

Ana Claudia Sant'Anna

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Profile

Assistant Professor in Agribusiness in the Division of Resource Economics and Management at West Virginia University, working on research topics including farmland values, farmer decision making, credit availability, among other topics. Ana Claudia has multicultural experience by living in Brazil, Germany, Spain, Australia, Trinidad and Tobago, and Malaysia.

Research Interests

Agribusiness, Land Use, Biofuel Economics, Agricultural Finance

Education

Kansas State University. PhD in Agricultural Economics, May 2017.

Fields: Natural Resources, Biofuel Economics, Land Use. GPA: 3.9/4.0

University of São Paulo – ESALQ/USP, Brazil. MSc. Applied Economics, 2011, GPA: 3.9/4.0

University of Brasilia, Brazil. BA. Economics, 3.8/4.0.

Ludwig-Maximilian-Universität, Germany. BA in Economics, Exchange semester 2004

Current and Previous Employment

United States

West Virginia University, Assistant Professor in Agribusiness, August 2019 -

The Ohio State University, Post-Doctoral Researcher, Farm Income Enhancement Program, Supervised by Dr. Ani Katchova, 2017 – 2019 (August)

Kansas State University, Graduate Research Assistant to Dr. Jason S. Bergtold, 2013 – 2017

Brazil

Research Institute for Applied Economics (IPEA), Health Economics Researcher, 2011-2013

University of Brasilia, Research Assistant to Dr. Jose Roberto Novaes de Almeida. 2011

Brazilian National Industry Council CNI/IEL, Research Assistant to Dr. Simone Assis, 2008-2009

University of Brasilia, National Council for Scientific and Technological Development (CNPq), Initiation into Scientific Research Program, 2007-2008

Brazilian House of Representatives, Budget and Financial Auditing Office, Internship, 2006-2007

The Central Bank of Brazil, Internship, 2005-2006

Germany

Bundsgartenschau München 2005 GmbH, Germany, Graphic Designer, 2003-2004

Technischesuniversität München, Germany, Library Student Worker, 2002

Publications

Peer-reviewed

1. **Sant'Anna, A.C.;** Katchova, A. "Determinants of land value volatility in the U.S. Corn Belt" *Applied Economics* (Accepted). 2019
2. **Sant'Anna, A.C.;** Bergtold, J.; Shanoyan, A.; Caldas, M.M.; Granco, G. "Examining the relationship between vertical coordination strategies and technical efficiency: Evidence from the Brazilian ethanol industry." *Agribusiness*. 2018. ([LINK](#))
3. Granco, G.; **Sant'Anna, A.C.;** Bergtold, J.; Caldas, M. M.; "Factors influencing ethanol mill location in a new sugarcane producing region in Brazil." *Biomass and Bioenergy*. v.111: 125-133. 2018 ([LINK](#))
4. Bergtold, J.S., Caldas, M.M.; **Sant'Anna, A.C.;** Granco, G and Rickenbrode, V. "Indirect Land-Use Change from Ethanol Production: The Case of Sugarcane Expansion at the Farm Level on the Brazilian

- Cerrado.” *Journal of Land Use Science*. 12:6, 442-456. 2017. ([LINK](#))
5. **Sant’Anna, A.C.**; Shanoyan, A.; Bergtold, J. S.; Caldas, M. M.; Granco, G. Ethanol and Sugarcane Expansion in Brazil: What is Fueling the Ethanol Industry? *International Food and Agribusiness Management Review*. v. 19(4):163-182, 2016 ([LINK](#))
 6. **Sant’Anna, A.C.**; Granco, G.; Bergtold, J.; Caldas, M.M.; Xia, T.; Masi, P.; Link, T.; Lorenzani, W. Chapter 13: The challenges of the sugarcane expansion: The perception of producers and landowners in Goiás and Mato Grosso do Sul. In: *Forty years of ethanol in Brazil: Hide or confront the crises?* Santos, G. (Org.) Brasília: IPEA. 2016.
 7. Granco, G.; Caldas, M. M.; Bergtold, J.; **Sant’Anna, A.C.** Exploring the Policy and Social Factors Fueling the Expansion and Shift of Sugarcane Production in the Brazilian Cerrado. *GeoJournal*. v. 1:1-18pp., 2015 ([LINK](#))
 8. Garcia, L.P.; **Sant’Anna, A.C.**; Freitas, L.R.S.; Magalhães, L.C.G. Tobacco control policy and variation in Brazilian family spending on cigarettes: results of the Brazilian Household Budget Surveys in 2002/2003 and 2008/2009. *Cadernos de Saúde Pública*. v. 31 (9):1894-1906, 2015. ([LINK](#))
 9. Garcia, L.P.; Ocké-Reis, C.O.; Magalhães, L.C.G.; **Sant’Anna, A.C.**; Freitas, L.R.S. Spending on private health insurance plans of Brazilian families: a descriptive study with data from the Family Budget Surveys 2002-2003 and 2008-2009. *Ciência & Saúde Coletiva*, 20(5):1425-1434, 2015. ([LINK](#))
 10. Garcia, L.P.; **Sant’Anna, A.C.**; Freitas, L.R.S.; Magalhães, L.C.G.; Aurea, A. P. Brazilian family spending on medicines: an analysis of data from the Family Budget Surveys, 2002-2003 and 2008-2009. *Cadernos de Saúde Pública* (ENSP. Printed version), v. 29, p. 1605-1616, 2013.
 11. Garcia, L.P.; **Sant’Anna, A.C.**; Freitas, L.R.S.; Magalhães, L.C.G. Healthcare expenses of Brazilian families living in metropolitan areas: a regional cut from the Family Budget Surveys, 2002-2003 and 2008-2009. In: Rogério Boueri; Marco Aurélio Costa. (Org.). *Brasil em desenvolvimento 2013: Estado, planejamento e políticas públicas*. 1ed. Brasília: IPEA, 2013, v. 3, p.859-876.
 12. Garcia, L.P.; **Sant’Anna, A.C.**; Magalhães, L.C.G.; Aurea, A. P. Healthcare expenses of Brazilian families living in metropolitan areas: composition and trends during the period from 1995 to 2009. *Ciência e Saúde Coletiva* (Printed version), v. 18, p. 115-128, 2012. ([LINK](#))

Working Papers

1. Katchova, A. L., **Sant’Anna, A.C.** “Impact of ethanol plant location on corn revenues for U.S. farmers”
2. **Sant’Anna, A.C.**, Katchova, A. L., Cowley, C. “Exploring the relationship between land values and credit availability”
3. **Sant’Anna, A.C.**, Bergtold, J., Caldas, M.M., Granco, G. “Bioenergy feedstock expansion and contract choice: Evidence from Brazil”
4. **Sant’Anna, A.C.**, T. Xia, J.S. Bergtold, M.M. Caldas and G. Granco. “Public policies versus market forces: What drives ethanol expansion in Brazil.”

Work in Progress

- “Land values and debt accumulation: a dynamic model” with Miranda, M. and Katchova, A.L.
 “Agricultural Productivity and Technical Efficiency in Brazil at the State Level: Assessing Determinants of Change” with Bergtold, J. and Espolador H.

Non Peer-reviewed

1. Granco, G., Caldas, M., Featherstone, A., **Sant’Anna, A. C.**, Bergtold, J. Farmers’ acreage responses to the expansion of sugarcane ethanol industry: the case of Goiás and Mato Grosso do Sul, Brazil. In: Li, R. and Monti, A. (eds) *Land Allocation for Biomass Crops: Challenges and Opportunities with Changing Land Use*. Springer. 103-123. 2018 ([LINK](#))
2. Bergtold, J.S.; **Sant’Anna, A.C.**; Miller, N; Ramsey, S.; Fewell, J.E. “Water Scarcity and Conservation along the Biofuel Supply Chain in the United States: From Farm to Refinery”. In: *Competition for Water Resources*. J. Ziolkowska and J. Peterson eds. Elsevier: 2016. ISBN:9780128032374.
3. Garcia, L.P.; Magalhães, L.C.G.; **Sant’Anna, A.C.**; Freitas, L.R.S.; Aurea, A.P. Dimensions of the access to medication in Brazil: profile and inequalities of the spending of the families according to the Family Budget Survey 2002-2003 and 2008-2009. Brasília: IPEA, 2013 (Working Paper of the Instituto de

- Pesquisa Econômica Aplicada- TD1839).
4. **Sant'Anna, A.C.**; Nogueira, J.M. Economic Valuation of Environmental Services: Increasing the Effectiveness of PES Schemes in Developing Countries? *Journal of Agricultural Science and Technology* (USA. Print), v. 2, p. 1048-1057, 2012.
 5. **Sant'Anna, A.C.**; Nogueira, J.M. Economic Valuation of Environmental Services of the National Forests. *Revista de Administração e Negócios da Amazônia*, v. 2, p. 83-108, 2010.
 6. **Sant'Anna, A.C.**; NOGUEIRA, J.M. The valuing of environmental services of National Forests: An anti-deforestation instrument? In: XVI Prize of the Regional Council of Economists of Distrito Federal (CORECON-DF) 2009, Monographs. CORECON-DF.

Outreach

1. Katchova, A.L.; **Sant'Anna, A.C.** “Agricultural Cycles and Implications for the Near Term.” *Economic Review*, Federal Reserve Bank of Kansas City, 2019.
2. **Sant'Anna, A.C.**; Katchova, A. L.; Brown, B. “Net farm income is forecasted to increase in 2019” *CFAES Report* ([LINK](#))
3. **Sant'Anna, A.C.**; Katchova, A. “The Impact of Bank Concentration on Land Values” *Journal of the American Society of Farm Managers and Rural Appraisers* (Accepted)
4. **Sant'Anna, A.C.**; Katchova, A. L.; Brown, B. Net farm income expected to decline again in 2018 after a small rebound last year. *Ohio Ag Manager* Sept. 13th 2018. ([LINK](#))
5. **Sant'Anna, A.C.**; Katchova, A. Ohio Land Value and Cash Rent Outlook. *AEDE Agricultural Outlook*, p. 10-11, Summer 2018. ([LINK](#))
6. McKee, B; **Sant'Anna, A.C.**; Bergtold, J.; Caldas, M.M.; Granco, G. “Trust me! Examining the contractual relationships between sugarcane producers and mills in the Cerrado.” *Journal of Extension and Rural Studies* (REVER). v.6(2):98-117, 2017. ([LINK](#))
7. **Sant'Anna, A.C.**; Granco, G.; Bergtold, J.; Caldas, M.M. The challenges of the sugarcane expansion: how do landowners and producers think and act. (In Portuguese) Brasília: IPEA, 2015 (*Radar Bulletin - Technology, Production and Foreign Trade, Special Edition - Renewable Energy, # 39*) ([LINK](#))
8. Santos, G.; **Sant'Anna, A.C.** Dependency on fertilizers and the effects from its ill use. *Valor Econômico*, 04 Jan. 2013.

Teaching

Instructor:

1. ARE 360 Current Issues in Agriculture (Fall 2019). Class size: 22 students (Undergraduate)
2. Math Review Class (Fall 2016). Kansas State University. Class size: 25 students (Masters and PhD). Overall effectiveness as a teacher 4.1. Increased desire to learn about the subject 3.8. Amount learned in the course 3.8.
3. Decision Tools for Agribusiness and Agricultural Economics (Fall 2015). Kansas State University. Class size: 34 students (freshmen). Overall effectiveness as a teacher 3.8. Increased desire to learn about the subject 3.7. Amount learned in the course 4.0.
4. Planning of Environmental Investments (Spring 2012). University of Brasilia. Class size: 34 students (undergraduate).

Teaching Assistant:

1. Computer Decision Tools for Agribusiness (Spring 2016). Kansas State University. Class size: 34 students (Masters in Agribusiness).
2. Decision Tools for Agribusiness and Agricultural Economics (Spring 2015). Kansas State University. Class size: 25 students (freshmen).
3. Natural Resources and Environmental Economics (Fall 2010). University of Sao Paulo – ESALQ. Two sections. Class size: 30 students (undergraduate).
4. Introduction to Econometrics – Recitations (Spring 2007). University of Brasilia. Class size: 30 students (undergraduates).

Student Advising:

1. Anne Russel Ph.D 2019 – Research Assistant 2019-
2. Kuan-Ming Huang, Ph.D. 2019 – Committee Member 2019-
3. Gabriel Blair (undergraduate) – Committee Member 2015-2017 University of Sao Paulo - ESALQ

Guest Lecture:

1. Contemporary Issues in Global Food and Agricultural System (Fall 2016). Kansas State University. Class size: +/- 100 students. Class title: *Ethanol expansion in the Brazilian Cerrado*.

Grants and Travel Awards

1. **FINATEC – Foundation of Scientific and Technological Enterprises.** (US\$600). “National Forests and Environmental Services: An Economic Valuation.” J.M. Nogueira (PI), A.C. Sant’Anna (Co-PI). Completed.
2. **Travel Grants:** Student Governing Association Travel (SGA) Award for Graduate Students in Agricultural Economics (GSAE), 2017 (\$1,000). Western Agricultural Economics Associations Travel Award, 2016 (\$500). Graduate Student Council Travel Grants, 2014-2016(1,350). XVI Latin-American Summer School in Operative Research Travel Grant, 2012.

Awards and Prizes

1. **Excellence in Review Awards,** Resources, Conservation & Recycling, Elsevier, 2017.
2. **University Distinguished Professors Graduate Student Award,** Kansas State University, 2016 (\$2,500).
3. **Golden Key GRA/GTA of the Year Finalist,** Kansas State University, 2016.
4. **Case Study Competition (1st Place).** American Agricultural Economics Association, 2015 (\$100).
5. **XVI Award for the best Monograph in Economics** (Honorable Mention), Regional Economists' Council of Brasilia, Brazil, 2009.
6. **National Award for Outstanding Performance in Initiation into Scientific Research (3rd Place),** National Council for Scientific and Technological Development, Brazilian Ministry of Science and Technology. 2008 (\$2,000).
7. **Novum Agencies Inside Award (1st Place),** Germany. 2003.

Scholarships and Selections

1. **William L. Richter International Scholarship.** Kansas State University, 2016.
2. **2015 Borlaug Summer Institute** with World Prize Laureate Gebisa Ejeta at The Purdue Center for Global Food Security at Purdue University, West Lafayette, IN. ([LINK](#))
3. **Research Scholarship.** Brazilian Research Institute for Applied Economics (IPEA) & the Research for the National Development Program (PNPD), 2011-2013
4. **Research Transfer Leadership-Program.** University of Münster - Germany, Year of International Cooperation between Brazil and Germany. 2011.
5. **Second Brazilian Workshop of the Game Theory Society in honor of John Nash, on the 60th anniversary of Nash Equilibrium,** with Nobel Laureates: John Nash, Robert Aumann, Roger Myerson and Eric Maskin. 2011
6. **CAPES Masters Scholarship.** Brazilian Coordination of Improvement of Higher Level Education - CAPES, 2010
7. **Teaching Improvement Program (PAE).** Brazilian Coordination of Improvement of Higher Level Education - CAPES, 2010. ([LINK](#))
8. **CNPq Masters Scholarship.** Brazilian National Council for Scientific and Technological Development (CNPq). Brazilian Ministry of Education, 2009
9. **National Program of Scientific Initiation Scholarship.** National Council for Scientific and

Technological Development (CNPq). Brazilian Ministry of Education 2007-2008

Professional and University Service

Brazil Steering Committee, West Virginia University, 2019-

Undergraduate Curriculum Committee, Resource Economics and Management, WVU, 2019-

Search Committee, Assistant Professor in Agricultural Economics, Kansas State University, 2016

Referee Service: Journal reviewer: Resources, Conservation & Recycling (1); Journal of Latin American Geography (1); Revista Cadernos de Economia (1). Abstract Referee for AAEA Meetings (2016, 2018 and 2019). Moderator for the 2016 AAEA Annual Meeting. Poster Referee for the 18th International Symposium of Scientific Initiation at University of São Paulo, ESALQ/USP.

Affiliations

Agricultural and Applied Economics Association. Southern Agricultural Economics Association. NC-1177 Multi-state Research Committee: Agricultural and Rural Finance Markets in Transition

Languages

German (Read: Fluent. Write: Fluent. Speak: Fluent). **Portuguese** (native speaker). **French** (Read: Intermediate. Write: Beginner. Speak: Beginner). **Spanish** (Read: Advanced. Write: Intermediate. Speak: Intermediate).

Computer Skills

Microsoft Office Suite; STATA; NLOGIT; GAMS; R Studio; ArcGIS (Beginner's level)

Additional Training

1. **Kansas State University:** Graduate Teaching Assistant Recognition of Achievement in Professional Development Certificate (2016 and 2017).
2. **University of Sao Paulo – ESALQ/USP:** Teaching Improvement Program (PAE) composed of a pedagogical preparation and supervised teaching internship.
3. **Brazilian National School of Public Health (FIOCRUZ):** Pesticides and their impacts on human health (20 hours) & Environmental chemical contaminants in water supply (20 hours), 2012.
4. **Brazilian Workshop of the Game Theory Society:** Network Game Theory (20 hours) with Matthew O. Jackson.

Extra-Curricular Activities

Leadership: Kansas State University: President (2016) and Vice President (2014) of the Graduate Students in Agricultural Economics. Vice President (2016) of Graduate Students in Agricultural Economics Case Study Team. Chatswood High School (Australia): School Council Member & Student Representative (2000).

Recent Volunteer Work: Columbus: Van Buren Shelter (2019), Taste of OSU (2018), Ronald Mc Donald House (2017). Kansas State University: Usher at McCain Theater (2015-2016). Nursing Home Visiting Ministry (2015).

Presentations and Posters

Invited Presentations:

2019: Graduate Student's Seminar. *Feedstock Production and Contracting: Evidence from Sugarcane Production for Ethanol in Brazil*. Federal University of Vicosa – UFV September 27 th Vicosa, MG, Brazil.

2018: Graduate Student's Seminar. *Exploring the relationship between land values and credit availability*. The Ohio State University, Department of Agricultural, Environmental and Development Economics. Sept 5th Columbus, OH.

2017: Graduate Student's Seminar. *Ethanol and Sugarcane Expansion in the Brazilian Cerrado: Farm, Industry, and Market Analysis*. University of Sao Paulo – ESALQ Campus. June 19 th Piracicaba, SP, Brazil.

Conference Presentations (papers presented by me are indicated as presenter):

2019: AAEA Meetings (poster), *Land values and farm debt accumulation: A dynamic model*, AAEA Meetings (presenter, track session) *Agricultural technical efficiency in Brazil at the state level: Assessing determinants of change*. SAEA Meetings (presenter), *The Impact of Bank Concentration on Land Values*, Birmingham, AL. AARES, *Impact of Ethanol Plant Location on Corn Revenues for U.S. Farmers*, Melbourne, Australia.

2018: AAEA Meeting (presenter and discussant) *Determinants of land value volatility in the Corn Belt* ([LINK](#)). Washington, D.C. 2018 NAC/NC-1177 Joint Meeting (presenter) *Exploring the relationship between land values and credit availability*. Federal Reserve Bank of St. Louis.

2017: SAEA Meetings (presenter), *Does Vertical Integration Increase Efficiency? A Look at Ethanol Plants in the Center-South of Brazil*, Mobile, AL. 55th Conference of the Brazilian Society of Economics, Administration and Rural Sociology, *Contracts negotiated between mills, sugarcane producers and landowners in Goias and Mato Grosso do Sul: a stated choice application*, Santa Maria, RS, Brazil.

2016: AAEA Meeting (presenter) *Analyzing sugarcane production contracts in Brazil: What do the farmers really want?* ([LINK](#)). Kansas Research Forum (presenter) *Foreign Versus National: The Efficiency of Ethanol Plants in Brazil*, Kansas State University.

2015: Kansas Research Forum (presenter) *Ethanol expansion in the Brazil: Analyses of the economic drivers*, Kansas State University. AAEA Meetings (poster) *It is all about location? An analysis of the factors that affect the location decision of sugarcane processing mills in Goias and Mato Grosso do Sul*, San Francisco, CA. The Energy Symposium (poster) *The linkages between sugarcane producers and mills in the Cerrado region*, Manhattan, KS.

2014: AAG Annual Meeting (presenter) *The Economic use of the Cerrado Legal Reserve: A Simulation of the Sustainable Harvest of Pequi*, Tampa, FL. The Energy Symposium (poster) *A welfare analysis of preferential fuel taxes for ethanol in Brazil*, Manhattan, KS.

2012: International Society for Environmental Economics Conference (presenter) *Valuing environmental goods and services: is it a tool for increasing the effectiveness of PES schemes in developing countries?* Rio de Janeiro, RJ. V Congreso de Economía de la Salud de América Latina y el Caribe (poster) *Composition of the private health spending of families living in rural and urban areas of the great regions of Brazil in 2008-2009*, Montevideo, Uruguay.

2011: IX Meeting of the Brazilian Society for Environmental Economics (presenter) *The economic use of the legal reserve in the Cerrado: a simulation of the sustainable extraction of pequi in Ipora*, Brasília, DF. 63rd Annual Meeting of the Brazilian Society for the Scientific Progress (poster) *Economic use of the Legal Reserve in the Cerrado: a case study of the sustainable extraction of pequi*, Goiania, GO.

2010: 48th Conference of the Brazilian Society of Economics, Administration and Rural Sociology (presenter) *The economic value of environmental goods and services: an application in the Brazilian Cerrado*, Campo Grande, Brazil. Young Researchers' Seminar. XI Seminar for Industrial Economics (presenter) *Maximizing the profits of the pequi collectors' cooperative of Japonvar-MG: What is the ideal product mix?*, Araraquara, SP.

2009: 47th Conference of the Brazilian Society of Economics, Administration and Rural Sociology

(presenter) *Economic valuation of environmental services of National Forests*, Porto Alegre, Brazil. 61st Annual Meeting of the Brazilian Society for the Scientific Progress (poster) *National Forests and environmental services: An economic valuation*, Manaus, AM.

2008: Young Researchers' Seminar. IX Seminar for Industrial Economics (presenter) *The economic regulation in Brazil*, Araraquara, SP. XIV Congress for Scientific Initiation at the University of Brasilia and the 5th Congress of Scientific Initiation of DF (poster) *National forests and environmental services: an economic valuation*, Brasilia, DF.

Outreach Presentations

2019: Katchova, A.L., **A.C. Sant'Anna**, and E.C. Davis. *The Ohio State University Farm Income Enhancement Program*. Community Engagement Conference. The Ohio State University, 23-24 Jan.

2018: Katchova, A.L. (with contributions from R. Dinterman and **A.C. Sant'Anna**) *Ohio Farm Financial Conditions and Outlook 2018*. OSU Agricultural Policy and Outlook Conference, 2nd Nov. Katchova, A. and **A.C. Sant'Anna**. *Are We Financially Fit? Understanding Farm Income and Balance Sheet Forecasts*. Ask the Expert, OSU Farm Science Review, 18-19 September 2018, London, OH. (presented twice)

2017: Katchova, A.L. (with contributions from L. Connor, R. Dinterman and **A.C. Sant'Anna**) *Ohio Farm Financial Condition: Farm Income and Assets, Land Values and Rent, and Farm Financial Stress*. OSU Agricultural Policy and Outlook Conference, 9th Nov.

2012: Rio +20 - United Nations Conference on Sustainable Development. IPEA in Rio+20. (Invited presenter) *The economic use of the Legal Reserve in the Cerrado: The case of the Pequi in Goiás and Minas Gerais*, Rio de Janeiro, RJ.

Interviews and Mentions

2019: Mentioned in North Texas e-News “Farm income projections hold a bit of good news”

2018: Mentioned in Matt, R. “Ohio’s farm economy looking grim heading into 2018 harvest” *Ohio’s Country Journal*

2017: Interview with Ani Katchova and FIE Team for “Farm income expected to rise” *AEDE News*. Podcast Interview with Ani Katchova and FIE Team “Is the farm economy repeating the 1980’s”.

2016: Youtube Video with Aleksan Shanoyan for IFAMR Journal “Case study: Ethanol and sugarcane expansion in Brazil: What is fueling the ethanol industry?”

2012: Mentioned in Fioravanti, C. “Beef from the forest” *Pesquisa FAPESP*

2011: Mentioned in Aguiar, A.N. “Economic use of the legal reserve in the *Cerrado*.” *Noticias Esalq-USP*