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I. EDUCATION

Ph.D.	Agricultural Economics	1996	University of Missouri-Columbia
M.S.	Land Management	1989	People's University of China
B.S.	Land Use Planning	1986	Central China Agricultural University

II. RESEARCH INTERESTS

Trained as a natural resource and environmental economist and conducts research in

- Effectiveness and cost-effectiveness of the conservation and management practices: Provide comprehensive understanding of conservation buffers in improving water quality from a theoretical placement strategy to the value and impacts of conservation buffers.
- Tradeoff and risk analyses: Integrate economic and biophysical models with geographic information systems and develop risk-based economic models to understand the economic and environmental risks and tradeoffs between economic and environmental impacts in watershed and natural resource management.
- Precision resource conservation: Promote the applications of the variable source area hydrology in resource conservation and develop a theoretical scientific basis to target conservation practices in critical source areas of landscapes.
- Watershed management policy and practices: Build an interdisciplinary and multi-agency team to develop watershed restoration plans that incorporate economic principles and actively participate in many other watershed management and stormwater management practices and discussions.

III. PROFESSIONAL EXPERIENCES

Associate Professor July 2008-Present	College of Sciences and Liberal Arts New Jersey Institute of Technology
Associate Professor July 2008-Present	School of Management New Jersey Institute of Technology
Assistant Professor Jan. 2002-June 2008	College of Sciences and Liberal Arts New Jersey Institute of Technology

- Keith Silverman, (Ph.D. i n E nvironmental S cience w ith c oncentration o n environmental policy, 2006), *A Community-based Evaluation of the Air Toxics Provisions of Title III of the 1990 Clean Air Act Amendments: Risks, Costs and Benefits*. Defend the dissertation on October 17, 2006.
- Florencio C Ballesteros Jr., (Ph.D. in Environmental Science with concentration on environmental policy, 2008), *Predicting Land Use Changes Using Parcel-level Data: Model Development and Application to Hunterdon County, New Jersey*. Defend the dissertation on April 11, 2008.

2. As a Reader:

- Ronnachai Tiyyarattanachai, (Ph.D. Environmental Science with concentration on environmental policy, 2010), *Long-Term Effectiveness of Institutional Controls and Engineering Controls: An Assessment of Management and Oversight Mechanisms in New Jersey*.
- Harnoor Dhaliwal, (M.S. Environmental Policy Studies, 2008), *Sustainable Site Remediation: the Life Cycle Assessment Approach*.
- Diana Saed, (M.S. Environmental Policy Studies, 2006), *Environmental Policy in Jordan: Analysis, Gap Identification, and Strategies for Improvement*.
- Amie Figueiredo, (M.S. Environmental Policy Studies, 2005), *The Role of University Participation in Integrated Coastal Management: A Case Study of the Ria de Aveiro*.
- Michael Bilheimer, (M.S. Environmental Policy Studies, 2004), *Incineration and Environmental Justice: the Case of Communities around Connecticut Resource Recovery Facilities*.
- Devin DeMarco, (M.S. Environmental Policy Studies, 2004), *the Rise and Fall of Open Market Emissions Trading in New Jersey*.

V. PUBLICATIONS

1. Books

1. Qiu, Z., Y. Wang and Q. Wang. *Housing System Reform in China*. Beijing, P.R. China: People's University of China Press. 1992.
2. Qiu, Z. *Land Information Management* (Dale, P.F. and J. McLaughlin). Beijing, P.R. China: Scientific and Technological Literature Press. 1992. Chinese Translation.
3. Qiu, Z. *The First Twelve Months of Life* (Caplan, F.). Beijing, P.R. China: Scientific and Technological Literature Press, 1991. Chinese Translation.

2. Book Chapters

1. Qiu, Z. Multi-Criteria Decision Analysis for Integrated Watershed Management. Chapter 6 in *Using Multi-Criteria Decision Analysis in Natural Resource Management*, ed. G. Herath and T. Prato (Editors). Aldershot, Hampshire, UK: Ashgate Publishing Ltd, pp. 93-118, 2006.
2. Qiu, Z. Land Supply. Chapter 3 in *Urban Land Economics* (Goldberg, M. and P. Chinloy). Beijing, P.R. China: People's University of China Press, 1990. Chinese Translation.
3. Qiu, Z. Land Management in Rural Area. Chapter 7 in *Introduction to Land Management*, ed. Z. Lin and X. Yan. Beijing, P.R. China: Chinese International Broadcast Press. 1990.
4. Qiu, Z. Land Taxation. Chapter 12 in *Land Economics*, ed. B. Bi. Beijing, P.R. China: People's University of China Press. 1990.
5. Qiu, Z. Historical Development of Cadastral Management. Chapter 1 in *Cadastral Management*, ed. Z. Lin. Beijing, P.R. China: People's University of China Press. 1990.

3. Refereed Journal Papers

1. Qiu, Z. Identifying Critical Source Areas in Watersheds for Conservation Buffer Planning and Riparian Restoration. *Environmental Management*. Vol. 44, No. 5. November 2009. pp. 968-980.
2. Qiu, Z., C. Hall and K. Hale. Evaluation of Cost-effectiveness of Conservation Buffer Placement Strategies in a River Basin. *Journal of Soil and Water Conservation*. Vol. 64, No. 5. September/October 2009. pp. 293-302.
3. Silverman, K.C., J.G. Tell, E.V. Sargent and Z. Qiu. Comparison of the ISC and AERMOD Dispersion Models: A Case Study for Human Health Risk Assessment. *Journal of Air and Waste Management Association*. Vol. 57, No. 12. December 2007. pp. 1439-1446.
4. Qiu, Z., M.T. Walter and C. Hall. Managing Variable Source Pollution in Agricultural Watersheds. *Journal of Soil and Water Conservation* Vol. 62, No. 3. May/June 2007. pp. 115-122.
5. Qiu, Z., T. Prato, and G. Boehm. Economic Valuation of Riparian Buffer and Open Space in a Suburban Watershed. *Journal of the American Water Resources Association*. Vol. 42, No. 6. December 2006. pp. 1583-1596.
6. Qiu, Z. Using Multi-Criteria Decision Models to Assess the Economic and Environmental Impacts of Farming Decisions in an Agricultural Watershed. *Review of Agricultural Economics* Vol. 27, No. 2. May 2005. pp. 229-244.

7. Qiu, Z. A VSA-based Strategy for Placing Conservation Buffers in Agricultural Watersheds. *Environmental Management* Vol. 32, No. 3. September 2003. pp. 299-311. Featured as Profile Article in that issue.
8. Wang, D., T. Prato, Z. Qiu, N.R. Kitchen, and K.A. Sudduth. Economic and Environmental Evaluation of Variable Rate Nitrogen and Lime Application in Claypan Soils. *Precision Agriculture: An International Journal on Advances in Precision Agriculture* Vol. 4, No. 1. March 2003. pp. 35-52.
9. Qiu, Z. Information Systems for Integrated Watershed Management. *Annals of Arid Zone* Vol. 41, No. 3/4. September – December 2002. pp. 305-320.
10. Qiu, Z., T. Prato, L. Godsey and V. Benson. Integrated Assessment of Uses of Woody Draws in Agricultural Landscapes. *Journal of the American Water Resources Association* Vol. 38, No. 5. October 2002. pp. 1255-1269.
11. Qiu, Z., T. Prato and F. McCamley. Evaluating Environmental Risks Using Safety-first Constraints. *American Journal of Agricultural Economics* Vol. 83, No. 2. May 2001. pp. 402-413.
12. Qiu, Z. and T. Prato. Physical Determinants of Economic Value of Riparian Buffers in an Agricultural Watershed. *Journal of the American Water Resources Association* Vol. 37, No. 2. April 2001. pp. 295-303.
13. Qiu, Z. and T. Prato. Accounting for Spatial Characteristics of Watershed in Evaluating Water Pollution Abatement Policies. *Journal of the Agricultural and Applied Economics* Vol. 31, No. 1. April 1999. pp. 161-175.
14. Qiu, Z., T. Prato and M. Kaylen. Watershed-scale Economic and Environmental Tradeoffs Incorporating Risks: A Target MOTAD Approach. *Agricultural and Resource Economics Review* Vol. 27, No. 2. October 1998. pp. 231-240.
15. Qiu, Z. and T. Prato. Economic Evaluation of Riparian Buffers in an Agricultural Watershed. *Journal of the American Water Resources Association* Vol. 34, No. 4. August 1998. pp. 877-890.
16. Qiu, Z. Establishing a Supply-Oriented Land Use Policy System. *China Land Science* Vol. 3, No. 3. 1988.

4. Refereed Conference Papers

1. Qiu, Z. and L. Wang. 2009. Water Quality Impacts of Agricultural BMPs in a Suburban Watershed in New Jersey. *The Proceedings of the 2009 5th International SWAT Conference*, Boulder, Colorado, August 5-7, 2009. Editor.
2. Qiu, Z., T. Prato and G. Boehm. 2004. Economics Evaluation of Riparian Buffers as a Conservation Practice. *The Proceedings of The American Water Resources Association 2004 Summer Specialty Conference: Riparian Ecosystems and Buffers: Multi-scale Structure, Function & Management*, Resort at Squaw Creek, Olympic Valley, CA, June 28-30, 2004. [CD-ROM].

3. Qiu, Z. and T. Prato. 2003. Integrated behavioral and environmental modeling for watershed management. *The Proceedings of the 4th International Conference on Integrating Geographic Information Systems and Environmental Modeling: Problems, Prospects, and Needs for Research*, the Banff Center, Banff (AB), Canada, Sept. 2-8, 2000. In: B.O. Parks, K.M. Clarke and M.P. Crane (editors), Proceedings of GIS/EM4 Conference. [CD-ROM]. GIS/EM4 No. 128.
4. Qiu, Z. and T. Prato. 2000. A Precision Landscape Planning Approach for Controlling Agricultural Nonpoint Source Pollution. The Proceedings of the 5th International Conference on Precision Agriculture and Other Precision Resources Management, Bloomington, MN, July 16-19, 2000, P.C. Robert, R.H. Rust and W.E. Larson (editors), ASA, CSSA, SSSA, Madison, WI. [CD-ROM].
5. Qiu, Z. and T. Prato. 1998. Stochastic Economic and Environmental Risk Assessment of Agricultural Nonpoint Source Pollution in an Agricultural Watershed. *The Proceedings: the conference of Watershed Management: Moving From Theory to Implementation*, Denver, Colorado, May 3 -6, 1998. pp. 1081 -88. Water Environment Federation, Alexandria, Virginia.
6. Qiu, Z., T. Prato and C. Fulcher. 1997. The Impacts of Data Resolution on Simulation of Water Quality Using the Agricultural Nonpoint Source Pollution Model and a Geographic Information System. *The 1997 ESRI Users Conference*. San Diego, CA.

5. Refereed Conference Abstracts

1. Qiu, Z. 2006. An Integrated Framework for Targeting Best Management Practices in an Agricultural Watershed. *Journal of Soil and Water Conservation* 61(3):197.
2. Qiu, Z. and T. Walter. 2006. Variable Source Area Hydrology and Targeting Water Quality Conservation Practices. *Journal of Soil and Water Conservation* 61(3):225.
3. Qiu, Z. 2002. Impacts of Farmers' Economic and Environmental Preferences in an Agricultural Watershed. *Journal of Soil and Water Conservation* 57(5): 301.
4. Qiu, Z. 2001. Integrated Assessment of Alternative Uses of Woody Drawns in Agricultural Landscapes. *Journal of Soil and Water Conservation* 56(4):387.
5. Qiu, Z., F. McCamley, T. Prato and V. Lansford. 2001. Environmental Policy Implications of Safety-first Models. *Journal of Agricultural and Resource Economics* 26(2):566.
6. Prato, T. and Z. Qiu. 2001. Multiple Criteria Bayesian Analysis of Adaptive Ecosystem Management and Planning for Protected Areas. *Journal of Agricultural and Resource Economics* 26(2):560.
7. McCamley, F., Z. Qiu and T. Prato. 2001. Mixed Integer Solution of Environmental Safety-first Problems. *Journal of Agricultural and Applied Economics* 33(3):620.

8. Qiu, Z. and T. Prato. 1999. Integrated Economic and Environmental Assessment of Variable Rate Technology for Nitrogen Application. *American Journal of Agricultural Economics* 81(5):1293.
9. Qiu, Z. and T. Prato. 1999. Economic Value and its Physical Determinants of Riparian Buffers in a Midwest Agricultural Watershed. *Journal of Agricultural and Applied Economics* 31(1):392.
10. Qiu, Z., T. Prato, C. Fulcher and Y. Barnett. 1998. WAMADSS – An Agricultural Resource Management Tool for Evaluating Sustainable Agriculture. *Journal of Soil and Water Conservation* 53(2):159.
11. Qiu, Z. and T. Prato. 1997. Economic Evaluation of Riparian Buffers in an Agricultural Watershed. *Journal of Soil and Water Conservation* 52(4):283.
12. Qiu, Z., T. Prato and M. Kaylen. 1997. Watershed-scale Economic and Environmental Tradeoffs Incorporating Yield Uncertainty and Environmental Risk. *Journal of Agricultural and Applied Economics* 29(1):210.
13. Qiu, Z., N.G. Kalaitzandonakes, and D. Wellman. 1996. Firm-level Productivity Growth Decomposition: A Non-parametric Malmquist Approach. *American Journal of Agricultural Economics* 78(5):1391.

6. Research Reports

1. Qiu, Z., T. Prato and G. Boehm. March 2004. *Residents' Willingness to Pay for Adopting Riparian Buffers in Newly Developed Residential Communities*. Research Report No. 27, the Center for Agricultural, Resources and Environmental Systems (CARES), University of Missouri, Columbia, MO 65211.
2. Qiu, Z. and T. Prato. December 2000. *Bio-Economic Assessment of Variable Rate Nitrogen Application for Corn*. Research Report No. 26, the Center for Agricultural, Resources and Environmental Systems (CARES), University of Missouri, Columbia, MO 65211.

7. Book Reviews

1. Qiu, Z. 2001. A Book Review on *Natural Resource Valuation and Policy in Brazil: Methods and Cases* edited by Peter H. May (Columbia University Press, New York, 1999), *Ecoscience: an International Journal in Ecology* 8(2):411-412.

VI. PROFESSIONAL PRESENTATIONS

1. Qiu, Z., C. Hall, D. Drewes, G. Messinger and K. Hale. Protection of Critical Source Areas for Water Resource Protection through Community-based Land Use Planning and Ordinances. The American Water Resource Association 2009 Annual Water Resources Conference. Seattle, Washington. November 9-12, 2009.

2. Qiu, Z., C. Hall, D. Drewes, G. Messinger and K. Hale. A Community Engagement Planning Process to Connect Science and Community for Water Resource Protection. The American Water Resources Association 2009 Annual Water Resources Conference. Seattle, Washington. November 9-12, 2009.
3. Qiu, Z. and L. Wang. Water Quality Impacts of Agricultural BMPs in a Suburban Watershed in New Jersey. The 2009 5th International SWAT Conference. Boulder, Colorado. August 5-7, 2009.
4. Qiu, Z., C. Hall, D. Drewes, G. Messinger and K. Hale. Protection of Critical Source Areas for Achieving Long-term Sustainability of Water Resources. The U.S. Environmental Protection Agency's Science and Technology Collaborative Network for Sustainability Webinar Series. June 8, 2009.
5. Qiu, Z., Identifying Critical Source Areas in Watersheds for Resource Management. The 2008 ESRI Users Conference. San Diego, California. August 4-8, 2008.
6. Qiu, Z., C. Hall and K. Hale. Cost-effective Assessment of Alternative Conservation Buffer Restoration Strategies in Agricultural Lands in Raritan Basin. The 63rd Annual International Conference of Soil and Water Conservation Society, Tucson, Arizona, July 26-30, 2008.
7. Qiu, Z., Understanding Economics and Water Quality Impacts of Agricultural BMPs in a Suburban Watershed in New Jersey. The 63rd Annual International Conference of Soil and Water Conservation Society, Tucson, Arizona, July 26-30, 2008.
8. Qiu, Z. Applying the Hydrological Simulation Program – Fortran (HSPF) for the Cooper River Watershed Planning. The New Jersey Watershed Restoration Planning Workgroup Conference, Rutgers EcoComplex in Bordentown, New Jersey, September 20, 2007. Invited.
9. Silverman, K. and Z. Qiu. Community-based Evaluation of Air Pollutants Using GIS. The 2007 ESRI Users Conference. San Diego, California. June 18-22, 2007.
10. Prato, T., D. Fagre, Z. Qiu and D. Johnson. Modeling Adaptive Agricultural Management for Climate Change in Montana's Flathead County. The MTNCLIM 2006 Conference at Timberline Lodge, Mt. Hood, Oregon, September 19-22, 2006.
11. Qiu, Z. An Integrated Framework for Targeting Best Management Practices in an Agricultural Watershed. The 61st Annual International Conference of Soil and Water Conservation Society, Keystone, Colorado, July 22-26, 2006.
12. Qiu, Z., C. Hall and K. Hale. Targeting the Variable Source Areas for Conservation Buffers. The 61st Annual International Conference of Soil and Water Conservation Society, Keystone, Colorado, July 22-26, 2006.
13. Qiu, Z. Identifying Critical Source Areas in Watersheds for Riparian Buffer Restoration. The 2006 Conference of the Mid-Atlantic Sections of the American Water Resources Association: Stream Restoration and Protection in the Mid-Atlantic

- Region, NJ School of Conservation, Montclair State University, Branchville, New Jersey, June 14-16, 2006.
14. Qiu, Z. Barriers and Opportunities of Managing Variable Source Pollution. The 60th Annual International Conference of Soil and Water Conservation Society, Rochester, New York, July 30 – August 4, 2005.
 15. Qiu, Z. Land Use Change and Environmental Quality. The Hubei Institute of Land Use Planning and Surveying, Wuhan, China. July 19, 2004. Invited.
 16. Qiu, Z. Land Use Change, Vehicle Travel and Environmental Quality. The U.S.-China Symposium on the Ecological and Environmental Issues in Land Use Decisions, People's University of China, Beijing, China. July 3, 2004. Invited.
 17. Qiu, Z., C. Hall, D. Drewes, and T. Walter. Delineation and Health Assessment of Riparian Areas in New Jersey Landscapes. The American Water Resources Association 2004 Summer Specialty Conference: Riparian Ecosystems and Buffers: Multi-scale Structure, Function & Management, Resort at Squaw Creek, Olympic Valley, CA, June 28-30, 2004.
 18. Qiu, Z., T. Prato, and G. Beohm. Economics Evaluation of Riparian Buffers as Conservation Practice in an Urban-rural Interface. The American Water Resources Association 2004 Summer Specialty Conference: Riparian Ecosystems and Buffers: Multi-scale Structure, Function & Management, Resort at Squaw Creek, Olympic Valley, CA, June 28-30, 2004.
 19. Qiu, Z. Integrating People, Sciences and Technology into Community-based Decision-making for Managing Water Resources: a Conceptual Framework. The 2003 Ecological Engineering for Integrated Water Management Conference: Design Urban and Industrial Watersheds, Graduate School of Design, Harvard University, Cambridge, MA, October 30 - November 2, 2003. Invited.
 20. Qiu, Z. Residents' Willingness to Pay for Adopting Riparian Buffers in Newly Developed Residential Communities. The 2003 American Water Resource Association International Conference, New York City, New York, June 30 - July 2, 2003.
 21. Qiu, Z. A VSA-based Strategy for Placing Conservation Buffers in Agricultural Watersheds. The 2003 American Water Resource Association International Conference, New York City, New York, June 30 - July 2, 2003.
 22. Qiu, Z., T. Prato, and G. Beohm. Residents' Willingness to Pay for Adopting Riparian Buffers in Newly Developed Residential Communities. The 2003 Missouri Natural Resources Conference, Osage Beach, Missouri, January 29 - 31, 2003.
 23. Qiu, Z., T. Prato, and G. Beohm. The Value of Open Space: Evidence from a Primary Residential Real Estate Market. The 2003 Missouri Natural Resources Conference, Osage Beach, Missouri, January 29 - 31, 2003.

24. Silverman, K.C., J.G. Tell, J.Z. Diver, Z. Qiu, and E.V. Sargent. Comparison of AERMOD, ISCST3, AERMOD-PRIME, and ISCST3-PRIME: Implications for Risk Assessment. The 2002 Annual Meeting of the Society for Risk Analysis, New Orleans, LA, December 8-11, 2002.
25. Qiu, Z. Integrated Assessment of Alternative Uses of Woody Draws in Agricultural Landscapes. The 2001 Soil and Water Conservation Society Annual Conference, Myrtle Beach, South Carolina, August 4-8, 2001.
26. Qiu, Z., T. Prato, F. McCamley, and V. Lansford. Environmental Policy Implications of Safety-first Models. The 2001 Western Agricultural Economics Association Annual Meeting, Logan, UT, July 2001.
27. Prato, T. and Z. Qiu. Multiple Criteria Bayesian Analysis of Adaptive Ecosystem Management and Planning for Protected Areas. The 2001 Western Agricultural Economics Association Annual Meeting, Logan, UT, July 2001.
28. Qiu, Z. Geo-economic Analysis of Alternative Uses of Woody Draws in Agricultural Landscape. The 2001 Missouri Environmental Quality Conference, Columbia, MO, April 26, 2001.
29. F. McCamley, Z. Qiu, and T. Prato. Mixed Integer Solution of Environmental Safety-First Problems. 2001 Southern Agricultural Economics Association Annual Meeting, Fort Worth, Texas, January 28 – 31, 2001.
30. Qiu, Z. and T. Prato. A Precision Landscape Planning Approach for Environmental Quality. The 2001 Missouri Natural Resources Conference, Osage Beach, Missouri, January 31 - February 2, 2001. Poster.
31. Qiu, Z., L. Godsey, V. Benson and T. Prato. Economic and Environmental Assessment of Alternative Uses of Woody Draws in Agricultural Landscapes. The 2001 Missouri Natural Resources Conference, Osage Beach, Missouri, January 31 - February 2, 2001.
32. Qiu, Z. An Internet-based Agricultural Land Use Trends Visualization System. The USDA NRCS Workshop: NRI Methodology and Applications. Chicago, IL, November 27-28, 2000.
33. Qiu, Z. and T. Prato. Behavioral and Environmental Modeling for Integrated Watershed Management. The 4th International Conference Integrating Geographic Information Systems and Environmental Modeling, Banff, Alberta, Canada, September 2-8, 2000.
34. Qiu, Z., T. Prato and V. Benson. Cost Effectiveness of Reducing Agricultural Nonpoint Source Pollution with Conservation Buffers in Variable Source Areas. The Annual Meeting of the American Agricultural Economics Association, Tampa, Florida, July 30 - August 2, 2000.
35. Qiu, Z. and T. Prato. A Precision Landscape Planning Approach for Controlling Agricultural Nonpoint Source Pollution. The 5th International Conference on

- Precision Agriculture and Other Precision Resources Management, Bloomington, MN July 16-19, 2000.
36. Qiu, Z., T. Prato and F. McCamley. Evaluating Environmental Risks using Safety-first Constraints. 2000 Western Agricultural Economics Association Annual Meeting, Vancouver, British Columbia, June 29 – July 1, 2000.
 37. Wang, M., O. Duru, A. Hjelmfelt, Z. Qiu and A. Thompson. Evaluating HSPF Model for Simulating the Hydrology of a Claypan Watershed. The 1999 ASCE International Water Resource Engineering Conference: Water Resources into the New Millennium: Past Accomplishments, New Challenges, Seattle, Washington, August 8-12, 1999.
 38. Qiu, Z. and T. Prato. Integrated Economic and Environmental Assessment of Variable Rate Technology for Nitrogen Application. The Annual Meeting of the American Agricultural Economics Association, Nashville, Tennessee, August 8-11, 1999.
 39. Qiu, Z. and T. Prato. Economic and Water Quality Implications of Multiple Objective Decision Analysis in an Agricultural Watershed. The Third National Workshop on Constructed Wetlands/BMPs for Nutrient Reduction and Coastal Water Protection, New Orleans, Louisiana, June 9-12, 1999.
 40. Qiu, Z., T. Prato and C. Fulcher. A Model for Integrated Environmental and Economic Analyses of Agricultural Watersheds. The Fourth Annual Missouri GIS Conference, Columbia, Missouri, March 16-17, 1999.
 41. Qiu, Z. and T. Prato. Economic Value and its Physical Determinants of Riparian Buffers in a Midwest Agricultural Watershed. the Southern Agricultural Economics Association Annual Conference in Memphis, Tennessee, Jan. 30 – Feb. 3, 1999.
 42. Qiu, Z. and T. Prato. A Model for Integrated Environmental and Economic Analyses of Agricultural Watersheds. The 1999 Missouri Natural Resources Conference, Osage Beach, Missouri, February 1-3, 1999.
 43. Qiu, Z., M. Wang, O. Duru, J. Meyer and C. Fulcher. Hydrological and Water Quality Modeling of Dardenne Creek Watershed in St. Charles, Missouri Using HSPF. The 1999 Missouri Natural Resources Conference, Osage Beach, Missouri, February 1-3, 1999.
 44. Meyer, J. and Z. Qiu. Development of a PC-based Watershed Management Decision Support System. The 1999 Missouri Natural Resources Conference, Osage Beach, Missouri, February 1-3, 1999.
 45. Qiu, Z., T. Prato, C. Fulcher and Y. Barnett. WAMADSS – An Agricultural Resource Management Tool for Evaluating Sustainable Agriculture. The 53rd Annual Conference of Soil and Water Conservation Society, San Diego, California, July 5-9, 1998.

46. Qiu, Z. and T. Prato. Stochastic Economic and Environmental Risk Assessment of Agricultural Nonpoint Source Pollution in an Agricultural Watershed. The Conference of Watershed Management: Moving From Theory to Implementation, Denver, Colorado, May 3-6, 1998.
47. Qiu, Z., T. Prato and C. Fulcher. The Impacts of Data Resolution on Simulation of Water Quality Using the Agricultural Nonpoint Source Pollution Model and a Geographic Information System. The 1997 ESRI Users Conference. San Diego, California. July 7-11, 1997.
48. Qiu, Z. and T. Prato. Economic Evaluation of Riparian Buffers in an Agricultural Watershed. The 52nd Annual Conference of Soil and Water Conservation Society. Toronto, Canada. July 22-25, 1997.
49. Qiu, Z., T. Prato and M. Kaylen. Watershed-scale Economic and Environmental Tradeoffs Incorporating Yield Uncertainty and Environmental Risk. The Annual Meeting of Southern Agricultural Economics Association. Birmingham, Alabama. February 2-5, 1997.
50. Qiu, Z., N.G. Kalaitzandonakes, and D. Wellman. Firm-level Productivity Growth Decomposition: A Non-parametric Malmquist Approach. The Annual Meeting of American Agricultural Economics Association. San Antonio, Texas. July 1996.
51. Qiu, Z. The Grain Demand and Supply in China. The 13th Midwest American Chinese Science and Technology Conference. St. Louis, Missouri. June 1996.
52. Qiu, Z. The Impacts of Data Resolution on Simulation of Water Quality Using AGNPS and GIS. The 13th Annual Research & Creative Activities Forum, University of Missouri. Columbia, Missouri. March 1996.
53. Qiu, Z. The Land Reform in China and the Real Estate Market in Beijing. The 12th Midwest American Chinese Science and Technology Conference. St. Louis, Missouri. June 1995.

VI. FUNDED GRANTS (Roles: **PI**: Principal Investigator, **CP**: Co-Principal, **I**: Investigator)

1. **PI**. Department of Agriculture – Forest Service. Comparative Assessment of Alternative Planning Approaches for Conservation Buffer Planning. \$20,000. 9/17/2009 – 9/30/2011.
2. **PI**. U S Environmental Protection Agency/NJ Department of Environmental Protection. *Walnut Brook Riparian Restoration Project*. \$ 126,016. 4/1/2009 – 9/30/2010. (with G. Messinger at North Jersey Resource Conservation and Development Council and C. Hall at Natural Resources Conservation Service).
3. **PI**. EPA-NCER STAR Grants. *Protection of Critical Source Areas for Achieving Long-term Sustainability of Water Resources*. \$199,871. 5/1/2007 – 6/30/2009. (with C. Hall at Natural Resources Conservation Service and D. Van Abs at New Jersey Water Supply Authority).

4. **PI.** US Environmental Protection Agency/NJ Department of Environmental Protection. *Developing a Watershed Restoration Plan for Neshanic River Watershed.* 10/1/2006 – 9/30/2010. \$435,715. (with C. Obropta at Rutgers University, D. Van Abs at New Jersey Water Supply Authority, C. Hall at Natural Resources Conservation Service, C. Testa at Hunterdon County Soil Conservation District and W. Kibler at South Branch Watershed Association).
5. **CP.** US Department of Agriculture – Natural Resources Conservation Service. *Riparian Restoration Plan for Agricultural Lands in the Raritan Basin.* 7/1/06-8/8/09. \$84,715 (my share \$35,981). (with G. Messinger at North Jersey Resource Conservation and Development Council – PI and D. Van Abs at New Jersey Water Supply Authority).

My Role: I contributed 20% effort to conceptualization and 40% effort to research methodology. I am responsible to identify and prioritize the critical source areas for the riparian restoration and to conduct economic evaluation and scenario analyses.

6. **CP.** US Department of Agriculture – CSREES National Research Initiative. *Adaptively Managing Agricultural Production for Future Climate and Land Use Changes in Montana's Flathead River Basin.* 7/15/2006 – 7/14/2010. \$450,000 (my Share \$96,000). (with T. Prato at University of Missouri-Columbia – PI, D. Fagre at US Geological Survey and D. Johnson at Montana State University).

My Role: I contributed 25% effort to conceptualization and research methodology. I am responsible for the economic and biophysical modeling under various climate/land use scenarios and farming decision analysis.

7. **PI.** US Geological Survey/New Jersey Water Resource Research Institute. *Integrated Assessment of Economic and Water Quality Impacts of Agricultural Best Management Practices.* 3/1/2006 – 2/28/2007. \$29,983. (with C. Obropta at Rutgers University). The deadline for this grant is being extended to 2/28/2008.
8. **CP.** US Department of Agriculture – NRCS Conservation Innovation Grants. The River-Friendly Farm Program in Neshanic River Watershed. 1/1/2006 – 12/31/08. \$85,000 (my in-kind contribution of \$12,927). (with J. Smith at North Jersey Resource Conservation and Development Council – PI and D. Van Abs at New Jersey Water Supply Authority).

My Role: I am responsible to identify the critical source areas for targeting farmers to be involved into the program in the watershed using a hydrological model.

9. **CP.** US Department of Agriculture – CSREES. Integrating Data and Models from the Cannonsville Watershed to Assess Short- and Long-term Effects of Phosphorus Control BMPs in the Northeast. September 2005 – September 2008. \$650,000 (my share is limited to travel reimbursements for involvements). (with T.S. Steenhuis – PI, C.A. Shoemaker, J.R. Stedinger, and M.T. Walter at Cornell University).

My Role: I contributed 5% effort to research methodology in social and economic analyses.

10. **PI.** NJIT SBR Grant. *Development of a Spatial Decision Support System for Integrated Watershed Management.* July 2003 – June 2004. \$20,000.
11. **PI.** NJIT SBR Grant. *Assessing Economic and Environmental Impacts of Land Use Decisions.* July 2002 – June 2003. \$14,000.
12. **CP.** USDA-CSREES. *Improving Water Quality through Integrated Watershed Management.* 2001 – 2005. \$493,500. (with T. Prato – PI and R. Broz at University of Missouri-Columbia).

My Role: I contributed 33% effort to conceptualization and research methodology. I didn't contribute to the execution due to relocation.

13. **PI.** The Missouri Cooperative Agricultural Research Grants. *Economic Analysis of Competing Land Uses in Environmentally Fragile Rural-Urban Interfaces.* July 2001 – June 2003. \$82,074. (with T. Prato at University of Missouri-Columbia).
14. **PI.** The Missouri Cooperative Agricultural Research Grants. *Identifying Environmentally Sensitive Areas in Agricultural Landscapes Using Hydrologic Models.* July – December 2001. \$11,046.
15. **CP.** US Environmental Protection Agency. *Evaluation of Soil P Indices for Management of Poultry Litter in Spatially-Variable Landscapes in the Ozark Region of Southwest Missouri and Northeast Oklahoma.* September 2000 – September 2002. \$213,050. (with P.P. Motavalli at University of Missouri-Columbia – PI and N.T. Basta, J.A. Hattey, H. Zhang and D.E. Storm at Oklahoma State University).

My Role: I contributed 5% effort to conceptualization and research methodology. I conducted a poultry producer survey to understand the processes of litter generation, transport and application and the producers' perception and willingness to adopt best litter management practices.

16. **CP.** The Missouri Cooperative Agricultural Research Grants. *Geo-economic Analysis of Alternative Uses of Woody Draws in Agricultural Landscape.* July 1999 – June 2001. \$59,748. (with T. Prato – PI, C. Fulcher and C. Barnett at University of Missouri-Columbia).

My Role: I contributed 80% effort to conceptualization and research methodology. I was fully responsible to the execution.

VII. SERVICE ACTIVITIES

1. Peer reviewing activity

1. Journals

- *Environmental Management*
- *Pedosphere*

- *Journal of Soil and Water Conservation*
- *Ecological Modeling*
- *Environmental Modeling and Assessment*
- *Environmental Modeling and Software*
- *Journal of Environmental Management*
- *The Journal of American Water Resources Association*
- *The Journal of Agricultural and Applied Economics*
- *Agroforestry*
- *AgBioForum*
- *Ecoscience: an International Journal in Ecology*

2. Research Agencies

- US Department of Agriculture – CSREES National Research Initiative Program
- University of Missouri Research Board.
- Environmental Protection Agency

3. Publishers

- McGraw-Hill: Chapters 3, 12, and 15 in *Economics*, Sixth Edition, by David Colander (April 2006); Chapters 4, 9 and 12 in *Essentials of Economics*, First Edition, by Stan Brue and Campbell McConnell (February 2006).

4. Professional Conferences

- The American Agricultural Economics Association. The 2003 Annual Meeting. January 2003
- The Southern Agricultural Economics Association. The 1999 Annual Conference. October 1998.

2. Community/Government

- US Department of Agriculture – CSREES: an invited panelist for reviewing and soliciting the funding proposals for its National Research Initiative Program, March 17-20, 2008, USDA-CSREES, Washington, D.C.

- US Department of Agriculture – CSREES: an invited panelist for reviewing and soliciting the funding proposals for its National Research Initiative Program, March 11-14, 2007, USDA-CSREES, Washington, D.C.
- US Department of Agriculture – CSREES: an invited panelist for reviewing and soliciting the funding proposals for its National Research Initiative Program, August 16-20, 2004, USDA-CSREES, Washington, D.C.
- US Department of Agriculture – Natural Resources Conservation Service: an invited expert to its workshop on Natural Resource Inventory Methodology and Applications, Chicago, IL, November 27-28, 2000.
- Essex County College (ECC): Member of ECC GIS Advisory Board. May 2006 - present.
- Rutgers Cooperative Extension: Member of the New Jersey Watershed Restoration Planning Workgroup. 2007 – present.
- Neshanic River Watershed Restoration Planning Committee: organizer and leader of this diverse group including the official representatives and residents from Raritan, Delaware, East Amwell and Flemington Townships and representatives from various governmental agencies related to Neshanic River Watershed. 2007 – present.
- New Jersey Critical Source Area Management Technical Committee: founder and leader of this diverse group including 20+ representatives from various agencies, organizations and consulting firms in New Jersey. 2005 – present.

3. Professional Societies

1. Soil and Water Conservation Society, member, 1997 – present
 - President of the New Jersey Firman E. Bear Chapter, 2009.
 - Organizer and chair of the symposium “Variable Source Area Hydrology and Targeting Water Quality Conservation Practices” for the 61st Annual International Conference of Soil and Water Conservation Society, Keystone, Colorado, July 22 – 26, 2006.
 - Organizer and chair of the symposium “Variable Source Area Hydrology and Its Implication for Soil and Water Conservation Practices” for the 60th Annual International Conference of Soil and Water Conservation Society, Rochester, New York, July 30 – August 4, 2005.
 - Invited expert to the Soil Water Conservation Society National LESA Workshop: Enhancing LESA’s Technical Capacity, Arbor Day Foundation – Lied Center, Nebraska City, NE, June 3-5, 2003.

- Invited expert to the Soil Water Conservation Society National Conservation Buffers Workshop, Arbor Day Foundation – Lied Center, Nebraska City, NE, June 12-13, 2001.
2. American Agricultural Economics Association, member, 1998 – 2005
 3. American Water Resources Association, member, 2002 – 2006
 4. Southern Agricultural Economics Association, member, 1997 – 2001
 - Coordinator and reviewer of the Selected Paper, and Session Moderator for the Southern Agricultural Economics Association Annual Conference in Memphis, Tennessee, Jan. 30 – Feb. 3, 1999.
 5. Western Agricultural Economics Association, member, 2001

VIII. HONORS, AWARDS, AND LISTINGS

1. The Society for Risk Analysis: a finalist for the Best Paper Award, 2002.
2. American Agricultural Economics Association: a nominee for the Outstanding Doctoral Dissertation Awards, 1997.
3. University of Missouri-Columbia Graduate Professional Council: the Outstanding Presentation Award at the 13th Annual Research and Creative Activities Forum, 1996.
4. Chinese Academy of Land Surveying and Planning: the Second-place Award of Scientific and Technological Progress for the project “Land Management System during the Period of People’s Republic of China: 1912 to 1949”, 1992
5. China National Land Management Bureau: the Second-place Award of Scientific and Technological Progress for the project “Urban Land Appraisal and Classification in Nanjin”, 1992.
6. People’s University of China: the Excellent Paper Award for “Establishing A Supply-Oriented Land Use Policy System" published in *China Land Science* 3 (1988), 1990.
7. People’s University of China: the Excellent Teacher Award, 1990 and 1992.

IX. MISCELLANEOUS

1. Public Media Citation

1. U.S. Environmental Protection Agency:
 - Riparian Buffers Yield Economic Returns. The U.S. Environmental Protection Agency *Nonpoint Source News-Notes*. No. 75. May 2005. pp. 15-16.

[://www.epa.gov/owow/info/NewsNotes/issue75/75issue.pdf](http://www.epa.gov/owow/info/NewsNotes/issue75/75issue.pdf)

2. New Jersey Institute of Technology:
 - NJIT Researchers to Improve Water Quality to Neshanic River Watershed. NJIT Press Release 953. November 22, 2006.
[://www.njit.edu/publicinfo/press_releases/release_953.php](http://www.njit.edu/publicinfo/press_releases/release_953.php)
3. Raritan Bulletin ([://www.raritanbasin.org/](http://www.raritanbasin.org/)):
 - Protection of Critical Source Areas for Achieving Long-Term Sustainability of Water Resources in Rockaway Creek Watershed. Featured Article in Issue #16. Summer 2007.
 - Neshanic Watershed Restoration Plan Project Kick-off. Featured Article in Issue #15. Spring 2007.
 - NJDEP Division of Watershed Management Awarded an EPA 319(h) Grant to Restore Neshanic River Watershed. News Article in Issue #14. Winter 2006/2007.
4. New Jersey Water Resource Research Institute ([://njwrri.rutgers.edu/](http://njwrri.rutgers.edu/)):
 - Cost-effectiveness of Targeting Critical Source Areas for Implementing Agricultural BMPs. *New Jersey Flows* Vol. 9, No. 1. Winter 2008. P. 3.
[://njwrri.rutgers.edu/newsletters/Winter%202008%20Newsletter.pdf](http://njwrri.rutgers.edu/newsletters/Winter%202008%20Newsletter.pdf)