# SILVIA SECCHI

# **EDUCATION**

	1996 - 2000	Iowa State University	Ames, IA, USA		
	Ph.D. in Economics				
	Concentrations: Environmental and Resource Economics, International Economics				
Major Professor: Bruce Babcock					
	1994-1995 <i>Master's Degree in Ag</i> Fields: Econometric	University of Reading <i>ricultural Economics</i> cs and Economic Development	Reading, England		
	1987-1993 Laurea in economics	Università Commerciale L. Bocconi	Milan, Italy		
	Specialization in International Economics				
	1985 - 1987 International Baccalau	United World College of the Adriatic <i>reate</i>	Duino, Italy		

#### ACADEMIC EXPERIENCE

2017-current Associate Professor	University of Iowa Department of Geographical and Sustainability Public Policy Center	Iowa City, IA Sciences
2014-2017 Associate Professor 2008-2014 Assistant Professor	Southern Illinois University Department of Geography and Environmental I Southern Illinois University Department of Agribusiness Economics	Carbondale, IL R <i>esources</i> Carbondale, IL
2004-2008 Associate Scientist 2001-2004 Assistant Scientist	Iowa State University Center for Agricultural and Rural Development Iowa State University Center for Agricultural and Rural Development	Ames, IA
1996 – 2000 Research Assistant	Iowa State University Center for Agricultural and Rural Developm	Ames, IA vent
1995 - 1996 Research Associate	University of Reading Centre for Agricultural Strategy	Reading, England

#### ADMINISTRATIVE EXPERIENCE

2016-2017	Southern Illinois University	Carbondale, IL			
Director, Environmental Resources & Policy Ph.D. Program					
2009-2015	Southern Illinois University	Carbondale, IL			
Co-Director, Environmental Resources & Policy Ph.D. Program					
Responsibilities included annual budgeting and personnel evaluations, recruiting, and					
representing the core curriculum at written and oral exams.					

#### **REFEREED JOURNAL ARTICLES**

#### (Asterisks denote graduate or undergraduate students advisees)

- Secchi, S., & McDonald, M. (2019). The state of water quality strategies in the Mississippi River Basin: Is cooperative federalism working? *Science of the Total Environment*, 677, 241-249. doi: <u>https://doi.org/10.1016/j.scitotenv.2019.04.381</u>.
- Mundia, C. W., Secchi, S., Akamani, K., & Wang, G. (2019). A Regional Comparison of Factors Affecting Global Sorghum Production: The Case of North America, Asia and Africa's Sahel. *Sustainability*, 11(7), 2135.
- Shruti K. Mishra, M. Cristina Negri, Justin Kozak, Julian F. Cacho, John Quinn, Silvia Secchi, Herbert Ssegane. (2019). Valuation of Ecosystem Services in Alternative Bioenergy Landscape Scenarios. *GCB Bioenergy*. doi: 10.1111/gcbb.12602.
- Secchi S. and S. Banerjee. (2019). A Dynamic Semester-Long Social Dilemma Game for Economic and Inter-Disciplinary Courses. *Journal of Economic Education*, 1-16. doi: 10.1080/00220485.2018.1551097.
- Bitterman P., S. Secchi, and D.A. Bennett. (2019). Constraints on Farmer Adaptability in the Iowa-Cedar River Basin. *Environmental Science and Policy* 92:9-16. doi: <u>https://doi.org/10.1016/j.envsci.2018.11.004</u>.
- 33. McClain S.N.\*, C. Bruch, S. Secchi and J.W.F. Remo. (2017). What Does Nature Have to Do with It? Reconsidering Distinctions in International Disaster Response Frameworks in the Danube Basin. Natural Hazards and Earth System Sciences. 7(12), 2151-2162. doi:10.5194/nhess-17-2151-2017
- 32. Teshager, A.D.\*, Gassman, P.W., Schoof, J.T., & Secchi, S. (2017). Simulation of Targeted Pollutant Mitigation Strategies to Reduce Nitrate and Sediment Hotspots in an Agricultural Watershed. *Science of the Total Environment, 607-608* (Supplement C), 1188-1200. doi: <u>https://doi.org/10.1016/j.scitotenv.2017.07.048</u>.
- Bhattarai, M.D.\*, Secchi, S., & Schoof, J. (2017). Projecting corn and soybeans yields under climate change in a Corn Belt watershed. *Agricultural Systems*, 152, 90-99. doi: <u>http://dx.doi.org/10.1016/j.agsy.2016.12.013</u>.
- Bhattarai, M.D.\*, Secchi, S., & Schoof, J. (2017). An Analysis of the Climate Change Mitigation Potential through Soil Organic Carbon Sequestration in a Corn Belt Watershed. *Environmental Management*, 59(1), 77-86. doi: 10.1007/s00267-016-0771-6.
- Trlica, A., Walia, M. K., Krausz, R., Secchi, S., & Cook, R. L. (2016). Continuous Corn and Corn-Soybean Profits over a 45-Year Tillage and Fertilizer Experiment. *Agronomy Journal*. doi: 10.2134/agronj2016.06.0377.
- Guida, R.J.\*, Remo, J.W.F., & Secchi, S. (2016). Tradeoffs of strategically reconnecting rivers to their floodplains: The case of the Lower Illinois River (USA). *Science of the Total Environment*, 572, 43-55. doi: <u>http://dx.doi.org/10.1016/j.scitotenv.2016.07.190</u>.
- 27. McClain, S.N.\*, Bruch, C., & Secchi, S. (2016). Adaptation in the Tisza: innovation and tribulation at the sub-basin level. *Water International*, 41(6), 813-834. doi: 10.1080/02508060.2016.1214774
- Guida, R.J.\*, Remo, J.W.F., & Secchi, S. (2016). Applying geospatial tools to assess the agricultural value of Lower Illinois River floodplain levee districts. *Applied Geography*, 74, 123-135. doi: <u>http://dx.doi.org/10.1016/j.apgeog.2016.07.002</u>.
- Teshager, A.D.\*, Gassman, P.W., Schoof, J.T., & Secchi, S. (2016). Assessment of impacts of agricultural and climate change scenarios on watershed water quantity and quality, and crop production. *Hydrology and Earth System Sciences, 20*(8), 3325-3342. doi: 10.5194/hess-20-3325-2016.

- Remo, J.W.F., Guida, R.J.\*, & Secchi, S. (2016). Screening the Suitability of Levee Protected Areas for Strategic Floodplain Reconnection Along the LaGrange Segment of the Illinois River, USA. *River Research and Applications*. doi: 10.1002/rra.3055.
- 23. Wade, T., Kurkalova, L., & Secchi, S. (2016). Modeling Field-Level Conservation Tillage Adoption with Aggregate Choice Data. *Journal of Agricultural and Resource Economics*, 41(2), 266–285.
- 22. Teshager, A.D.\*, Gassman, P.W., Secchi, S., Schoof, J.T., & Misgna, G. (2016). Modeling Agricultural Watersheds with the Soil and Water Assessment Tool (SWAT): Calibration and Validation with a Novel Procedure for Spatially Explicit HRUs. *Environmental Management*, 57(4), 894-911. doi: 10.1007/s00267-015-0636-4.
- Varble, S.\*, Secchi, S., & Druschke, C.G. (2016). An Examination of Growing Trends in Land Tenure and Conservation Practice Adoption: Results from a Farmer Survey in Iowa. *Environmental Management*, 57(2), 318-330. doi: 10.1007/s00267-015-0619-5.
- 20. Ding, D., Bennett, D., & Secchi, S. (2015). Investigating impacts of alternative crop market scenarios on land use change with an agent-based model. *Land*, 4(4), 1110-1137.
- Dodder, R.S., Kaplan, P.O., Elobeid, A., Tokgoz, S., Secchi, S., & Kurkalova, L.A. (2015). Impact of energy prices and cellulosic biomass supply on agriculture, energy, and the environment: An integrated modeling approach. *Energy Economics*, *51*, 77-87. doi: <u>http://dx.doi.org/10.1016/j.eneco.2015.06.008</u>.
- Smith, S., Varble, S.\*, & Secchi, S. (2015). Fish Consumers: Environmental Attitudes and Purchasing Behavior. *Journal of Food Products Marketing*, 1-17. doi: 10.1080/10454446.2014.940114.
- Liu, C.-C., Herriges, J.A., Kling, C.L., Secchi, S., Nassauer, J.I., & Phaneuf, D.J. (2014). A Comparison of Value Elicitation Question Formats in Multiple-Good Contingent Valuation. *Frontiers of Economics in China*, 9(1), 85-108. doi: doi:http://dx.doi.org/10.3868/s060-003-014-0006-2.
- Druschke, C.G.\*, & Secchi, S. (2014). The impact of gender on agricultural conservation knowledge and attitudes in an Iowa watershed. *Journal of Soil and Water Conservation*, 69(2), 95-106. doi: 10.2489/jswc.69.2.95.
- 15. Secchi S. (2013). Integrated Modeling for Conservation Policy Support. Choices, 28(3), 1-5.
- 14. Banerjee, S., Secchi, S., Fargione, J., Polasky, S., & Kraft, S.E. (2013). How to sell ecosystem services: a guide for designing new markets. *Frontiers in Ecology and the Environment, 11*(6), 297-304. doi: 10.1890/120044.
- Elobeid, A., Tokgoz, S., Dodder, R., Johnson, T., Kaplan, O., Kurkalova, L., & Secchi, S. (2013). Integration of agricultural and energy system models for biofuel assessment. Environmental *Modelling & Software*, 48, 1-16. doi: http://dx.doi.org/10.1016/j.envsoft.2013.05.007
- 12. Varble, S.\*, & Secchi, S. (2013). Human consumption as an invasive species management strategy. A preliminary assessment of the marketing potential of invasive Asian carp in the US. *Appetite, 65*, 58-67. doi: http://dx.doi.org/10.1016/j.appet.2013.01.022.
- Muste, M., Bennett, D., Secchi, S., Schnoor, J., Kusiak, A., Arnold, N., ... Rapolu, U. (2013). End-To-End Cyberinfrastructure for Decision-Making Support in Watershed Management. *Journal of Water Resources Planning and Management, 139*(5). doi: doi:10.1061/(ASCE)WR.1943-5452.0000289.
- Secchi, S., Gassman, P. W., Jha, M., Kurkalova, L., & Kling, C. L. (2011). Potential water quality changes due to corn expansion in the Upper Mississippi River Basin. *Ecological Applications*, 21(4), 1068-1084. doi: 10.1890/09-0619.1.

- 9. Secchi, S., Kurkalova, L., Gassman, P. W., & Hart, C. (2011). Land use change in a biofuels hotspot: The case of Iowa, USA. *Biomass and Bioenergy*, 35(6), 2391-2400.
- Rabotyagov, S., Campbell, T., Jha, M., Gassman, P. W., Arnold, J., Kurkalova, L., . . . Kling, C. L. (2009). Least-cost control of agricultural nutrient contributions to the Gulf of Mexico hypoxic zone. *Ecological Applications*, 20(6), 1542-1555. doi: 10.1890/08-0680.1.
- Opperman, J. J., Galloway, G. E., Fargione, J., Mount, J. F., Richter, B. D., & Secchi, S. (2009). Sustainable floodplains through large-scale reconnection to rivers. *Science*, 326(5959), 1487-1488. doi: 10.1126/science.1178256.
- 6. Secchi, S., Gassman, P. W., Williams, J. R., & Babcock, B. A. (2009). Corn-based ethanol production and environmental quality: A case of Iowa and the Conservation Reserve Program. *Environmental Management*, *44*(4), 732-744.
- 5. Secchi, S., Jha, M., Kurkalova, L., Feng, H. H., Gassman, P. W., & Kling, C. L. (2007). Privatizing ecosystem services: Water quality effects from a carbon market. *Choices*, 22(2), 97-102.
- Secchi, S., Gassman, P. W., Jha, M., Kurkalova, L., Feng, H. H., Campbell, T., & Kling, C. L. (2007). The cost of cleaner water: Assessing agricultural pollution reduction at the watershed scale. *Journal of Soil and Water Conservation, 62*(1), 10-21.
- 3. Herriges, J. A., Secchi, S., & Babcock, B. A. (2005). Living with hogs in Iowa: The impact of livestock facilities on rural residential property values. *Land Economics*, *81*(4), 530-545.
- Jha, M., Gassman, P. W., Secchi, S., Gu, R., & Arnold, J. (2004). Effect of watershed subdivision on SWAT flow, sediment, and nutrient predictions. *JAWRA Journal of the American Water Resources Association*, 40(3), 811-825. doi: 10.1111/j.1752-1688.2004.tb04460.x

Hurley, T., Secchi, S., Babcock, B., & Hellmich, R. (2002). Managing the risk Of European Corn Borer resistance to Bt corn. *Environmental and Resource Economics*, 22(4), 537-558. doi: 10.1023/a:1019858732103.

## BOOKS

Kling, K.L., S. Secchi, and M. Peters. 2011. NRCS Environmental Credit Trading Reference. Washington D.C. U.S. Department of Agriculture. URL: http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/stelprdb1045650.pdf

## **GUEST EDITORSHIPS**

Guest Co-Editor for *Economics Research International*'s special issue on the economics of biofuels, <u>http://www.hindawi.com/journals/ecri/si/306959/</u>.

Guest Co-Editor for Biomass and Bioenergy's special issue on land use change - Vol. 35(6).

## **REFEREED EXTENSION PUBLICATIONS**

Schulte, L.A., H. Asbjornsen, R. Atwell, C. Hart, M. Helmers, T. Isenhart, R. Kolka, M. Liebman, J. Neal, M. O'Neal, R. Schultz, S. Secchi, J. Thompson, M. Tomer, and J. Tyndall. 2008. Targeted Conservation Approaches for Improving Water Quality: Multiple Benefits for Expanded Opportunities. PMR 1002. Iowa State University Extension, Ames, IA.

#### **REFEREED TEACHING MATERIALS**

Cooke S.L., A.C. Lloyd\*, A.D. Monteblanco and S. Secchi. 2015. Moving to higher ground: Ecosystems, Economics and Equity in the Floodplain. National Center for Case Study Teaching in Science. URL:

http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case\_id=778&id=778

# INVITED JOURNAL ARTICLES

Secchi, S., Garvey, J., & Whiles, M. (2012). Multifunctional Floodplain Management: Looking Ahead From the 2011 Mississippi Floods. *National Wetlands Newsletter, 34*(5), 21-24.

Nassauer, J. I., Dowdell, J. A., Wang, Z., McKahn, D., Chilcott, B., Kling, C. L., & Secchi, S. (2011). Iowa farmers' responses to transformative scenarios for Corn Belt agriculture. *Journal of Soil and Water Conservation, 66*(1), 18A-24A. doi: 10.2489/jswc.66.1.18A

Secchi, S., Tyndall, J., Schulte, L. A., & Asbiornsen, H. (2008). High crop prices and conservation - Raising the stakes. *Journal of Soil and Water Conservation*, 63(3), 68A-73A. [2009 Editor's Choice Award].

# **BOOK CHAPTERS**

- Varble S. and S. Secchi. 2018. Growing switchgrass in the Corn Belt: Barriers and drivers from an Iowa survey. In "Land Allocation for Biomass: Challenges and Opportunities" (R. Li and A. Monti eds.) Springer [peer reviewed]
- Secchi S. and S. Soman. 2010. Mandatory and Voluntary Conservation Policies: Competing Visions or Complementary Approaches? In: Human Dimensions of Soil and Water Conservation: A Global Perspective. (T. Napier, ed.) Nova Science Publishers. [peer reviewed]
- Kurkalova L., S. Secchi, and P. W. Gassman. 2009. Corn Stover Harvesting: Potential Supply and Water Quality Implications. In: Handbook of Bioenergy Economics and Policy (M. Khanna, J. Scheffran, and D. Zilberman, eds.) Springer. [peer reviewed]
- Feng H. H., C. Kling L. Kurkalova, and S. Secchi. 2007. Subsidies! The Other Incentive-Based Instrument: the Case of the Conservation Reserve Program. In: Moving to Markets in Environmental Regulation: Lessons from Twenty Years of Experience (J. Freeman and C. Kolstad, eds.) Oxford University Press, New York. [peer reviewed]
- 6. Gassman P.W., S. Secchi, M. Jha and L.A. Kurkalova. 2006. Upper Mississippi River Basin modeling system part 1: SWAT Input data requirement and Issues. In: Coastal Hydrology and Processes (V.P. Singh and Y.J. Xu eds.) Water Resources Publications, Highland Ranch, CO.
- 5. Jha M., P.W. Gassman, S. Secchi, and J. Arnold. 2006. Upper Mississippi River Basin modeling system part 2: Baseline Simulation Results In: Coastal Hydrology and Processes (V.P. Singh and Y.J. Xu eds.) Water Resources Publications, Highland Ranch, CO.
- Kling C.L., S. Secchi, M. Jha, H. Feng, P.W. Gassman, and L.A. Kurkalova. 2006. Upper Mississippi River Basin modeling system part 3: Conservation practice scenario results. In: Coastal Hydrology and Processes (V.P. Singh and Y.J. Xu eds.) Water Resources Publications, Highland Ranch, CO.
- Secchi S., T. M. Hurley, B. Babcock and R. L. Hellmich. 2006. Managing European Corn Borer Resistance to Bt Corn with Dynamic Refuges. In: Regulating Agricultural Biotechnology: Economics and Policy (R. Just, J. Alston, and D. Zilberman eds.) Springer.

- Secchi S., B. A. Babcock. 2003. Pest Mobility, Market Share, and the Efficacy of Using Refuge Requirements for Resistance Management. In: Battling Resistance to Antibiotics and Pesticides: An Economic Approach (R. Laxminarayan, ed.), Resources for the Future, Washington DC. [peer reviewed]
- Hurley T. M., S. Secchi, B. Babcock, and R. L. Hellmich. 2002. Managing the Risk of European Corn Borer Resistance to Bt Corn, In The Economics Of Managing Biotechnologies (T. Swanson, ed.) Kluwer: Dordrecht, The Netherlands. [peer reviewed article reprint]

#### PAPERS UNDER REVIEW

Klawitter C.\*, S. Secchi. 2018. Spatial and Temporal Trends in Organic Agriculture in Iowa. Under review at *Renewable Agriculture and Food Systems*.

McClain S.H.\*, S. Secchi, J.W.F. Remo, and C. Bruch. 2018. From Integrated Water Resources Management to resilience: Implications for a new paradigm in the Danube and Rhine River basins. Submitted to the *International Journal of Water Resources Development*.

Bhattarai M.D.\*, and S. Secchi. 2016. Carbon Footprints of Select Agricultural Practices: Assessing the Potential for Climate Mitigation. To be submitted to *Environmental Science and Technology*.

Bouska, W., D. Glover, J. Trushenski, S. Secchi, J. Garvey. 2016. Large-scale commercial harvest to control bigheaded carp: successes, failures, and population responses. Submitted to *Fisheries Management and Ecology*.

#### GRANTS

- 26. Walton Family Foundation A Scorecard to measure States' Nutrient Reduction Strategies 2017-2019, \$19,585.
- 25. INTERNAL SIUC Undergraduate Research Assistantship. Creating an Atlas of Southern Illinois' Ecosystem Services. 2015-2016, \$2,700.
- 24. USDA NIFA Costs of continuous conservation tillage: estimation with incomplete data (with L. Kurkalova, T. Wade and R. Claassen), 2016-2018, \$499,995.
- 23. Argonne National Lab (DoE funds) Landscape by Design Valuation of Ecosystem Services, 2015-2017, \$49,736.
- National Science Foundation DYN COUPLED NATURAL-HUMAN. People, Water, and Climate: Adaptation and Resilience in Agricultural Watersheds (with D. Bennett, N. Basu, M. Muste, W. Gutowski) 2011-2017, \$1,011,832.
- Illinois DNR Training, Certification, Pilot Incentive, Marketing, And Removal Research Project for the long-term strategy in reducing and controlling Asian Carp populations (with J. Garvey), 2011, \$1,500,000.
- National Science Foundation DYN COUPLED NATURAL-HUMAN. Climate Change, Hydrology, and Landscapes of America's Heartland: A Multi-scale Natural-Human System (With C. Lant, S. Kraft, G. Misma, J. Nicklow, and J. Schoof) 2010-2014, \$1,430,000.
- 19. USDA ERS Cooperative Agreement 58-6000-0-0056. Estimating the costs of continuous conservation tillage. 2010-2014. \$30,887.
- USDA CSREES AFRI Agribusiness Markets and Trade. An Analysis of the Impact of Biofuel Expansion through Linking of Agricultural and Energy Markets (With A. Elobeid and L. Kurkalova) 2010-2014, \$360,396.

- 17. The Nature Conservancy. Floodplain Restoration Strategies Integrating Biomass plantings and Ecosystem Service Payments (With S. Kraft) 2009-2013, \$112,536.
- INTERNAL SIUC Seed Grant. Economic And Environmental Assessment of the Use of Woody Biomass for Energy Production in Southern Illinois, 2009-2010, \$14,985 + 1 month of Summer support.
- 15. INTERNAL SIUC Undergraduate Research Assistantship. The Role of Federal and State Policy in Promoting Renewable Energy Production. 2009-2010, \$5,400.
- National Science Foundation Cyber-Enabled Discovery and Innovation Type II. Understanding Water-Human Dynamics with Intelligent Digital Watersheds. (with J. Schnoor, M. Muste, A. Kusiak and D. Bennett). 2009-2012, \$899,391.
- 13. EPA, Region 7. Biofuel Feedstock Landscape Coverage for Five Biofuel Industry Scenarios (with R. Cruse, A. Elobeid and S. Tokgoz) 2008-2010, \$150,000.
- 12. Iowa State University Agricultural Systems Initiative. Assessing alternative crop choices and environmental impacts of the bioeconomy: an integrated landscape approach (with M. Duffy and P.W. Gassman) 2007-2008, \$15,000.
- Agricultural Marketing Resource Center. Helping Farmers Make Decisions in the Bioeconomy: Mapping the Potential for Switchgrass in Iowa Relative to Corn and Soybeans. 2007-2008. (with B. Babcock and P.W. Gassman), \$75,000.
- Department of Energy-USDA. Expansion of ethanol production: evaluation of costs and benefits to rural communities in the Upper Mississippi River Basin. (with L. Kurkalova, C.L. Kling, P.W. Gassman, M. Jha, A. Carriquiry and D. Otto) 2006-2009, \$676,722.
- 9. USDA Natural Resources Conservation Service. Environmental Credit Trading Handbook. 2006-2007 (with C.L. Kling), \$84,150.
- 8. Prairie Rivers of Iowa R.C. & D and USDA Natural Resources Conservation Service. Rapid Watershed Assessment for the Boone River, the Upper Iowa and the South Skunk Watersheds (with T. Isenhart, C.L. Kling, P.W. Gassman and M. Tomer) 2006-2007, \$72,500.
- 7. NASA and USDA Cooperative State Research, Education, and Extension Service. Interactive Drivers of Land Use/Land Cover Change in Agricultural Areas: Climate and Land Manager Choices. (with C.L. Kling, H. Feng, P.W. Gassman, and E. Tackle) 2006-2008, \$465,900.
- 6. Iowa Farm Bureau, Leopold Center for Sustainable Development, Iowa Soybean Association, Iowa Corn Growers Association. Assessment of Conservation Practices on Agricultural Cropland in Iowa (with C.L. Kling, H. Feng, P. Gassman, and M. Jha) 2006, \$72,500.
- USDA CSREES Integrated Projects. Water Resource Degradation in the Boone Watershed: Integrating Stakeholder Knowledge and Preferences with Economic and Watershed Models (with C.L. Kling, M. Duffy, L. Kurkalova, H. Feng, P.W. Gassman, and J. Cooper) 2005-2008, \$590,000.
- Prairie Rivers of Iowa R.C. & D and Leopold Center for Sustainable Development. Boone River Watershed and Gordon's Marsh Project (with C.L. Kling, and P.W. Gassman) 2005-2006, \$35,000.
- Iowa State Water Resources Research Institute. Improving Water Quality in Iowa Rivers: Cost-Benefit Analysis of Adopting New Conservation Practices and Changing Agricultural Land Use (with C.L. Kling, H. Feng, P.W. Gassman, and L. Kurkalova) 2005-2006, \$39,600.
- National Science Foundation. Biocomplexity of Integrated Perennial-Annual Agroecosystems (Senior Personnel. Principal Investigators: H. Asbjornsen, R. M Cruse, C.L. Kling, M. Z Liebman, J. D Opsomer) 2005-2007, \$ 99,998.

 Iowa Department of Natural Resources. Costs of Adopting Conservation Practices on Agricultural Cropland in Iowa and Possible Nutrient Standards (with C.L. Kling, H. Feng, P. Gassman, and L. Kurkalova) 2004, \$53,360.

## **TEACHING EXPERIENCE**

Environmental and Energy Economics (GENV 422). Double listed class for undergraduate and graduate students. Average class size: 20.

Geography, People and the Environment (GENV 300i). Class for the University's core curriculum social sciences and interdisciplinary requirement. Average class size: 70.

Environmental Decision Making (Environmental Resources & Policy 502). Core class for the interdisciplinary ER&P Ph.D program. Average class size: 12.

Interdisciplinary Approaches to Environmental Issues (ABE 470). Team taught class, capstone for the Minor in Environmental Studies.

#### GRADUATE STUDENT ADVISEMENT

#### MASTERS STUDENT ADVISER

Amy Kopale – Masters in Geography, UIowa, 2019 Aleesandria Gonzalez- Masters in Geography, SIUC, 2017 Daniel Fucik - Masters in Geography, SIUC, 2016 Andisiwe Stuurman - Masters in Geography, SIUC (Fulbright scholar), 2015 Mohamud Esmail – Masters in Agribusiness Economics, SIUC, 2011 Alison Britt – Masters in Agribusiness Economics, SIUC, 2011 Kent Rupp – Masters in Agribusiness Economics, SIUC, 2011

#### PH.D. STUDENT ADVISER

Austin Holland – Ph.D. in Geography, UIowa, current Shanna McClain (with C. Bruch) – Ph.D. in Environmental Resources & Policy, SIUC (IGERT fellow), 2016 Mukesh Bhattarai – Ph.D. in Environmental Resources & Policy, SIUC, 2016 Awoke Teshager (with J. Schoof) – Ph.D. in Environmental Resources & Policy, SIUC, 2016 Tom Shaw – Ph.D. in Environmental Resources & Policy, SIUC, 2015 Sarah Varble – Ph.D. in Environmental Resources & Policy, SIUC, 2014

#### MASTERS STUDENT COMMITTEE MEMBER

Tracy Fidler – Masters in Natural Resources and Environmental Sciences, UIUC, 2017 Jodie Hancock – Masters in Forestry, SIUC, 2017 Ann Rushing – Masters in Geography, SIUC, 2015 Brent Ritzler – Masters in Public Administration, SIUC, 2015 Lance Odum – Masters in Public Administration, SIUC, 2012 Andrew Johnson – Masters in Geography, SIUC, 2012

<u>PH.D. STUDENT COMMITTEE MEMBER</u> Oronde Drakes – Ph.D. in Geography, UIowa, current

Rebecca Kauten – Ph.D. in Geography, UIowa, current Clara Mundia – Ph.D. in Environmental Resources & Policy, SIUC, 2017 Amanda Marshall – Ph.D. in Environmental Resources & Policy, SIUC, 2017 Dat Tran- Ph.D. in Energy & Environmental Systems, NCA&T University, 2016 Ross Guida – Ph.D. in Environmental Resources & Policy, SIUC, 2016 Obed Quaicoe- Ph.D. in Energy & Environmental Systems, NCA&T University, 2016 Artur Rombenso – Ph.D. in Zoology, SIUC, 2016 Wahid Rahman – Ph.D. in Environmental Resources & Policy, SIUC, 2014 Tim Stoebner – Ph.D. in Environmental Resources & Policy, SIUC, 2014 Steve Randall - Ph.D. in Energy & Environmental Systems, NCA&T University, 2012 Caroline Gottschalk Druschke – Ph.D in Rethoric, University of Illinois at Chicago, 2011

## PROCEEDINGS

Kurkalova L. A., S. Secchi and P. W. Gassman. 2009. Greenhouse Gas Mitigation Potential of Corn Ethanol: Accounting for Corn Acreage Expansion. Proceedings of the 2007 National Conference on Environmental Science and Technology. G.Uzochukwu,; Schimmel, K.; Chang, S.-Y.; Kabadi, V.; Luster-Teasley, S.; Reddy, G.; Nzewi, E. (Eds.). Springer. p. 251-257.

Secchi S., P. W. Gassman, M. Jha, L. Kurkalova, and C. L. Kling. 2008. Water Quality Effects of Corn Ethanol versus Switchgrass-Based Biofuels in the Midwest. Proceedings of the Farm Foundation Conference: "Transition to a Bioeconomy: Environmental and Rural Development Impacts", October 15-16, 2008, Hyatt Regency At Union Station, St. Louis, MO. URL: <u>http://www.farmfoundation.org/news/articlefiles/401-</u> Final version Farm Foundation%20feb%2020%2009.pdf

Secchi S. 2008. The Environmental Sustainability of Ethanol and Biofuels. Proceedings of the Iowa State University Extension and Town/Craft Roundtable: "Biofuels and the Rural Economy Roundtable", May 14, 2008, Perry, IA.

Gassman, P.W., S. Secchi, and M. Jha. 2008. Assessment of bioenergy-related scenarios for the Boone River watershed in north central Iowa. In: Proceedings of the 21st Century Watershed Technology: Improving Water Quality and Environment Conference, March 29-April 3, American Society of Agricultural and Biological Engineers, Concepción, Chile.

Gassman, P.W., S. Secchi, and M. Jha. 2007. An alternative approach for analyzing wetlands in SWAT for the Boone River watershed in north central Iowa. In: *4th International SWAT Conference Book of Abstracts*, July 3-7, UNESCO-IHE, Institute for Water Education, Delft, Netherlands.

Gassman, P.W., S. Secchi, and M. Jha. 2006. Application of SWAT for the Boone River watershed in north central Iowa. Presented at the American Society of Agricultural and Biological Engineers Annual Meeting, July 9-12, Portland, OR. ASABE Paper 062234, St. Joseph, MI.

Secchi S., H. H. Feng, L. A. Kurkalova, C. L. Kling, P. W. Gassman, and M. Jha. 2005. Nonpoint source needs assessment for Iowa part II: the cost of improving Iowa's water quality. Watershed Management to Meet Water Quality Standards and Emerging TMDL (Total Maximum Daily Load), Proceedings of the 3<sup>rd</sup> Conference 5-9 March 2005 Atlanta, Georgia. ASAE, St. Joseph, Michigan, pp.522-532.

Gassman, P.W., S. Secchi, M. Jha, L.A. Kurkalova, H.Feng, and C.L. Kling. 2005. Nonpoint source needs assessment for Iowa part III: economic and environmental outcomes. Watershed Management to Meet Water Quality Standards and Emerging TMDL (Total Maximum Daily Load), Proceedings of the 3<sup>rd</sup> Conference 5-9 March 2005 Atlanta, Georgia. ASAE, St. Joseph, Michigan, pp.533-542.

Gassman, P.W., S. Secchi, C.L. Kling, M. Jha, L.A. Kurkalova, and H.Feng. 2005. An analysis of the 2004 Iowa Diffuse Pollution Needs assessment using SWAT. *Proceedings of the SWAT 2005* 3rd International Conference, pp. 291-30111-15 July, Zurich, Switzerland.

Jha, M., P.W. Gassman, S. Secchi, J.G. Arnold, L.A. Kurkalova, H. Feng, and C.L. Kling. 2005. An assessment of alternative conservation practice and land use strategies on the hydrology and water quality of the Upper Mississippi River Basin. In: *Proceedings of the SWAT 2005 3rd International Conference*, pp. 444-453, July 11-15, Zurich, Switzerland.

Takle, E. S., M. Jha, P. W. Gassman, C. J. Anderson, and S. Secchi. 2005. Climate change impacts on the hydrology and water quality of the Upper Mississippi River Basin. In: *Proceedings of the SWAT 2005 3rd International Conference*, pp. 599-608. July 11-15, Zurich, Switzerland.

Feng H., C. L. Kling, L. A. Kurkalova, S. Secchi, and P. W. Gassman. 2005. The Conservation Reserve Program in the Presence of a Working Land Alternative: Implications for Environmental Quality, Program Participation, and Income Transfer. *American Journal of Agricultural Economics* 87 (5).

Jha M., P. W. Gassman, S. Secchi, and J. Arnold. 2003. Configuration of SWAT for the Upper Mississippi River Basin: an application to two subwatersheds. Proceedings of the Total Maximum Daily Load (TMDL) Environmental Regulations II, 8-12 November 2003, Albuquerque, New Mexico.

Secchi S. and B. A. Babcock. 2002. Pearls before Swine? Potential Trade-Offs Between the Human and Animal Use of Antibiotics. *American Journal of Agricultural Economics* 84 (5).

## WORK IN PROGRESS AND WORKING PAPERS

Dodder R.S., A. Elobeid, T. L. Johnson, P. O. Kaplan, L. A. Kurkalova, S. Secchi, S. Tokgoz. 2011. Environmental Impacts of Emerging Biomass Feedstock Markets: Energy, Agriculture, and the Farmer. CARD Working Paper [11-WP 526].

Secchi S. 2007. Watching corn grow: a hedonic study of the Iowa landscape. Working paper 07-WP 445, Center for Agricultural and Rural Development, Ames, Iowa.

Secchi S., P. W. Gassman, M. Jha, L. Kurkalova, H. H. Feng, T. Campbell, C.L. Kling. 2005. The Cost of Clean Water: Assessing Agricultural Pollution Reduction at the Watershed Scale. Center for Agricultural and Rural Development, Ames, Iowa.

Secchi S., M. Jha, L. A. Kurkalova, H. Feng, P. W. Gassman, C. L. Kling. 2005. The Designation of Co-benefits and Its Implication for Policy: Water Quality versus Carbon Sequestration in Agricultural Soils. Working paper 05-WP 389, Center for Agricultural and Rural Development, Ames, Iowa.

Kurkalova L. A., C. Burkart, S. Secchi. 2004. Cropland Cash Rental Rates in the Upper Mississippi River Basin. Technical report 04-TR 47, Center for Agricultural and Rural Development, Ames, Iowa.

Secchi S. 2002. Patient Behavior and Antibiotic Prescriptions: the Equilibrium Level of Antibiotic Use and the Role of a Market Permit System. Center for Agricultural and Rural Development, Ames, Iowa.

Babcock B. A., J. Beghin, M. Duffy, H. Feng, B. Hueth, C. L. Kling, L. Kurkalova, U. Schneider, S. Secchi, Q. Weninger, J. Zhao. 2001. Conservation Payments: Challenges in Design and Implementation. Working paper 01-BP 34, Center for Agricultural and Rural Development, Ames, Iowa.

Secchi S. and B. A. Babcock. 2001. Optimal Antibiotic Usage with Resistance and Endogenous Technological Change. Working paper 01-WP 269, Center for Agricultural and Rural Development, Ames, Iowa.

Hurley T. M., S. Secchi, B. A. Babcock, and R. L. Hellmich. 1999. Managing the Risk of European Corn Borer Resistance to Transgenic Corn: An Assessment of Refuge Recommendations. Staff Report 99-Sr 88, Center for Agricultural And Rural Development, Ames, Iowa.

#### **CONFERENCE PAPERS AND POSTERS**

Secchi S. 2015. The push and pull of conservation, energy and climate mitigation policies on agricultural landscapes: the case of conservation tillage. Conference on Complex Systems, September 26-30, Tempe, AZ.

Secchi S. 2015. The potential of conservation tillage payments as a climate mitigation strategy. AAG Annual Meeting, April 21-25, Chicago, IL.

Eichholz M. W., R. T. Alisauskas, J. O. Leafloor, S. Varble, S. Secchi. 2013. Feasibility of Commercial Wildlife Exploitation as a Management Tool: Snow Geese as a Case Study of Overabundance. 20th Annual Conference of The Wildlife Society, October 5-10, Milwaukee, WI.

Secchi S. and S. Varble. 2013. We Can Beat Them If We Eat Them: Assessing the Marketing Potential of the Asian Carp in the US. Symposium on the Culture, Biology, and Management of Asian Carps in North America, 143rd Annual Meeting of the American Fisheries Society, September 8-12, Little Rock, AR.

Wade T., L. Kurkalova, and S. Secchi. 2013. Estimation of Discrete Choice Models with Aggregate Data: An Application to the Adoption of Conservation Tillage. Presented at the USDA ERS and Farm Foundation workshop "Agricultural Markets for Ecosystem Services: Greenhouse Gases, Conservation Practice Adoption & Behavioral Responses", August 8<sup>th</sup>, Washington D.C.

Secchi S. and L. Kurkalova. 2013. Estimating the Cost of Supplying Greenhouse Gas Offsets with Continuous Conservation Tillage. Presented at the USDA ERS and Farm Foundation workshop "Agricultural Markets for Ecosystem Services: Greenhouse Gases, Conservation Practice Adoption & Behavioral Responses", August 8<sup>th</sup>, Washington D.C.

Varble S., and S. Secchi. The Role of Watershed Management Groups and Key Stakeholders in the Resilience and Sustainability on a Rural Iowa Watershed. SWCS Annual meeting, Reno, NV 21-24 July 2013.

Varble S., D. Varble and S. Secchi. Potential for Perennial Crops for Bioenergy Production: Results of a Survey from an Iowa Watershed. SWCS Annual meeting, Reno, NV 21-24 July 2013.

Smith S., S. Varble and S. Secchi. 2013. Fish Consumers: Purchasing Habits and Environmental concerns. Selected Poster for the 2013 Annual ICHRIE Summer Conference, July 24-27, St. Louis, MO.

Wade T., L. Kurkalova, and S. Secchi. 2012. Using the Logit Model with Aggregated Choice Data in Estimation of Iowa Corn Farmers' Conservation Tillage Subsidies. AAEA Annual Meeting, August 12-14, Seattle, WA.

Kurkalova L., S. M. Randall, and S. Secchi. 2012. The Impact of Energy Price Changes on Cropping Patterns in Iowa. 31<sup>st</sup> USAEE/IAEE North American Conference, November 4-7, Austin, TX.

Kurkalova L., S. M. Randall, and S. Secchi. 2012. The Impact of Energy Price Changes on Cropping Patterns in Iowa. AERE Session at the Southern Economics Association Annual Meeting Nov 16-18, New Orleans, LA. Secchi S. 2012. Integrating Biofuel Production and Mitigation Strategies Into Agricultural Landscapes. Bioenergy and Biodiversity: Oxymoron or Opportunity? Symposium at the Ecological Society of America Annual Meeting, 5-10 August, Portland, OR.

Kurkalova L., R. Dodder, A. Elobeid, T. Johnson, O. Kaplan, S. Secchi, S. Tokgoz. 2011. Land-Use Impacts of Emerging Biomass Feedstock Markets: Accounting for Agricultural and Energy Market Interactions and the Variability of Local Conditions. Association Of Environmental And Resource Economists' Inaugural Summer Conference, 9 - 10 June, Seattle, WA.

Secchi S., S. Esling, C. Lant, J. A. Koropchak. 2011. The Environmental Resources and Policy Ph.D. Program at Southern Illinois University Carbondale: a Success Story. Facilitating Interdisciplinary Research and Education Symposium, March 28-29, Boulder, CO

Secchi S., J. Fargione, J. Remo, B. Moseley, T. Strole and S. Kraft. 2010. Stacking Ecosystem Services in Reconnected Floodplains: Linking Socioeconomic and Biophysical Analysis to Improve Floodplain Management. Selected paper at the Soil and Water Conservation Society Annual Meeting, July 18-21, St. Louis, MO.

Secchi S., P. W. Gassman, M. Jha, L. Kurkalova, and C. L. Kling. 2010. Potential Water Quality Changes Due to Corn Expansion in The Upper Mississippi River Basin. Selected paper at the 4<sup>th</sup> World Congress of Environmental and Resource Economists, June 28-July 2, 2010, Montréal, Canada.

Kurkalova, L. A., S. Randall, S. Secchi. 2010. Land-Use Implications of the Changes in Energy Prices. Selected Poster at the Agricultural and Applied Economics Association 2010 Annual Meeting, July 25-27, 2010, Denver, CO.

Secchi S., P. W. Gassman, M. Jha, L. Kurkalova, and C. L. Kling. 2009. The Water Quality Effects of Corn Expansion in the Midwest. Selected poster at the USDA, USGS, EPA and SWCS "Science to Solutions (Gulf Hypoxia)" workshop on December 9-11, 2009 Des Moines, IA.

Secchi S. 2009. Balancing Conservation Policy: Targeting Ecosystem Service Provision with Feedstock Production for the Bioeconomy in the Midwestern U.S. Invited presentation at the organized Symposium: "Integrating science and policy for watershed sustainability: Balancing hydrological services, quality of life, and economic vitality" (OOS #4185) at the Ecological Society of American Annual Meeting August 2-7 2009, Albuquerque, NM.

Secchi S., L. Kurkalova P. W. Gassman, and B. Babcock. 2009. Land Use and Environmental Impacts of Corn Grain vs. Cellulosic Ethanol: Policy Implication. Selected paper at the 2009 SWCS Annual Conference July 11-15, Dearborn, MI.

Secchi S. (Invited speaker). 2009. Ethanol Production and the Mississippi River, an Economic Perspective. 2009 Mississippi River Conference: "Visions of a Sustainable Mississippi River: Merging Ecological, Economic, and Cultural Values", organized by the National Great Rivers Research and Education Center and The Nature Conservancy, August 10 – 13, 2009, Collinsville, IL.

Kurkalova, L. A., S. Secchi, and P. W. Gassman. 2009. Harvesting Corn Stover and Crop Residue Management: The Impact of Conflicting Economic Incentives, Selected Poster at the Annual AERE Workshop - 2009 Theme: Energy and the Environment, Washington, DC June 18-20, 2009.

Kurkalova, L. A., S. Secchi, and P. W. Gassman. 2009. Effectiveness of Environmental Policies and Bioenergy Production Incentives. Selected paper at the SWCS Annual Conference July 11-15, 2009, Dearborn, MI.

Kurkalova, L. A., S. Secchi, and P. W. Gassman. 2009. Effectiveness of Environmental Policies and Bioenergy Production Incentives. Selected Poster at the AAEA & ACCI Joint Annual Meeting in Milwaukee, WI, July 26–28, 2009.

Secchi S., P. W. Gassman, M. Jha, L. Kurkalova, and C. L. Kling. 2008. Rotation and Water Quality Effects of Harvesting Corn Stover, Selected AERE paper at the AAEA & ACCI Joint Annual Meeting, July 27-29 2008, Orlando, FL (session 3059).

Secchi S., P. W. Gassman, and B. A. Babcock. 2008. Land Use and Environmental Impacts of Corn Grain versus Cellulosic Ethanol: a GIS Approach, Selected paper at the 28th USAEE/IAEE North American Conference, "Unveiling the Future of Energy Frontiers.", December 3-5 2008, New Orleans, LA, USA.

Secchi S., P. W. Gassman, M. Jha, L. Kurkalova, and C. L. Kling. 2008. Quality Effects of Corn Ethanol versus Switchgrass-Based Biofuels in the Midwest, Selected paper at the Farm Foundation Conference: Transition to a Bioeconomy: Environmental and Rural Development Impacts, October 15-16 2008, St. Louis, MO.

Secchi S., L. Kurkalova, J. C. Tyndall, P. W. Gassman, and C.L. Kling. 2008. The Next Step for the Bioeconomy: Mapping the Impact of Corn Stover Use on Crop Choice, Land Use, and Environmental Quality". Selected poster at the AAEA & ACCI Joint Annual Meeting, July 27-29 2008, Orlando, FL (session M56).

Secchi S. 2008. The Environmental Sustainability of Ethanol and Biofuels, Overview presentation at the Iowa State University Extension and Town/Craft Roundtable: "Biofuels and the Rural Economy Roundtable", May 14, 2008, Perry, IA.

Secchi S., L. Kurkalova, C.L. Kling, J. Cooper, P.W. Gassman, M. Jha. 2006. Water Resource Degradation in the Boone Watershed: Integrating Economic and Watershed Models. Soil and Water Conservation Society workshop "Managing Agricultural Landscapes for Environmental Quality: Strengthening the Science Base", Kansas City, MO, October 2006.

Secchi S. 2005. Watching Corn Grow: a Hedonic Study of the Iowa Landscape, Eastern Economic Association Annual Conference, New York City, NY, March 2005.

Secchi S. 2001. Models to Support TMDL Development Across the Midwest (Symposium), American Agricultural Economics Association Annual Meeting, Chicago, IL, August 2001.

Secchi S., B.A. Babcock. 2001. Optimal Pesticide Usage with Resistance and Endogenous Technological Change, American Agricultural Economics Association Annual Meeting, Chicago, IL, August 2001.

Secchi S., T. M. Hurley, and R. L. Hellmich. 2001. Managing European Corn Borer Resistance to Bt Corn with Dynamic Refuges, 5th ICABR International Conference, Ravello, Italy, June 2001.

Secchi S., B.A. Babcock. 1999. A Model of Pesticide Resistance as a Common Property and Exhaustible Resource, American Agricultural Economics Association Annual Meeting, Nashville, TN, August 1999.

Secchi S., B.A. Babcock. 1999. Managing Pest Resistance: The Potential Of Crop Rotations And Shredding, American Agricultural Economics Association Annual Meeting, Nashville, TN, August 1999.

#### **OTHER PUBLICATIONS**

Healy M.\*, and S. Secchi. 2016. A Comparative Analysis of Ecosystem Service Valuation Decision Support Tools for Wetland Restoration. A Report Prepared for the Association of State Wetland Managers. URL: http://www.aswm.org/pdf\_lib/ecosystem\_service\_valuation\_032116.pdf

Secchi S. 2015. Background paper on Economic Valuation of Ecosystem Services from Working Lands Conservation, prepared for USDA's ERA and NRCS Economic Valuation of Conservation Based Ecosystem Services Workshop.

Braden J. and S. Secchi, 2014, C-FARE and AAEA Webinar "Policy Innovations in Nonpoint Source Pollution-policy". Friday, March 21, 2014.

Cooke S. L., A. C. Lloyd\*, A. D. Monteblanco, and Silvia Secchi, 2013. Ecosystems, Economics, and Equity in the Floodplain. A case study developed for the National Socio-Environmental Synthesis Center Project Teaching Socio-Environmental Synthesis with Case Studies. URL: http://www.sesync.org/ecosystems-economics-and-equity-in-the-floodplain-case-study-5

Secchi S., 2009. Overview Presentation. NRCS and C-FARE Webinar "Environmental Markets: New Approaches for Natural Resources Management Webinar", February 23rd, 2009

Feng H., L. A. Kurkalova and S. Secchi. 2001. Multifunctionality: Market failure and options to internalise externalities: Applying the OECD framework - A review of literature in the USA, Consultant background paper for the OECD workshop "Multifunctionality: Applying the OECD Analytical Framework, Guiding Policy Design", July 2001.

#### INVITED CONFERENCE AND SEMINAR PRESENTATIONS

Invited presentation "The role of policy in promoting sustainable floodplain management" at Emiquon Science 2015: River Floodplain Restoration and Connection, February 19th, 2015, Lewistown, IL

Invited Presentation "Understanding the links between humans, climate change, water and carbon in a Corn Belt Watershed", at the AGU Fall meeting, December 15-19th, 2014, San Francisco, CA.

Invited presentation "Promoting Bioenergy Crops: An economic perspective on challenges and opportunities" at the workshop Incorporating Bioenergy in Sustainable Landscape Designs Workshop Two: Agricultural Landscapes June 24–26th, 2014, Argonne National Laboratory, IL.

Invited presentation "Increased Biofuel Production and Water Resources" at the National Academies Roundtable on Science and Technology for Sustainability, May 20-21, 2014, Washington DC. URL:

http://sites.nationalacademies.org/cs/groups/pgasite/documents/webpage/pga\_088191.pdf

Invited speaker at the Indiana University-Purdue University first "Rivers of the Anthropocene" conference, January 23-24<sup>th</sup>, 2014, Indianapolis, IN.

Invited speaker at the MISI-ZIIBI: Living with the Great Rivers, Climate Adaptation Strategies in the Midwest River Basins, co-sponsored by Washington University in St. Louis and the Royal Netherlands Embassy, March 23<sup>rd</sup>, 2013, St. Louis, MO.

Plenary speaker at the 2013 Missouri River Natural Resources Conference and BiOp Forum "Beyond the Banks" March 12th, 2013, Jefferson City, MO.

Luncheon speaker at the Soil and Water Conservation Society Modeling Summit 2011 - Advancing the Science of Modeling, March 30<sup>th</sup>, 2011, Denver, CO.

Invited lecture to the "Food, Energy, and Quality of Life in Iowa" graduate class at Iowa State University, on the difference between ecological and environmental economics approaches to agricultural policy, September 21<sup>st</sup>, 2009.

North Carolina A&T State University, Energy and Environmental Systems Seminar, April 12th, 2010.

Iowa State University Biobased Industry Center Energy Camp, May 21st 2010.

University of Minnesota, Applied Economics Department, Environmental and Resource Economics Seminar, April 26th 2010.

University of Illinois at Urbana-Champaign, Department of Agricultural and Consumer Economics Seminar, September 10th 2010.

University of Iowa, Department of Geography, Kohn Colloquium, October 29th 2010.

#### **PROFESSIONAL ACTIVITIES**

Editorial Board, Cogent Environmental Science, 2017-present

Editorial Board, Applied Economic Perspectives and Policy, 2015-2018.

Oklahoma EPSCoR External Advisory Board Member 2017-2018

Participant at invitation-only Purdue University University of Illinois workshop "Scientific Challenges to Operationalizing Payments for Agro-Ecosystem Services (PAgES)" (organized by Ben Gramig and Sylvie Brouder). Indianapolis, IN, November 2017.

Consultant, Walton Family Foundation – Developing a Score Card for Iowa and Illinois' Nutrient Reduction Strategies. 2016-2017.

Program Committee Member for the 6th World Congress of Environmental and Resource Economists, 2018.

National Science Foundation, panelist, 2010, 2011, 2014, 2016 and 2017. Ad hoc reviewer, 2012, 2013, 2014, 2016, 2017.

USDA - NIFA panelist, 2017. Ad hoc reviewer 2014 and 2016.

Reviewer for Selected Paper Sessions of the American Agricultural Economics Association meetings, 2002, 2003, 2008 and 2016.

Author of working paper II for the USDA and C-FARE workshop, 'Economic Valuation of Conservation Based Ecosystem Services', July 21, 2015, Washington, DC.

Participant, inaugural SESYNC short course, Teaching Socio-Environmental Synthesis with Case Studies, July 23-26, 2013, Annapolis, MD.

Planning Committee Member, AWRA 2013 Spring Specialty Conference: "Agricultural Hydrology and Water Quality II", March 25-27, St. Louis, MO.

Participant, NSF workshop on Developing and Sustaining Interdisciplinary Graduate Programs, 7-8 October 2012, Coeur d'Alene, ID.

EPA Star Fellowship Panelist, 2012.

Council on Food, Agricultural and Resource Economics (C-FARE), Blue Ribbon Panel of Experts, Environmental and Natural Resources Panel, 2011 to present.

Program Committee Member for the 18<sup>th</sup> and 19th Annual Meetings of the European Association of Environmental and Resource Economists, 2011 and 2012.

Member of the Middle Mississippi Wetland Field Station Advisory Committee Southern Illinois University, 2009- 2017.

Rapporteur at the JRC/EEA/OECD Expert Consultation: "Review and inter-comparison of modeling land use change effects of bioenergy", Paris, France, 29-30 January 2009.

Reviewer for the National Institutes for Water Resource - U.S. Geological Survey Competitive Grants Program, 2009 and 2011.

Reviewer for the Collaborative, Highly Interdisciplinary Research Program at the Swiss Federal Institute of Technology, Zurich Research Commission, 2009.

Reviewer for Selected Paper Sessions of the 3rd World Congress of Environmental and Resource Economists, 2006.

Reviewer for USDA-CSREES Conservation Effects Assessment Project, 2005 and 2006.

Reviewer of the Union of Concerned Scientists' report "CAFOs Uncovered: The Untold Costs of Confined Animal Feeding Operations" URL: http://www.ucsusa.org/food and environment/sustainable food/cafos-uncovered.html.

Reviewer for: Agriculture, Agricultural and Resource Economics Review, Agriculture and Human Values, Appetite, Applied Economic Perspectives and Policy, Applied Geography, Biofuels, Biological Invasions, Biomass & Bioenergy, BioScience, Choices, Ecology, Ecological Applications, Ecological Economics, Ecosystem Services, Energy Policy, Environmental and Development Economics, Environmental and Resource Economics, Environmental Management, Environmental Research Letters, Environmental Science & Technology, Frontiers of Ecology and the Environment, GCB Bioenergy, Intelligent Systems in Accounting, Finance and Management, International Journal of Digital Earth, Journal of Agricultural and Resource Economics, Journal of Applied Geography, Journal of Environmental Economics and Management, Lands Use Policy, Landscape and Urban Planning, Journal of Natural Resources Policy Research, Journal of Soil and Water Conservation, Nature Climate Change, PLoS ONE, SAGE Open (Article Editor), Society & Natural Resources, Proceedings of the National Academies of Science, Transactions of ASABE.

#### ACADEMIC HONORS AND AWARDS

Southern Illinois University Early Career Faculty Excellence Award, 2012. [inaugural winner]

Yellow Ribbon Poster Presentation, with L. Kurkalova, and P. W. Gassman, Agricultural and Applied Economics Association, 2009.

2009 Editor's Choice Award, Journal of Soil and Water Conservation: Secchi, S., J. Tyndall, L.A. Schulte, and H. Asbjornsen. 2008. High crop prices and conservation: Raising the stakes. *Journal of Soil and Water Conservation* 63(3):68A-73A.

Iowa State University College of Agriculture and Life Science Team Award, to the Resource and Environmental Policy Division. 2008.

Second Place Poster Presentation, with M. Jha, L. Kurkalova, C. Kling, H. Feng, P. Gassman, and T. Campbell, American Agricultural Economics Association, 2005 and 2006.

Second Place Poster Presentation, with C. Kling, H. Feng, L. Kurkalova, P. Gassman, M. Jha, T. Campbell, A. Bhaskar, C. Burkart, S. Sengupta and R. Olson, American Agricultural Economics Association, 2004.

First Place Poster Presentation, with C. Kling, L. Kurkalova, and P. Gassman, American Agricultural Economics Association, 2003.

Outstanding Ph.D. Dissertation (Honorable Mention), American Agricultural Economics Association, 2001.

Professional Advancement Travel Grant, Iowa State University, 1999.

Premium for Academic Excellence Award, Iowa State University, 1996.

## **OUTREACH PRESENTATIONS AND POPULAR PRESS ARTICLES**

SIU Energy Debate – September 8, 2012.

Carbondale Science Café' - Presentation on Biofuels, March 24, 2011.

Speaker, "No Silver Bullets: Unintended Consequences Of Oil And Water Solutions", May 18, 2009, Indo-American Center, Chicago, IL.

The View - Expert opinions on a special series on energy for The Southern Illinoisan newspaper.

- October 19th, 2008: "Only way out of foreign oil get out of oil"
- November 23<sup>rd</sup>, 2008: "Myopic energy policy hurts country"
- December 21st, 2008: "The evidence on greenhouse gases is there".
- January 25th, 2009: "Don't quit on coal just yet"
- February 22<sup>nd</sup>, 2009: "Natural gas it's nice if you can get it..."
- March 29th, 2009: "Nuclear energy: Worth the risk?"
- April 19th, 2009: "Conservation: The low hanging fruit"
- May 24th, 2009: "Wind and Solar Energy: No Silver Bullet"
- June 21st, 2009: "Biofuels and Land Use Effects: An Open Question"
- July 19th, 2009: "Water and Energy: A Rather Fluid Link"
- August 28th , 2009: "Just say no to the lobbyists"
- September 27th, 2009: "No such a thing as a free lunch"
- October 18th, 2009 "Energy conflicts will last as long as oil pays for them"
- February 14<sup>th</sup>, 2010, "The Evidence is still there" (with J. Schoof)
- September 19th, 2010, "Glass half full or half empty, but still too small"
- December 12th, 2010, "Biofuel policy Thinking ahead"
- March 20th 2011, "Not for the faint of heart"
- July 17th, 2011, "Cracking fracking"
- December 8th, 2011, "Flavor of the month?"
- October 21<sup>st</sup>, 2012, "Looking for facts behind the noise"
- January 6th, 2013, "A chilly forecast for coal"
- June 30th, 2013, "Illinois is really first in the nation this time"

#### **COMPUTER SKILLS**

Good knowledge of TSP, SPSS, ArcGIS, SpaceStat and the Windows environment (word processing, spreadsheets, databases). Watershed modeling with SWAT (Soil and Water Assessment Tool). Environmental modeling with EPIC (Environmental Policy Integrated Climate).

#### **MEMBERSHIPS**

Agricultural & Applied Economics Association Association of American Geographers Association of Environmental and Resource Economists Ecological Society of America