

# J. WESLEY BURNETT

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*Economics Department*

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## EDUCATION

PhD	University of Georgia, 2011. <i>Thesis: A theoretical and empirical analysis of economic growth and environmental degradation</i>
MA	University of Georgia, 2007.
BA	College of Charleston, 1999.

## CURRENT POSITION AND PROFESSIONAL EXPERIENCE

2014 – Present	Assistant Professor, Economics Department, College of Charleston.
2012 – 2014	Research Associate, Regional Research Institute, West Virginia University.
2011 – 2014	Assistant Professor, Resource Management, West Virginia University.

## BIOGRAPHICAL SKETCH

Dr. Burnett is an assistant professor of microeconomics. His research interests consist of energy economics and policy, environmental economics and policy, natural resource economics and policy, applied econometrics, and regional science.

## AWARDS AND HONORS

2017	Distinguished Faculty Research Award, School of Business, College of Charleston
2013	Ralph E. Powe Jr. Faculty Enhancement Award, Oak Ridge Associated Universities.
2011	Who's Who Among Students in American Universities and Colleges, Who's Who Among Students.

- 2011 Outstanding PhD Paper, University of Georgia, Department of Agricultural and Applied Economics.
- 2011 Outstanding PhD Student, University of Georgia, Department of Agricultural and Applied Economics.
- 2010 Southern Economic Association Invited Graduate Student Award, Southern Economic Association.
- 2010 Outstanding PhD Paper, University of Georgia, Department of Agricultural and Applied Economics.
- 2010 Outstanding PhD Student, University of Georgia, Department of Agricultural and Applied Economics.

**CONTRACTS, GRANTS AND SPONSORED RESEARCH**

- 2015 – 2016 Dynamic Interactions and Spillovers in Criminal Behavior  
Project Period: August 2015-July 2016; \$7,500  
The Center for Public Choice & Market Process, Faculty Research Fellow  
(J. Wesley Burnett, Principal; Jessica Madariaga, Co-investigator)
- 2015 - 2016 Pond Management Approaches and Costs: An Economic State Governmental Agency-of-the-Knowledge Review and Synthesis  
South Carolina Sea Grant Consortium  
Project Period: January 2015-March 2016; \$25,000  
(Christopher A. Mothorpe, Principal; J. Wesley Burnett, Co-Investigator)
- 2013 - 2015 The Technology, Energy, Economy, and Environment (TEEE) Chain: Integrated Modeling for Technology Transition in Energy Rich Regions  
National Science Foundation  
Project Period: August 2013-October 2015; \$335,930  
(Hodjat Ghadimi, Principal; J. Wesley Burnett, Co-Investigator; Randall Jackson, Co-Investigator; Jerald Fletcher, Co-Investigator)
- 2013 - 2015 Social economic impacts of biofuel production in central Appalachia  
US Department of Agriculture  
Project Period: July 2013-August 2015; \$349,952  
(Jingxin Wang, Principal; J. Wesley Burnett, Co-Investigator; Randall Jackson, Co-Investigator; Hodjat Ghadimi, Co-Investigator)
- 2013 - 2014 Dynamic Evaluation of Volatility Transmission between Agricultural Commodities  
US Department of Agriculture  
Project Period: September 2013-September 2014; \$11,445  
(J. Wesley Burnett)

- 2013 - 2014      The Dynamic Effect of Shale Gas Development on Local Communities: Evidence from Property Values  
US Department of Agriculture  
Project Period: September 2013-September 2014; \$19,160  
(J. Wesley Burnett)
- 2013 - 2014      Projecting Surface Coal Mining Footprints in Central Appalachians Over the Next 25 Years  
The Nature Conservancy  
Project Period: September 2013-September 2014; \$96,460  
(Michael Strager, Principal; J. Wesley Burnett, Co-Investigator; Jacqueline Strager, Co-Investigator)
- 2011 - 2014      Energy and Speculation: New Dynamics in Agricultural Commodity Price Volatility  
US Department of Agriculture  
Project Period: September 2011-September 2014; \$18,200  
(J. Wesley Burnett)
- 2013 - 2014      The Dynamic Effect of Shale Gas Development on Local Communities  
Oak Ridge Associated Universities  
Project Period: July 2013-July 2014; \$10,000  
(J. Wesley Burnett)

## PUBLICATIONS

### Peer-Reviewed Articles

- Burnett, J.W. and Madariaga, J.F. (2017). "A Top-Down Economic Efficiency Analysis of U.S. Household Energy Consumption." *The Energy Journal*, forthcoming.
- Xiarchos, I.M. and Burnett, J.W. (2017). Dynamic Volatility Spillovers in Agricultural and Energy Commodities. *Journal of Agricultural and Applied Economics*, forthcoming.
- Burnett, J.W., & Madariaga, J. (2017). The Convergence of U.S. State-level Energy Intensity. *Energy Economics*, 62, 357-370.
- Burnett, J.W., & Zhao, X. (2017). Spatially Explicit Prediction of Wholesale Electricity Prices. *International Regional Science Review*, 40(2), 99-140.
- Kucher, O., Burnett, J.W., & Lacombe, D. J. (2016). Spatial Spillovers in U.S. Wholesale Gasoline Markets. *Papers in Regional Science*, forthcoming.
- Burnett, J.W. (2016). Club Convergence and Clustering of U.S. Energy-Related CO2 Emissions. *Resource and Energy Economics*, 46, 62-84.
- Weber, J., Burnett, J.W., & Xiarchos, I. M. (2016). Broadening Benefits from Natural Resource Extraction: Housing Values and Taxation of Natural Gas Wells as Property. *Journal of Policy Analysis and Management*, 35(3), 587-614.
- Burnett, J.W. (2015). Unconventional Gas and Oil Development: Economic and Environmental Impacts. *Agricultural and Resource Economics Review*, 44(2), 3-8.

- Burnett, J.W., & Zhao, X. (2015). Forecasting U.S. State-Level Carbon Dioxide Emissions. *The Review of Regional Studies*, 44(3), 223-240.
- Zhao, X., Burnett, J.W., & Lacombe, D. J. (2015). Province-level Convergence of China CO2 Emission Intensity: A Spatial Dynamic Panel Data Analysis. *Applied Energy*, 150, 286-295.
- Burnett, J.W., Jackson, R., & Blobaum, R. (2015). The State of Play in Poland's Unconventional Shale and Oil Development. *Development Policy Review*, 33(4), 395-414.
- Zhao, X., & Burnett, J.W. (2014). Forecasting Province-Level CO2 Emissions in China. *Letters in Spatial and Resource Sciences*, 7(3), 171-181.
- Zhao, X., Burnett, J.W., & Fletcher, J. (2014). Spatial Analysis of China Province Level CO2 Emission Intensity. *Renewable and Sustainable Energy Reviews*, 33, 1-10.
- Burnett, J.W., & Lacombe, D. (2013). Accounting for Spatial Autocorrelation in the 2004 Presidential Popular Vote: A Reassessment of the Evidence. *The Review of Regional Studies*, 42(1), 75-89.
- Burnett, J.W., Bergstrom, J., & Wetzstein, M. (2013). Carbon Dioxide Emissions and Economic Growth in the U.S. *Journal of Policy Modeling*, 35(6), 1014-1028.
- Burnett, J.W., Bergstrom, J., & Dorfman, J. (2013). A Spatial Panel Data Approach to Estimating U.S. State-Level Energy Emissions. *Energy Economics*, 40, 396-404.
- Michieka, N., Fletcher, J., & Burnett, J.W. (2012). An Empirical Analysis of the Role of China's Exports on CO2 Emissions. *Applied Energy*, 104, 258-267.

#### **Other Peer-Reviewed Articles**

- Burnett, J.W., & Weber, J. (2014). Is the Natural Gas Revolution all its Fracked Up to Be for Local Economies? *Choices Magazine*, 29(4), 1-5.
- Weber, J., Burnett, J.W., & Xiarchos, I. M. (2014). Unconventional Gas Development and Local Public Finance: Evidence from the Barnett Shale. *US Association for Energy Economics Dialogue*, 22(3).
- Burnett, J.W. (2013). Cooperative Management of Water Resources: An Economic Perspective. *Global Water Forum*.
- Burnett, J.W. (2013). Hydraulic Fracturing and U.S. Water Policy. *Global Water Forum*.
- Burnett, J.W. (2012). Spatial Modeling Techniques in the Analysis of Energy Economics. *US Association for Energy Economics Dialogue*, 20(1).

#### **Technical Reports**

- Strager, M., Burnett, J.W., Strager, J., Maxwell, A. (2014). "Development of a Spatially Explicit Surface Coal Mining Predictive Model," The Natural Conservancy.
- Burnett, J.W. (2015). "Moving to A Free Market Agricultural Policy," Americans for Limited Government Foundation.

## **Working Papers**

- Burnett, J.W., Mothorpe, C., and Jaume, S.C. (2017). "The Economic Impacts of Oklahoma's Earthquake Alley: Unconventional Oil and Gas Development, Induced Seismic Activity, and Housing Prices."
- Harker-Steele, A. and Burnett, J.W. (2017). "The Unintended Consequences of Increasing the Capacity of Variable Generation into the Electricity Grid."
- Burnett, J.W. and Mothorpe, C. (2017). "An Economic Assessment of U.S. Coastal and Estuarine Stormwater Management." Revised and Resubmit.
- Madariaga, J.F. and Burnett, J.W. (2017). "Dynamic Interactions and Spillovers in Criminal Behavior."

## **PRESENTATIONS, LECTURES, PANELS AND PAPERS**

- Burnett, J.W., Madariaga, J.F. (2017, November) "A Top-Down Economic Efficiency Analysis of U.S. Household Energy Consumption." Southern Economics Association, Tampa, FL.
- Burnett, J.W., Mothorpe, C., Jaume, S.C. (2017, November) "Earthquake Alley: Unconventional Oil and Gas Development, Induced Seismic Activity, and Housing Price Impacts." Southern Economics Association, Tampa, FL.
- Burnett, J.W. (2017, August) "Energy Economics 101: A Primer on the Economics and Markets of Energy." Center for Advanced Power Engineering Research, Asheville, NC.
- Burnett, J.W., Mothorpe, C., Jaume, S.C. (2017, July) "Earthquake Alley: Unconventional Oil and Gas Development, Induced Seismic Activity, and Housing Price Impacts." International Energy Workshop, University of Maryland.
- Burnett, J.W., Madariaga, J.F. (2017, April) "A Top-Down Economic Efficiency Analysis of U.S. Household Energy Consumption." Invited Presentation, University of Georgia.
- Burnett, J. W., Madariaga, J. F. (2016, November) "The Convergence of U.S. State-Level Energy Intensity." Southern Economic Association Meeting, Washington, DC.
- Burnett, J. W., Madariaga, J. F. (2016, May) "The Convergence of U.S. State-Level Energy Intensity." South Carolina Applied Microeconomics Day, Greenville, SC.
- Burnett, J. W. (2016, March) "Broadening Benefits from Natural Resource Extraction: Housing Values and Taxation of Natural Gas Wells as Property." Public Choice Society Meeting, Ft. Lauderdale, FL.
- Burnett, J. W. (2015, November) "An Energy Efficiency Analysis of California's Household Energy Use." Southern Economic Association Annual Meeting, New Orleans, LA.
- Burnett, J. W. (2014, November) "Spatially Explicit Prediction of Wholesale Electricity Prices." Regional Science Association International Conference, Atlanta, GA.
- Burnett, J. W. (2014, November) "Shale Gas Development and Housing Values Over a Decade: Evidence from the Barnett Shale." Southern Economic Association, Atlanta, GA.
- Burnett, J. W. (2014, June) "Shale Gas Development and Housing Values Over a Decade: Evidence from the Barnett Shale." International Association of Energy Economics, New York, NY.

- Burnett, J. W. (2013, November) "Spatially Explicit Prediction of Wholesale Electricity Prices." Department of Agricultural and Applied Economics, Athens, GA.
- Burnett, J. W. (2013, November) "Province-level Convergence of China CO2 Emission Intensity: A Spatial Dynamic Panel Data Analysis." North American Resource Science Council, Atlanta, GA.
- Burnett, J. W. (2013, October) "Province-level Convergence of China CO2 Emission Intensity: A Spatial Dynamic Panel Data Analysis." Department of Economics, Hangzhou, China.
- Burnett, J. W. (2013, October) "Forecasting Future Coal Production from Surface Mining in Central Appalachia." Pittsburgh International Coal Conference, Beijing, China.
- Burnett, J. W. (2013, July) "Club Convergence and Clustering of U.S. Energy-Related CO2 Emissions." Agricultural and Applied Economics Association, Washington, DC.
- Burnett, J. W. (2013, July) "Club Convergence and Clustering of U.S. Energy-Related CO2 Emissions." US Association of Energy Economics, Anchorage, AK.
- Burnett, J. W. (2013, July) "Forecasting U.S. State-Level Carbon Dioxide Emissions." VII World Conference of Spatial Econometrics, Washington, DC.
- Burnett, J. W. (2013, June) "Spatially Explicit Prediction of Wholesale Electricity Prices." International Association of Energy Economics, New York, NY.
- Burnett, J. W. (2013, June) "Forecasting China Province-Level CO2 Emissions with a Spatial Panel Data Approach." London Symposium on Climate Change, London, England.
- Burnett, J. W. (2013, June) "Dutch Disease and the Resource Curse: Too Much Wealth Managed Unwisely." XXIV International Conference Drilling Oil-Gas AGH, Krakow, Poland.
- Burnett, J. W. (2013, March) "Club Convergence and Clustering of U.S. Energy-Related CO2 Emissions." Southern Regional Science Association, Washington, DC.
- Burnett, J. W. (2012, July) "Energy and Speculation: New Dynamics in Agricultural Commodity Price Volatility." Agricultural and Applied Economics Association, Seattle, WA.
- Burnett, J. W. (2011, October) "State-Level Energy Consumption, Carbon Dioxide Emissions, and Economic Growth." US Association of Energy Economics, Washington, DC.
- Burnett, J. W. (2011, August) "A Spatiotemporal Fixed Effects Estimation of U.S. State-Level Carbon Dioxide Emissions." Agricultural and Applied Economics Association, Pittsburgh, PA.

## **EDITORIAL AND REVIEW ACTIVITIES**

Dr. Burnett has served as an invited manuscript reviewer or referee for the following peer-reviewed academic journals: The Energy Journal, Energy Economics, Energy Policy, Environmental and Resource Economics, Land Economics, Energies, Journal of Cleaner Production, Papers in Regional Science, Renewable and Sustainable Energy Reviews, the Review of Regional Studies, Growth and Change, Resources, Ecological Indicators, Atlantic Economic Journal, Agricultural and Resource Economics Review, Natural Resources Research, Annals of Regional Science, and Energy Efficiency.

Dr. Burnett is currently a member of the editorial board for the Review of Regional Studies.

## **COMMITTEES AND SERVICE**

### **University-wide Service**

Committee on Student Affairs and Athletics, Committee Member, August 2016 – May 2017.  
General Education Committee, August 2017 – May 2018.  
Faculty Senate, August 2017 – May 2018.  
Sustainability Advocate, Sustainability Literacy, Quality Enhancement Plan, August 2017 – May 2018.

### **Professional and Community Service**

Academic Magnet High School, Charleston, SC, Committee Member, March 2015 – March 2016.  
Northeastern Agricultural and Resource Economics Association, Facilitator, June 2013 – June 2014.  
USC Summer Law Program, Charleston, SC, Invited Faculty Expert, July 2017.

### **School of Business Service**

School of Business Honors Director, August 2017 – May 2018.  
Technology Committee, Committee Member, August 2017 – May 2018.  
Student Development Committee, Committee Member, August 2014 – May 2017.

### **Other**

Admissions Committee, Masters of Environmental Studies, August 2016 – May 2018.

## **FACULTY DEVELOPMENT ACTIVITIES**

Distance Education Readiness Course 2017, College of Charleston, Charleston, SC, January 2017 – March 2017.

Economics Teaching Workshop 2016, University of North Carolina, Wilmington, NC, October 2016.

Faculty Technology Institute, College of Charleston, Charleston, SC, May 2015.

Faculty Spring Break Writers' Retreat, College of Charleston, Charleston, SC, March 2015.

Estimate, Department of Economics, Michigan State University, East Lansing, MI, May 2013 - June 2013.

## **CONSULTING**

### **Academic**

Americans for Limited Government, Charleston, SC, 2015.

### **Other**

Resource Economics Consulting, LLC, Charleston, SC, 2014.

## **TEACHING EXPERIENCE**

### **College of Charleston**

ECON 200, Principles of Microeconomics, FALL 2014 - SPRING 2016  
ECON 317, Microeconomic Analysis, SPRING 2015 - SPRING 2016  
EVSS 601, Economic Theory for Policy Analysis, FALL 2014 - FALL 2015  
EVSS 691, Evaluating the Economic Benefits of Carbon Sequestration in a Managed Forest in Mexico, SPRING 2016  
EVSS 693, Environmental Economics and Government Responses to Market Failure, SPRING 2015

## **GRADUATE STUDENTS MENTORED OR TRAINED**

Committee member: Eric Bowen, Damon Hartley, Marines Henriquez, Brandon Kiger, Austin Morrison, Seanna Kautz, Amanda Harker-Steele

Major professor: Ashley Schnitker (MS completed, December 2016), Nykundi Michieka (PhD completed, August 2013), Xueting Zhao (PhD completed, August 2014), Nirav Ghandi (MS expected completion, Spring 2017), Chelsea Woodruff (MS expected completion, Spring 2017)

## **GENERAL TEACHING INTERESTS**

Microeconomics; environmental, energy, and natural resource economics; econometrics

## **GENERAL RESEARCH INTERESTS**

Energy economics; environmental economics; natural resource economics; applied econometrics; regional science

## **PROFESSIONAL MEMBERSHIPS**

American Economic Association  
Association of Environmental and Resource Economics  
International Association of Energy Economics  
Southern Economic Association