

James George Baldwin

Curriculum Vitae

Senior Lecturer

Boston University Department of Earth and Environment
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Education

- 2003-2009 Ph.D., Boston University Dept. of Geography and Environment
Dissertation: The Spatial and Temporal Evolution of Carbon Emissions
Drivers in the United States.
- 2000-2002 M.A., Boston University, Energy and Environmental Analysis
- 1997-2002 B.A., Boston University, Environmental Analysis and Policy

Professional Experience

- 2020-Present Director of Master's Programs, Department of Earth and Environment,
Boston University
- 2019-Present Senior Lecturer, Department of Earth and Environment, Boston University
- 2008-2019 Visiting Assistant Professor/Lecturer, Department of Earth and
Environment, Boston University
- 2015-2019 Professional Master's Program Adviser
- 2013-2017 Adjunct Assistant Professor, Department of Natural and Applied Sciences,
Bentley University
- 2019-Present Senior Lecturer, Pardee School of Global Studies, Boston University
- 2010-2019 Lecturer, Pardee School of Global Studies, Boston University
- 2005-2008 Instructor, Department of Geography and Environment, Boston University
- 2003-2008 Teaching Fellow, Department of Geography and Environment, Boston
University
- 2000-2002 Research Assistant, Environmental Impact of Water Traffic on Boston
Harbor Islands National Recreation Area, Department of Geography,
Boston University and New England Aquarium,
- 2000-2001 Research Assistant, CLIMB Project (Climate's Long-term Impacts on
Metro Boston), Department of Geography, Boston University.
<http://www.tufts.edu/tie/climb/>

Publications

Sucharita Gopal, Joshua Pitts, Zhongshu Li, Kevin P. Gallagher, James G. Baldwin and William Kring. Fueling Global Energy Finance: The Emergence of China in Global Energy Investment . *Energies* Vol. 11, Issue 10, 2018

Michael Mann, Peter Berck, Max Moritz, Enric Batllori, James Baldwin, Conor Gately, and Dick Cameron. Modeling Residential Development in California from 2000-2050: Integrating Wildfire Risk, Wildland and Agricultural Encroachment. *Land Use Policy*, Vol. 41, 2014

James G. Baldwin and Ian Sue Wing. The Spatiotemporal Evolution of U.S. Carbon Dioxide Emissions: Stylized Facts and Implications for Climate Policy. *The Journal of Regional Science* Vol. 53, Issue 4, October 2013

Clayton Hunter*, James G. Baldwin and Michael L. Mann. The Economic Viability of Solar Photovoltaic Canopies as Urban Climate Change Mitigation: An Analysis of the Potential Utilization of Public Space in Boston Massachusetts. *Energy and Environment Research* Vol. 3, No 1, 2013 (* Undergraduate Student)

Michael Mann, Robert Kaufmann, Dana Bauer, Sucharita Gopal, James Baldwin and Maria Del Carmen Vera-Diaz. Ecosystem Service Value and Agricultural Conversion in the Amazon: Implications for Policy Intervention. *Environmental and Resource Economics* Vol. 53, Issue 2, 2012

James G. Baldwin. Beyond Oil, the View from Hubbert's Peak, Book Review. *Ecological Economics*, Vol. 59, Issue 3, September 2006

Paul Kirshen et al. "Infrastructure Systems, Services and Climate Change: Integrated Impacts and Response Strategies for the Boston Metropolitan Area". Report to the U.S. EPA, August 13, 2004.

Publications in Preparation and Working Papers

James G. Baldwin and Ian Sue Wing. Empirical Projections Point to the Likelihood of a High-Warming Future. For submission to *Environmental Research Letters*

James G. Baldwin, Aaron Korman and Robert Kaufmann. Impacts of Karenia Blooms on Home Values in Florida. For submission to *Ecological Economics*

Research in Progress

Climate resilient housing development options in the United States

HSR as climate adaptation and mitigation in the United States

Presentations and Papers at Conferences and Workshops

Impacts of Global Environmental Change on Military Readiness (with Christopher Gaulin) 2018 Annual Meeting of the Association of American Geographers, New Orleans, LA. April 11, 2018

“A Seat at the Table” : Creating a Conservative Approach to Global Environmental Negotiations (with Stephanie Gagnon) 2018 Annual Meeting of the Association of American Geographers, New Orleans, LA. April 11, 2018

Accuracy Assessment of the Baldwin-Sue Wing Spatiotemporal Carbon Emissions Model 2017 Annual Meeting of the Association of American Geographers, Boston, MA. April 5, 2017

California Wildfire in a Changing Climate and Built Environment (with Michael L. Mann) 2014 Annual Meeting of the Association of American Geographers, Tampa, FL, April 12, 2014

Spatial Patterns in Global CO₂ Emissions Drivers: Divergence Through Time (with Michael L. Mann) 2014 Annual Meeting of the Association of American Geographers, Tampa, FL, April 12, 2014

The Role of Migration as a Determinant of the Spatial Evolution of U.S. Carbon Emissions (with Michael L. Mann) 2013 Annual Meeting of the Association of American Geographers, Los Angeles, CA, April 6, 2013

Assessing the Economic Impacts of Coral Bleaching in Small Island Developing States (with Michael L. Mann and Mallory Nomack), 2012 Annual Meeting of the Association of American Geographers, New York, NY, Feb. 25, 2012

Forecasting Energy Related CO₂ Emissions at Multiple Spatial Scales by Way of an Index Number Decomposition (with Ian Sue Wing), 2011 Annual Meeting of the Association of American Geographers, Seattle WA, April 16, 2011

Rooftop Technologies for Urban Climate Impact Reduction: Cool Roofs and Integrated PV in Boston (with Jared Newell, Clayton Hunter, Jackie Gushue, Nick Baudouin, Steven Loehr and Josh Levine), 2010 Annual Meeting of the Association of American Geographers, Washington DC, April 18, 2010

The Changing Regional Structure of U.S. Carbon Dioxide Emissions, 1963-2002 (with Ian Sue Wing), 56th Annual North American Meeting of the Regional Science Association International, New York NY, Nov. 20, 2008

Understanding the Drivers of U.S. Carbon Dioxide Emissions: A Regional Approach (with Ian Sue Wing), 56th Annual North American Meeting of the Regional Science Association International, New York NY, Nov. 20, 2008

Invited Lectures and Presentations

Mapping Global Patterns of Energy Investments, with Suchi Gopal , Josh Pitts, Kevin Gallagher and Zhongshu Li, Research on Tap : Meet, Greet and :Learn (lecture series) Boston University, February 12, 2018

Taming the Cascade of Uncertainty in Emissions Forecasting, Bentley University, Waltham, MA, December 14, 2016

Projecting Future CO2 Emissions: A Geographic Approach, Worcester State University, Worcester, MA, January 28, 2016

The Middlesex Canal in the Context of the Great 19th Century Energy Transition, Middlesex Canal Association, Billerica, MA, October 25, 2015

Environmental Change, Natural Resources and Economic Inequality, Boston University “Rhett Talks” Lecture Series. *Boston University*, Boston, MA, April 7, 2014

The Evolution of Energy Related Carbon Emissions Drivers in the U.S.; Implications for Climate Policy, *Sonoma State University*, Rohnert Park, CA, March 4, 2013

Energy Climate and Sustainability, *Fairleigh Dickinson University*, Madison, NJ February 15, 2013

The Evolution of Energy Related Carbon Emissions Drivers in the U.S.; Implications for Climate Policy, *William Patterson University*, Wayne, NJ, January 25, 2013

Structural Decomposition as an Emissions Forecasting Tool: Policy Implications of Historic and Geographic Trends, *University of South Florida*, St. Petersburg, FL, December 2, 2012

Geopolitics, the Global Economy and U.S. Energy Policy, *Boston University Student and Alumni Energy Club*, Boston, Ma, October 16, 2012

Energy Politics: Energy Implications of Election 2012, *Boston University Alumni Association Energy Affinity Network*, Boston, MA, September 22, 2012

Use of Structural Decomposition for Emissions Forecasting, *Cornell University*, Ithaca NY, October 26, 2011

The Evolution of Energy Related CO2 Emissions in the US: Projections and Implications for a Sustainable Future, *Massachusetts Institute of Technology*, Cambridge USA, February 24, 2011

The Role of Energy and Emissions in Environmental Planning, *University of New England*, Armidale Australia, March 9, 2011

Understanding the Structure of Carbon Emissions as a Tool for Climate Adaptation Strategy, *University of Queensland*, Brisbane Australia, December 9, 2008

Courses Taught

Introduction to Environmental Science (CAS GE100), Boston University Dept. of Geography and Environment. *Undergraduate*

Economic Geography (CAS GE103), Boston University Dept. of Geography and Environment. *Undergraduate*

Sustainable Energy (CAS GE150), Boston University Dept. of Earth and Environment. *Undergraduate*

Regional Geography (CAS GE201), Boston University Dept. of Earth and Environment. *Undergraduate*

Data, Models, and Analysis in Earth and Environment (CAS EE270), Boston University Dept. of Earth and Environment. *Undergraduate*

International Economics (CAS IR292), Boston University Dept. of Geography and Environment/ Dept. of International Relations. *Undergraduate*

World Commerce (CAS GE300), Boston University Dept. of Geography and Environment. *Undergraduate*

Environmentally Sustainable Development (CAS GE/IR304) Boston University Dept. of Earth and Environment / Dept. of International Relations

Political Geography (CAS GE331), Boston University Dept. of Geography and Environment. *Undergraduate*

Introduction to GIS (CAS GE365), Boston University Dept. of Earth and Environment. *Undergraduate*

Quantitative Environmental Modeling (CAS GE375), Boston University Dept. of Geography and Environment. *Undergraduate*

Directed Study Program: Economic Geography of Sustainable Development (CAS GE492), Boston University Dept. of Geography and Environment. *Undergraduate*

Advanced Economic Geography: Economic Geography of Sustainable Cities (CAS 323/GRS GE723), Boston University Dept. of Geography and Environment. *Undergraduate/Graduate*

U.S. Environmental Policy (CAS GE425/GRS625), Boston University Dept. of Geography and Environment. *Undergraduate /Graduate*

Physical Principles of the Environment (CAS GE510), Boston University Dept. of Geography and Environment. *Graduate*

Multivariate Statistics for Geography and Environmental Studies (CAS GE516), Boston University Dept. of Geography and Environment. *Graduate*

Energy Society and Environment (CAS GE519), Boston University Dept. of Geography and Environment. *Graduate*

Quantitative Analysis for Global Affairs (GRS IR602), Boston University, Pardee School of Global Studies. *Graduate*

Economics for Global Policy (GRS IR603), Boston University, Pardee School of Global Studies. *Graduate*

Regional Energy Modeling (GRS EE712), Boston University Dept. of Earth and Environment. *Graduate*

Energy Alternatives (NASE 344), Bentley University Department of Natural and Applied Sciences. *Undergraduate*

Special Honors

- 2016/17 Nominee, Boston University 2017 *Metcalf Award for Excellence in Teaching*
- 2015 “Outstanding Contribution in Reviewing“ special recognition from *Energy Policy*
- 2014/15 Nominee, Boston University 2015 *Metcalf Award for Excellence in Teaching*
- 2014 Boston University Class of 2014 dedicated alumni gift honoree

Refereeing

The Energy Journal, Energy Policy, PLOS ONE, Climate and Development, Energies, The Year in Ecological Economics, Environment and Planning A, Geoforum, Agriculture, Ecosystems & Environment, Applied Geography, Sustainability, Atmospheric Pollution Research

Grants and Research Awards

- 2017 Boston University Course Development Grant
- 2010-2011 2011 Boston University Alumni College Research Award
- 2010 *Migration, Settlement, and Environmental Pressure in the United States*, Boston University Grants for Undergraduate Teaching and Scholarship

Theses Supervised

- 2022-Present John Leah, MA Theses, Department of Earth and Environment, Boston University (1st reader), *Social License to Operate in Extractive Industry*
- 2021-Present Jonathan Grobstein, MA Thesis, Department of Earth and Environment, Boston University (supervisor), *Climate Resilient Housing Development in the United States*
- 2021-Present Alicia Spaziante, MA Thesis, Department of Earth and Environment, Boston University (supervisor), *Transportation Sustainability in the United States*
- 2021 Austin Lee, Senior Honors Thesis, Pardee School of Global Studies, Boston University (2nd Reader), *South Korean Renewable Energy Policy*
- 2020-2021 Ahmad Ali Azari, MA Thesis, Pardee School of Global Studies, Boston University (1st Reader), *How should rentier economies handle the energy transition – A case study – United Arab Emirates*
- 2019-2021 Aaron Korman, MA Thesis, Department of Earth and Environment, Boston University (supervisor), *Climate Change Impacts on Coastal Communities*
- 2017- 2018 Stephanie Gagnon, MA Thesis, Pardee School of Global Studies, Boston

- University (supervisor), *Developing “Republican Friendly” Climate Policy Tools*. Completed May 2018
- 2017-2019 Christopher Gaulin, MA Thesis, Department of Earth and Environment, Boston University (supervisor), *National Security Implications of Climate Change in the U.S.*. Completed May 2019
- 2017-2018 Josef Benzouai, Kilichand Honors Thesis, Kilichand Honors College, Boston University, Completed May 2018
- 2017 Rachel Eckles, Senior Honors Thesis, Department of Earth and Environment, Boston University (1st Reader), *Greenhouse Gas Life Cycle Analysis of Boston Waste Reduction and Diversion Policies*. Completed May 2017
- 2016-2017 Morgan Peterson, Senior Honors Thesis, International Relations, Boston University (2nd Reader), *Women, Water and Hydroelectric Development in Guatemala*. Completed May 2017
- 2016- 2017 Gabriel Toole, Senior Honors Thesis, International Relations, Boston University (supervisor), *Renewable Power Generation in Sub-Saharan Africa:Kenya Case Study*. Completed May 2017
- 2016 Abigail Silber, Senior Honors Thesis, International Relations, Boston University (2nd Reader), *Poverty as a Disease: A Monster with Two Heads*. Completed April 2016
- 2014-2015 Kevin Smith, M.A. Thesis, International Relations/ Earth and Environment, Boston University (2nd Reader), *Energy Strategy for 2030:Policy Options for Japan*. Completed May 2015
- 2012-2013 Peter O'Connor, Ph.D. Geography and Environment, Boston University (3rd reader), Thesis Title: *Aspects of Energy Transitions: History and Determinants*. Completed September 2013
- 2010-2011 Mallory Nomack, M.A. Energy and Environmental Analysis, Boston University (supervisor) Thesis Title: *Econometric Evaluation of the Economic Impacts of Coral Bleaching Events in Small Island Economies* . Completed May 2011
- 2009 Jieping Li, Ph.D. Geography and Environment, Boston University (3rd reader), Thesis Title: *Application of Latent Variables in Transport Planning Models*. Completed January 2009

Service

- 2021 Visiting Fellow, The College Board, Bala Cynwyd, PA
- 2020-Present Director of Master's Programs, Department of Earth and Environment, Boston University
- 2015-2020 Professional Master’s Program Adviser, Department of Earth and Environment, Boston University
- 2015-2016 Science Content Reviewer for WGBH NOVA television program

- 2015-Present Faculty Advisory Board, *The Pardee Periodical*, the graduate student journal of the Pardee School of Global Studies at Boston University
- 2014-2016 Undergraduate Student Group Faculty Adviser, *Boston University Vegetarian Society*
- 2010-2011 Director, *2011 Boston University Alumni College: "The Sustainable City"*
- 2008-Present Undergraduate Adviser, Boston University Department of Geography and Environment.
- 2008-Present Curriculum development for GE103, GE150, GE201, GE230, GE300, GE/IR304, GE323, GE516, GE519, IR602, IR603, EE712, and GE723, Boston University Department of Geography and Environment and Pardee School of Global Studies
- 2006 Departmental Outreach Committee, Boston University Department of Geography and Environment.
- 2003 Graduate Student Representative, Boston University Dept. of Geography and Environment

Professional Memberships

International Association for Energy Economics, Association of American Geographers, Regional Science Association International, The International Society for Ecological Economics, Association of Environmental and Resource Economists

Languages

Native speaker of English, conversant in French