, Juan P., Richard K. Perrin and Lilyan E. Fulginiti. 2016. "A variable cost function for corn ethanol plants in the Midwest". *Canadian J. of Agr. Econ* 64(3):565-587. DOI: 10.1111/cjag.12097.
- Bairagi, Subir, Richard Perrin, Lilyan Fulginiti, Thomas Clemente, Cory Hungate and Gavin Key. 2017. Economic Feasibility of high Omega-3 soybean oil in mariculture diets: A sustainable replacement for fish oil. *Aquaculture Economics and Management* 21(4):452-469. http://www.tandfonline.com/doi/full/10.1080/13657305.2016.1228711
- Quinn, J.E., T. Awada, F. Trindade, L. Fulginiti, R. Perrin. 2017. Combining habitat loss and agricultural intensification improves our understanding of drivers of change in avian abundance in a North American cropland anthrome. *Ecology and Evolution* 7(3):803-814. DOI: 10.1002/ece3.2670 . http://onlinelibrary.wiley.com/doi/10.1002/ece3.2670/full
- Perrin, Richard K, Lilyan Fulginiti and Mustapha Alhassan. 2017. Biomass from Marginal Cropland: Willingness of North Central US Farmers to Produce Switchgrass on Marginal Fields. *Biofuels, Bioproducts and Biorefining* 11:281-294 http://dx.doi.org/10.1002/bbb.1741
- Sesmero, J., R. Perrin and L. Fulginiti. 2018. A Nonparametric Measure of Marketing Efficiency: An Illustration with Corn Ethanol Plants. *Agribusiness* 2018; 34(3):579-596. https://doi.org/10.1002/agr.21543
- Perrin, Richard, Lilyan Fulginiti, Subir Bairagi, and Ismail Dweikat. 2018. Sweet Sorghum as Feedstock in Northern Plains Corn Ethanol Plants: The Role of Biofuel Policy. *Jl Ag Resource Econ*, 43(1):34-45.
- Silva, Felipe, Richard Perrin and Lilyan Fulginiti. 2018. The opportunity cost of preserving the Brazilian Amazon forest. *Agricultural Economics*, 34(3):579-596. https://onlinelibrary.wiley.com/doi/10.1111/agec.12478
- Garcia, Federico, Lilyan Fulginiti and Richard Perrin. 2019. What Is the Use Value of Irrigation Water from the High Plains Aquifer? *American Journal of Agricultural Economics*, 101(2):455-466. https://doi.org/10.1093/ajae/aay062
- Silva, Felipe de Figueiredo, Lilyan E. Fulginiti, and Richard K. Perrin. 2019. The Cost of Forest Preservation in the Brazilian Amazon: The "Arc of Deforestation". Journal of Agricultural and Resource Economics 44(3):497–510.

- Silva, Felipe, Richard Perrin, Lilyan Fulginiti and Karina Schoengold. 2019. The Effects of Irrigation and Climate on the High Plains Aquifer: A County-level Econometric Analysis. *Journal of the American Water Resources Association* 55(5): 1085-1101.
- Silva, F., L. E. Fulginiti, R. K. Perrin and M. J. Braga. 2020. "The increasing opportunity cost of sequestering CO₂ in the Brazilian Amazon forest." *Empirical Economics* https://doi.org/10.1007/s00181-021-02031-5
- Silva, F., R. K. Perrin, L. E. Fulginiti, and M. E, Burbach. 2021. Can Engagement Improve Groundwater Management? *Water Economics and Policy* 7(2):

PAPERS UNDER REVIEW

- Silva, Felipe, Lilyan Fulginiti and Richard Perrin. Do farmers efficiently use water for irrigation? Irrigation water use efficiency for cornfields in Nebraska.
- Queiroz, Pedro, Richard K. Perrin, Lilyan E. Fulginiti and David Bullock. An expected value of sample information (EVSI) approach for estimating the expected payoff from a variable rate technology for nitrogen application (to JARE, 7/20/21)
- Kabata, Tshepelayi, Lilyan Fulginiti and Richard Perrin. The potential cost of methane and nitrous oxide emissions regulation in U.S. agriculture. 2019
- Trindade, Federico, Lilyan Fulginiti and Richard Perrin. 2017. "How to Double Yields in 50 Years: Lessons from the US Great Plains" (Land Econ R&R Aug 2021)
- Queiroz, Pedro, Richard K. Perrin, Lilyan E. Fulginiti. Deforestation and directed technical change in South American agriculture. (to Ag Econ, 8/17/21)

PAPERS IN PREPRATION

- Megeressa, Dereje, Richard K. Perrin and Lilyan E. Fulginiti. 2015. "The Impact of Biofuel Policy On Land Use in the Northern Plains".
- Perrin, Richard, Subir Bairagi and Lilyan Fulginiti. 2018. "Welfare impacts of innovations along the value chain: high Omega-3 soybean oil in aquaculture production"
- Silva, Felipe, Lilyan Fulginiti and Richard Perrin . 2020. Climate change, productivity and producer welfare in Great Plains agriculture

OTHER PUBLICATIONS

- Perrin, R. K. "Linear Programming in Rural Development Research," p. 117-131 in *Quantitative Techniques with Application to Rural Development Research*, ed. Garnett L. Bradford and Fred B. Saunders, Department of Agricultural Economics, University of Kentucky, Lexington, March 1972.
- Perrin, R. K. A Survey of Beef Production Patterns in the Mountains and Piedmont of North Carolina, *Economics Information Report No. 27*, Department of Economics, North Carolina State University, Raleigh, April 1972.

- Ryan, James G. and R. K. Perrin. The Estimation and Use of a Generalized Response Function for Potatoes in the Sierra of Peru. North Carolina Agricultural Experiment Station, *Technical Bulletin 214*, January 1973.
- Perrin, R. K. and E. A. Proctor. The Economics of Replacing Apple Trees -- A Guide for Producer Decision Making,. *Economics Information Report No. 36*, Department of Economics, North Carolina State University, Raleigh, February 1974.
- Perrin, R. K. and Larry J. Deaton. An Analysis of the Raleigh Christmas Tree Market in 1972, With Projections to 1980. *Economics Information Report 40*, Department of Economics, North Carolina State University, Raleigh, July 1974.
- Perrin, R. K., C. Richard Shumway, Raymond W. Harvey, and Joseph C. Burns. Economic Analysis of Beef Production and Forage Systems in the North Carolina Mountains. *Agricultural Experiment Station Technical Bulletin No. 227*, North Carolina Agricultural Experiment Station, September 1974.
- Perrin, Richard K. "The Value of Information and the Value of Theoretical Models in Crop Response Research", (abstract) *American Journal of Agricultural Economics* 56(5):1204, December 1974.
- Perrin, Richard K. and Earl O. Heady. Relative Contributions of Major Technological Factors and Moisture Stress to Increased Grain Yields in the Midwest, 1930-71. *Center for Agricultural and Rural Development Report* 55, Iowa State University, Ames, March 1975.
- Nichols, T. E. Jr., John G. Clapp, Jr., and Richard K. Perrin. An Economic Analysis of Factors Affecting Oil and Protein Content of Soybeans. *Economics Information Report No. 42*, Department of Economics and Business, North Carolina State University, Raleigh, September 1975.
- Perrin, Richard K., D. L. Winkelmann, E. R. Moscardi, and J. R. Anderson. *From Agronomic Data to Farmer Recommendations: An Economics Training Manual*. Centro Internacional de Mejoramiento de Maiz y Trigo, Mexico City, 1976.
- Perrin, Richard K. and Thomas Johnson. Linear Programming and Optimal Control: An Introduction to Optimizing Procedures in Economics. *Economics Information Report No. 54*, Department of Economics and Business, North Carolina State University, Raleigh, July 1978.
- Perrin, Richard K. "The Economic Value of Genetic Information in Selecting Sires", (abstract) *American Journal of Agricultural Economics* 62(5):1108-9, December 1980.
- Perrin, Richard K., K. A. Hunnings, and L. A. Ihnen. Effects of the U.S. Plant Variety Protection Act of 1970. *Economics Research Report No. 46*, Department of Economics and Business, North Carolina State University, Raleigh, October 1983.
- Perrin, Richard K., K. A. Hunnings, and L. A. Ihnen. "Effects of the U.S. Plant Variety Protection Act of 1970", (abstract) *American Journal of Agricultural Economics* 66(5): 905, December, 1984.
- Bullock, J. Bruce, et al. "Expected Impacts of Agricultural Legislation: Comparison of the Administration's Proposed Food and Agriculture Program with an Extension of the Agriculture and Food Act of 1981," *Report No. 104*, Council for Agricultural Science and Technology, Iowa State University, Ames, May 1985, 10 pp.
- Perrin, R. K. Book review: "The Transformation of Mexican Agriculture: International Structure and the Politics of Rural Change," by Steven E. Sanderson, *Journal of Economic Literature* 25(2):785-786, 1987.

- Fulginiti, L. E. and R. K. Perrin. "Measuring Tobacco Supply Elasticity", (abstract) *American Journal of Agricultural Economics* 69(5):1081, December, 1987.
- Bernhart, K. J. and R. K. Perrin, "On Predicting Supply Shifts from New Technology: Diethylstilbestrol", (abstract), *Southern Journal of Agricultural Economics*, 21(1):190, July 1989.
- Gargiulo, C. and R. K. Perrin. "Social Cost Analysis of Alcohol Production from Argentine Cane Sugar", (abstract) *Southern Journal of Agricultural Economics*, 21(1):177, July 1989.
- Fulginiti, L. E. and R. K. Perrin. 1989. "Argentine Agricultural Structure and Policy Implications," in *Government Intervention in Agriculture*, Bruce Greenshields and M. Bellamy, eds., IAAE Occasional Paper No. 5, Dartmouth Publishing Co.
- Fulginiti, Lilyan and Richard Perrin, "An Allais Efficiency Approach to Measuring Production Sector Waste Due to a Quota", (abstract), *American Journal of Agricultural Economics*, 71(5):1346, December, 1989.
- Fulginiti, L.E. and R.K. Perrin. "Argentine Agricultural Structure and Policy Implications", in *Government Intervention in Agriculture*, B. Greenshields, ed., IAAE Occasional Paper No. 5, Gower Publishing, Brookfield, Vermont, 1990.
- Perrin, R. K. and G. P. Sappie. North Carolina Farm Income and Production, 1950-1989. *Economics Information Report No. 83*, Department of Agricultural and Resource Economics, North Carolina State University, Raleigh, November, 1990.
- Fulginiti, Lilyan and Richard Perrin, "Prices and Productivity in Agriculture", (abstract), *American Journal of Agricultural Economics* 73(5):1537, December 1991.
- Perrin, R. K. and J. C. Beghin. "The Role of the Private and Public Sectors in the Development and Diffusion of Biotechnology in Agriculture Discussion" in *The Proceedings of the 21st International Conference of Agricultural Economists*, Dartmouth pp383-386, 1992.
- Fulginiti, Lilyan and Richard Perrin, "Measures of Waste in Agriculture", (abstract) *American Journal of Agricultural Economics*, December, 1992.
- Elisiana, J., L. Fulginiti and R. Perrin. "Aggregate Agricultural Inputs and Outputs in Developing Countries: A Data Set", *Technical Report 93-TR28*, Center for Agricultural and Rural Development, Iowa State University, Ames, February, 1993.
- Perrin, R. K. (editor, 1988-93) *North Carolina Farm Income Projections* a state-level summary of estimated economic indicators for the past year, current year and next year based on a combination of econometric forecasts and expert panel expectations, published semi-annually by the Department of Agricultural and Resource Economics, NCSU.
- Roy, Debiprasad, and R. K. Perrin. "A Summary of Experimental Results from Administering pST to Fattening Hogs", *ARE Special Report No. 4*, Department of Agricultural and Resource Economics, N. C. State University, Raleigh, June,1993.
- Perrin, Richard K. "Intellectual Property Rights in the Public Interest", Ch 13 in Robert W. Weaver (ed.), *U.S. Agricultural Research: Strategic Challenges and Options*, Agricultural Research Institute, Bethesda, Maryland, 1993.
- Fulginiti, L. and R. Perrin, "Measures of Waste Due to Quotas", *American Journal of Agricultural Economics* 75(3):776-781, Aug 1993.
- Fulginiti, L. and R.K. Perrin, "Productivity in LDC Agriculture: the Malmquist Measure", (abstract), *American Journal of Agricultural Economics* 75(5):1303 Dec 1993.

- Perrin, R.K. "Technology Assessment for Reducing Meat-borne Disease Through Irradiation and Carcass Washing", (abstract), *American Journal of Agricultural Economics* 75(5):1313, Dec. 1993.
- Perrin, Richard K. and K. D. Zering, "Rates and Sources of Productivity Gains in the U.S. Broiler Industry, 1957-1991", (abstract), *Journal of Agricultural and Resource Economics* 18(2):307, Dec. 1993.
- Perrin, R. K. "Long-term Trends in Nebraska's Farm Product Mix," 1994 Agriculture Outlook and Policy Issues, CC363, Nebraska Cooperative Extension, UNL, 1994.
- Perrin, R. K. "Pathogens in the U. S. Food Supply." 1994 Agriculture Outlook and Policy Issues, CC363, Nebraska Cooperative Extension, UNL, 1994.
- Perrin, R. K. "Growth Hormones in Dairy and Swine Production." *Cornhusker Economics*, Department of Agricultural Economics, UNL, Feb 16, 1994.
- Fulginiti, Lilyan and Richard K. Perrin. "Prices, Productivity, and Waste in LDC Agriculture." *GATT Research Paper 94-GATT 12*, Center for Agricultural and Rural Development, Iowa State University, Ames, April, 1994.
- Perrin, Richard K. "Intellectual Property Rights in Economic Development", Ch 27 in *Agricultural Technology: Policy Issues for the International Community*, J. R. Anderson, ed., CAB International, Wallingford, U.K., 1994.
- Perrin, Richard K. and Lilyan Fulginiti. "An Efficiency Approach to Measuring Production Sector Waste Due to a Quota" (abstract), *American Journal of Agricultural Economics* 76(5):1250, Dec. 1994.
- Perrin, R. K. and Jeffrey Royer. "Recent Developments in the Changing Pork Industry." *1995 Agriculture Outlook and Policy Issues*, CC363, Nebraska Cooperative Extension, UNL, 1995.
- Perrin, R. K. "Our Natural Resources How Much Shall We Charge?" *Cornhusker Economics*, Department of Agricultural Economics, UNL, April, 1995.
- Perrin, R. K. "Productivity Gains in Nebraska Agriculture." 1996 Agriculture Outlook and Policy Issues, CC363, Nebraska Cooperative Extension, UNL, 1996.
- Fulginiti, Lilyan and Richard K. Perrin. AAn Allais Measure of Production Sector Waste Due to Quotas. *Working Paper 96-WP 146*, Center for Agricultural and Rural Development, Iowa State University, Ames, January, 1996.
- Perrin, R. K. "UNL and the Land-Grant Mission." *Cornhusker Economics*, Department of Agricultural Economics, UNL, Feb 14, 1996.
- Perrin, Richard K. and Lilyan Fulginiti. "Productivity Measurement in the Presence of 'Poorly-Priced' Goods", *American Journal of Agricultural Economics* 78(5):1355-1359, Dec. 1996.
- Perrin, Richard K. "Nebraska Agricultural Productivity." *Cornhusker Economics*, Department of Agricultural Economics, UNL, Jan 22, 1997.
- Perrin, R.K. "Nebraska Agriculture and the World Food Outlook for the Year 2030." 1997 Agriculture Outlook and Policy Issues, CC363, Nebraska Cooperative Extension, UNL, 1997.
- Perrin, R. K. Review of "Adaptability analysis: A Method for the Design, Analysis and Interpretation of On-Farm Research and Extension" by Peter E. Hildebrand and John R. Russell, *American Journal of Agricultural Economics*, 79(1):277-78, January, 1997.
- Perrin, R. K. "\$300/Acre Rent for Wetlands?" *Cornhusker Economics*, Department of Agricultural Economics, UNL, Jan 21, 1998.

- Perrin, R. K. "Intellectual Property Rights." *Cornhusker Economics*, Department of Agricultural Economics, UNL, Jan 20, 1999.
- Perrin, R. K. "Returns to Taxpayers' Research Expenditures: A Case in Point." *Cornhusker Economics*, Department of Agricultural Economics, UNL, Jan 19, 2000.
- Perrin, R. K. "Economic Opportunities for New Genetic Products", Ch. 2 in *Designing Crops for Added Value*, Agronomy Monograph, ASA, CSSA and SSSA, Madison, WI, March, 2000.
- Perrin, Richard K. and Terry Klopfenstein. *Economic Impact of Feeding Wet Grain Processors' Byproducts in Nebraska*. RB 337, University of Nebraska Cooperative Extension, Lincoln, NE, 2000.
- Perrin, Richard K., Joan Poor and Dermot Coyne. *Economic Impact of the Chase Variety of Pinto Bean.* RB 338, University of Nebraska Cooperative Extension, Lincoln, NE, 2000.
- Perrin, Richard and Terry Klopfenstein. "Economic Returns of Wet Byproducts as Cattle Feed." 2001 Beef Cattle Report, Department of Animal Science, MP 76-A, UNL, 2001.
- Perrin, Richard and Phil Anthony. "The Potential for Hard White Winter Wheat in Nebraska." *Cornhusker Economics*, Department of Agricultural Economics, UNL, Jan 17, 2001.
- Perrin, Richard. "The Argentine Economy We Should Care What Happened." *Cornhusker Economics*, Department of Agricultural Economics, UNL, Jan 16, 2002.
- Perrin, Richard. "Research on Nebraska Agricultural Productivity." *Focus*, Department of Agricultural Economics, UNL, Spring/summer, 2002.
- Yu, B., R. Perrin and D. Marx. "Estimating the Contribution of Specific Wheat Varieties to State-level Production", Proceedings of the Kansas State University Conference on Applied Statistics, Manhattan, March, 2002.
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- Perrin, Richard. 2018. "The Ethanol Renewable Identification Number Price Fight and Nebraska Agriculture", *Cornhusker Economics*, Dept. of Agr. Econ. UNL, April 11, 2018.
- Silva, Felipe, Richard Perrin and Lilyan Fulginiti. 2018. "Agricultural Production and Forest Preservation in the Brazilian Amazon", *Cornhusker Economics*, Dept. of Agr. Econ. UNL, April 25, 2018.
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- Perrin, Richard, Felipe Silva, Lilyan Fulginiti and Karina Schoengold. 2019. "Effects of Irrigation and Climate on the High Plains Aquifer", *Cornhusker Economics*, Dept. of Agr. Econ. UNL, Nov. 13, 2019.
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- Trindade, Federico, Lilyan E. Fulginiti, and Richard Perrin. 2020. "Crop Yield Growth along the 41st Parallel: Contributions of Environmental vs. Human-Controlled Factors". Cornhusker Economics, Dept. of Agr. Econ. UNL, Sept 20, 2020.

RECENT PRESENTATIONS:

- F. Trindade, L. Fulginiti & R. Perrin. 2018. Irrigation and Climate Effects on Land Productivity in the U.S. Central Plains. At the 30th International Conference of Agricultural Economics, July28-Aug 2, Vancouver, Canada
- Felipe Silva, Lilyan Fulginiti, Richard Perrin. 2018. Agricultural productivity and forest preservation in the Brazilian Amazon. At the 30th International Conference of Agricultural Economics, July28-Aug 2, Vancouver, Canada
- L Fulginiti, R Perrin, F Silva 2018. Water efficiency: A field level analysis of corn fields in Nebraska At the 2018 AAEA Annual Meeting, Aug 5-7, Washington, D.C.
- Silva, Felipe; Fulginiti, Lilyan E.; Perrin, Richard K. 2018. The effect of technological change on deforestation: evidence from the Brazilian Amazon forest. At the 2018 AAEA Annual Meeting, Aug 5-7, Washington, D.C.
- Perrin, Richard K., Pedro Queiroz, Felipe Silva, Lilyan Fulginiti. 2018. Ex-ante expected payoff from variable rate N application: an expected value of sample information (EVSI) approach. At the 2018 AAEA Annual Meeting, Aug 5-7, Washington, D.C.

RECENT GRANTS AND CONTRACTS

- USDA-NIFA (Penn State U) Securing Water for and from Agriculture through Effective Community & Stakeholder Engagement. \$1,039,733 (UNL portion), 2017-2020.
- USDA-NIFA CAP (U of Illinois) *Using Precision Technology In On-Farm Field Trials To Enable Data-Intensive Fertilizer Management* \$4,000,000, 2015-2020
- Agricultural Research Division, IANR (UNL), *Measuring Returns on IANR Investments* (PI), \$136,053, 2012-2015.
- USDA-NIFA (Iowa State U), *Agro-Ecosystem Approach to Sustainable Biofuels Production* \$1,916,143 (\$90,945 Perrin component), 2012-2016.
- USDA-NIFA Center for Agricultural and Food Industrial Organization Policy Research Group. \$766,166 (\$130,850 Perrin-Fulginiti component), 2012-2014.
- Daugherty Water for Food Institute, (UNL). *Option Values and the Sustainable Management of the High Plains Aquifer for Food Production and Ecosystem Services*. (Co-PI) \$100,000, 2011-2013.
- Nebraska Center for Energy Science Research (UNL), *The Shadow Price of CO₂ Emissions for Nebraska Electricity Generating Plants*, (Co-PI) \$107,464, 2011-2013.
- Institute for Agriculture and Natural Resources (UNL), Strategic Investments Grant, *Forty-first Parallel Agro-Ecosystem Sustainability and Productivity* (Co-PD), \$373,720, 2010-2013.
- Nebraska Center for Energy Science Research (UNL), Opportunities for Nebraska in Future Carbon Markets, \$131,980, 2008-2010.
- USDA-ARS Cooperative Agreement, *Ex-ante evaluation of food safety technology* (PI), \$27,400, 2006-2007.
- USDA Cooperative Agreement, *Economic Evaluation of Switchgrass Grown as a Biomass Energy Crop in the Central and Northern Plains, USA* (PI), \$176,975, 2000-2007.

PROFESSIONAL ACTIVITIES:

Chair, American Agr. Econ. Assn. Economic Statistics Committee (1980-81);

Gamma Sigma Delta, NCSU chapter president, 1981-82;

Editorial Council, Am Jl Agr Economics, 1984-86;

Vice-Pres, Southern Agr. Econ. Assn. 1987-88;

Director, Executive Board, Am. Agr. Econ. Assn, 1987-1990;

Governing Board, American Agr. Econ. Foundation, 1988-1990;

American Agr. Econ. Assn. Ad hoc Committee to Commission a Paper on Agricultural Economics, 1993;

American Agr. Econ. Assn. Finance Committee, Chair 1988-1990, member 1999-2002;

Experiment Station Committee on Organization and Policy (ESCOP), Science and Technology Committee, 2004-2007.

REFEREE FOR:

Agribusiness: An International Journal

Agricultural and Applied Economics (Southern Journal of Agricultural Economics)

Agricultural Economics

American Journal of Agricultural Economics

Australian Journal of Agricultural and Resource Economics

Economic Development and Cultural Change

European Journal of Operations Research

Johns Hopkins Press

Journal of Agribusiness

Journal of Agricultural and Resource Economics (Western Journal of Agricultural Economics)

Journal of Animal Science

Journal of Development Economics

Journal of Economic Literature

Journal of Environmental Economics and Management

Journal of Production Agriculture

Journal of Productivity Analysis

Land Economics

National Science Foundation

North American Journal of Aquaculture

Review of Economics and Statistics

Review of Agricultural Economics

Scandinavian Journal of Economics

Southern Economics Journal

Technological Forecasting and Social Change

World Development