

CURRICULUM VITAE

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I. PERSONAL

A. Education

- Stanford University, Ph.D. in Engineering Economic Systems & Operations Research, August 2002
- Stanford University, M.S. in Engineering Economic Systems & Operations Research, June 1998
- University of California, Berkeley, B.A. in Applied Mathematics, June 1986

B. Academic and Professional Positions

- Associate Dean for Research, College of Engineering, University of Massachusetts – Amherst, 2018 – Present
- Armstrong Professional Development Professor, College of Engineering, University of Massachusetts – Amherst, 2017 – Present
- Professor, Mechanical and Industrial Engineering, University of Massachusetts – Amherst, 2014 – Present
- Associate Professor, Mechanical and Industrial Engineering, University of Massachusetts – Amherst, 2008 – 2014
- Visiting Associate Professor, Precourt Institute for Energy Efficiency, Stanford University, 2009- 2010
- Assistant Professor, Mechanical and Industrial Engineering, University of Massachusetts – Amherst, 2002 – 2008
- Research Assistant, The Energy Modeling Forum, Stanford University, 1999 – 2002
- Research Assistant, The Center for International Security and Cooperation, 1998
- Summer Faculty Fellow, NASA Jet Propulsion Lab, 2005
- Consultant, Stanford Global Climate and Energy Program, 2003
- Peace Corps Volunteer, Mathematics Teacher, Kanton Secondary School, Tumu, Ghana, 1992 – 1994
- Mathematics Teacher, Los Cerros Middle School, Danville, CA, 1991 – 1992
- Actuarial Consultant, Coopers & Lybrand, San Francisco, CA, 1987 – 1991

C. Honors and Awards

- Energy, Environment, and Natural Resources *Best Publication in Sustainability* 2017
- Armstrong Professional Development Endowed Professorship 2017 - 2020
- College of Engineering 2016 Outstanding Senior Faculty Award
- Higher Education Resource Services (HERS) Institute Participant 2015-2016
- Finalist, 2014 & 2015 C3E Award for Women in Clean Energy
- The 2014 Distinguished Graduate Mentor Award, University of Massachusetts, Amherst
- The 2009 *Campbell Watkins Energy Journal Best Paper Award*

- NSF CAREER Award, 2008
- IEOR Professor of the Year 2008
- IEOR Advisor of the Year, 2005, 2006, 2009, 2015.
- Decision Analysis Student Paper Award, 2nd Place, 2003
- Food Research Institute Fellowship, Stanford, CA, 1995 -- 1998
- Second Year Honors awarded to the most outstanding second-year mathematics student at U.C. Berkeley, 1984.

D. Membership in Academic, Professional, and Scholarly Societies

- Institute of Operations Research and Management Sciences (INFORMS)
- Association of Environmental and Resource Economists (AERE)
- International Association for Energy Economics (IAEE)
- The Decision Analysis Society

II. TEACHING

A. Courses Taught

- MIE 113 Introduction to Mechanical and Industrial Engineering (2010,2011,2012,2013,2014, significantly restructured in 2015, 2016,2017)
- MIE 273 and CEE 260 Probability and Statistics (2008,2009, significantly restructured in 2017)
- MIE 353 Engineering Economy (2004, 2005, 2006)
- MIE 379 Deterministic Operations Research (2002, 2003, 2004, 2005, 2006,2007,2008)
- MIE 492 Senior Seminar (2006,2010, 2011,2014, 2015, 2016,2017)
- MIE 478 Senior Capstone Design (2009,2011, 2012,2015,2016,2017)
- MIE 686 Multi-Criteria Decision Making (2007,2008)
- MIE 754 Economic Decision Making (2002-5, 2011-13,2015-16, 2018)
- MIE 794 Graduate Seminar (2004, 2005)

B. Special Courses

- Faculty at the ETH PhD Academy “Sustainability at the Crossroads: Integrating Technologies, Policies and Strategies for a Sustainable Economy”, outside of Zurich, Switzerland, June 17-22, 2018

C. Statement of contribution to curriculum development

MIE 113 Introduction to Mechanical and Industrial Engineering

- In 2015, we revised this class to make it a Team-Based Learning Class. All content is delivered out of class and the students take part in team-based activities in class. Additionally, it is now theme-based, with a theme of Engineering Sustainability: Energy and the Environment. We use technology, including iClickers, screencasts, and interactive online quizzes..

MIE 754: Economic Decision Making

- This class was completely re-tooled to provide the graduate students with the skills and knowledge they need to apply economic analysis to research topics in IEOR as well as in ME. The class provides a solid grounding in economic analysis from an optimization point of view. It is a very demanding and rigorous class. We cover topics such as the theory of the firm, the theory of the market, monopoly, game theory, oligopoly, decision making under uncertainty, as well as the traditional topic of the time value of money. The students work in teams on a project in which they apply what they learn in a term project.

MIE 686: Multi-Criteria Decision Making

- This class was revised to focus on applying Decision Analysis methods to decisions with multiple criteria. Topics covered include structuring decision problems; probability

concepts; decision trees and value of information; utility theory; non-inferior sets and stochastic dominance; and multi-attribute value and utility functions. The central focus of the class was on applying the concepts to a real decision problem. This class was attended by a wide variety of students, both graduates and undergraduates, from IE, ME, SOM, and ECE.

C. Graduate Students

Ph.D. Dissertations

- Ekundayo Shittu Ph.D. IEOR (2004 –2008) “Environmental Policy and Investment Decisions under Uncertainty.” Recipient of Isenberg Award in 2005, a 1-year fellowship awarded to students who demonstrate academic merit and a commitment to the integration of science, engineering and management. IIASA summer fellow 2007. Current Position: **Asst. Prof. GWU.**
- Rose Zdybel Ph.D. IEOR (2008 – 2013) “R&D Portfolio Analysis Of Low Carbon Energy Technologies To Reduce Climate Change Mitigation Costs.”
- Robert Barron, Ph.D. IEOR (2012 - 2015). “Analysis of The Impact of Technological Change on the Cost of Achieving Climate Change Mitigation Targets.” IIASA summer fellow 2014. Current Position: **Asst. Prof. Western New England University**
- Olaitan Olaleye Ph.D. IEOR (2012 – 2015). “Role of Low Carbon Energy Technologies in Near Term Energy Policy.” Current Position: Phillips
- Alexana Cranmer Ph.D. IEOR (2013 – 2017). “Modeling The Economic And Environmental Performance Of Offshore Wind Energy”. Current Position: **Asst. Prof. Bentley University**
- Mojue Kaikai, Ph.D. ME (2014 – Expected 2019)
- Rodrigo Fernandez Mercado, Ph.D. IEOR (2014 – Expected 2019)
- Destenie Nock, Ph.D. IEOR (2015 – Expected 2019). NSF Graduate Research Fellow.
- Franklyn Kanyako, Ph.D. IEOR (2016 – Expected 2020)

M.S. Thesis

- Kwame Adu-Bonnah, M.S. IEOR (2003-2005) “Optimal climate technology research and development investment under uncertainty”

- Joseph Kalowekamo M.S. Mechanical Eng. (2005 – 2007) “Module cost estimation for Organic Solar Cells”
- Ben Ewing M.S. IEOR (2007 – 2009) “A Decision Support System for Energy Decision Making in the Pioneer Valley”
- Georg Schorpp, M.S. IEOR (2007 – 2009) “Optimal Energy R&D Portfolio Decision Making Under Climate Change Uncertainty”
- Nathanael Miksis IEOR (2006 – 2010) “Agent-based modeling for electricity markets.”
- Sandhya Ragavan M.S. Mechanical Engineering (2007 – 2010) “Characteristics of Electricity Storage for Wind Farm Integration to Grid”
- Yiming Peng Ph.D. IEOR (2008 – 2010) “Technology, Uncertainty, and Climate Change.”
- Peter Rasmussen M.S. IEOR (2009 – 2011) “A cost model for CCS”
- Noubara Adoumbaye M.S. IEOR (2010 – 2012) “Impact of Grid integration on the value of solar R&D”
- Karamvir Singh M.S. IEOR (2010 – 2012) “The expected costs and benefits of stopping wind turbines to avoid bird deaths”
- Yash Sanghai M.S. Mechanical Engineering (2009 – 2012) “Characteristics of fuel cells for wind farm integration on to the grid”
- Olaitan Olaleye M.S. IEOR (2010 – 2013) “Effects Of Different Methods Of Aggregation Of Probabilities On The R&D Investment Portfolio For Optimal Emissions Abatement: An Empirical Evaluation”
- Robert Barron M.S. IEOR (2010 – 2013) “Endogenous Technological Change In The DICE Integrated Assessment Model”
- Jubith S. Charthamkudath M.S. IEOR (2010 – 2012) “Comparing The Present U.S. Electricity Grid To A Smart Grid System”
- An Pham M.S. IEOR (2011 – 2013) [co-advisor with Jenna Marquard] “Climate change and water planning”
- Nazanin Khatami, M.S. IEOR (2016 – 2017). Course only, co-authored paper: “The Levelized Cost of Carbon: A Practical, if Imperfect, Method to Compare CO2 Abatement Projects”
- Claire Cruikshank, MS IEOR (2016 – 2018) “Does the elicitation mode matter? Comparing different methods for eliciting expert judgment”
- Tim Costa, MS ME (2017 – 2019 expected) Wind energy experience curve analysis

Graduate Students Independent Study

- Ashwin Baikadi, Engineering Management MS student, Independent Study Spring 2018. “Sustainability Metrics for Energy Systems.”

- Suprabha Prabhakaran, ECE MS Student, Independent Study Fall 2014. “Study of Electricity Industry Structure, ten Regional Transmission Organizations/Independent System Operators (RTOs/ISOs), and their Major Challenges in North America”
- Ryan Wicks, ECO MS Student, Independent Study Fall 2015. “Water impacts of energy technology portfolios”

D. Undergraduate Students

Independent Studies and Special Projects

- Ami Khalsa (UMass, ECO) Research Assistant 2017-2018, REU summer 2018, Commonwealth College Thesis 2018-2019. The sustainability of hydro power.
- Ivan Norman (UMass, ECE) Research Assistant Spring 2018 and REU Summer 2018. Solving multi-criteria problems.
- Richard Anonyai (UMass, ECE) REU Summer 2018. Sustainability and the New England Natural Gas Pipeline
- Olivia Pfeiffer (UMass, MIE) Commonwealth College Thesis, 2018-2019 and Research Assistant Spring 2018. Investigating the variability of hydro with respect to wind power
- Tristan Koopman (UMass, ECE) Commonwealth College Thesis, 2017-2018. Synergy between pumped-hydro energy storage and wind energy in the new england electricity system.
- Emily Pottier (UMass, MIE) Commonwealth College Thesis, 2016-2017; and Research Assistant Spring 2016. Investigating the sustainability of energy technologies in Mass.
- James Abate (UMass, MIE), Independent Study, 2016, Uncertainty bounds on the impacts of offshore wind on Terns.
- Dan Sheahan (UMass, MIE) Commonwealth College Thesis 2015-2016, estimating the power loss due to neighboring wind farms
- Michael Ameckson (North Carolina A&T) NSF REU 2015. Developed a genetic programming approach to efficiently solve offshore wind farm siting optimization problem.
- Wayne Ferrell (UMass, MIE) STEM Ambassador's Program, 2015. Implemented detailed power predictions into off Shore wind farm siting optimization problem.
- Sarah Mangels (UMass, MIE) NSF REU, 2014, Developed information on cumulative capacity and learning curves for wind energy to support an expert elicitation; and developing and testing a set of questions for expert elicitation experiments.
- Mojue Kaikai, (UMass, ME) NSF REU, 2013, Developing a hands-on curriculum for urban students on renewable energy; **and** B.S. Independent Study, spring 2013, estimating capacity values for offshore wind
- Charlene Nalubega, (UMass, IE) LSAMP REU 2013, Developing a cost estimate for offshore wind turbines.
- Hadley Patten, (UMass, IE) NSF REU, 2012 & 2013, aggregating expert elicitations
- Dana Everndon, (UMass, IE) Commonwealth College Thesis (2011-2012), Learning by doing in energy technologies
- Sandra Jenkins, (UMass, EE) Commonwealth College Thesis (2011-2012), Renewable

Energy Integration.

- Hannah Varner, (Brown University, ME) B.S., NSF REU, 2011, Combining Expert Elicitations across multiple studies
- Tyler Loggins, (UMass, IE) B.S., Paid research funded by ICARUS, an EU-funded project, 2011, Expert judgments on the future of carbon capture
- Isaac Wainstein, (UMass, IE) Commonwealth College Thesis (2010-2011) Optimal Calendar Rebalancing Strategy: The Effects of Asset Growth and Volatility
- Michael Berthaume, (UMass, ME) B.S. Independent Study, 2008, Optimal Investment in Solar R&D
- Tim Olsen, (UMass, ME) B.S. Independent Study, 2007, Energy Consumption at The Hitchcock Center
- Ashley Lewis, B.S. (UMass, IE) Commonwealth College Honors Thesis, (2007 – 2008), Optimal Investment in Solar R&D as a Response to Climate Change
- Jessica Wilbarger, (Smith College, Engineering) B.S. REU “Interactive Energy Projections: A Tool for Sustainable Decision Making in the Pioneer Valley” (2007)
- Marc Santos, (UMass, ME) B.S., REU “Electricity Market Simulations” (2006)
- Julia Sullivan and Cristina Rivera, B.S. Capstone project “An Optimal Driving Strategy for the Supermileage Vehicle” (2003)

III. RESEARCH

A. Grants and Contracts

Principal Investigator

Funded

- Earn and Learn with Springfield High School of Science and Technology, **Massachusetts Clean Energy Center**, \$160,000, 7/1/2017 – 10/1/2018
- Does the elicitation mode matter? Comparing different methods for eliciting expert judgment, **Sloan Foundation**, \$19,971, 7/1/2016 – 6/30/2017
- Developing a metric for the cost of abatement, **Massachusetts DOT**; \$71,054, 01/01/2016 – 03/30/2017
- REU Site: Offshore wind energy: Solving the Engineering, Environmental & Socio-Economic Challenges; **NSF**, \$357,920, 02/01/2015 – 02/01/2018
 - Supplement for Research Experience for Teachers; NSF; \$10,000
- IGERT: Wind Energy Engineering, Environmental Impacts, and Policy, **NSF**, \$3,200,000, 08/15/2011 – 08/15/2018
 - Supplement for Improving Graduate Student Preparedness: Curriculum development for science and policy; NSF; \$34,946, 9/1/2016 – 9/1/2017
 - Supplement for Understanding public priorities, tradeoffs, and development goals following acute storms: Toward resilient and sustainable energy infrastructure; NSF; \$42,256, 03/01/2018 – 07/31/2018
- Choosing a Portfolio of Technology Policies in an Uncertain World, **NSF SciSIP**, \$383,000 (Umass), 07/01/2010 – 6/30/2013
 - REU Supplement for Choosing a Portfolio of Technology Policies in an Uncertain World, NSF, \$8,600, 05/15/2013 – 8/15/2013
- CAREER: Technology R&D, Climate Change, and Uncertainty, **NSF**. \$434,000. 09/01/2008 – 09/01/2013
 - REU Supplement for CAREER: Technology R&D, Climate Change, and Uncertainty, **NSF**, \$5000, 05/15/2014 – 8/15/2014
 - REU Supplement for CAREER: Technology R&D, Climate Change, and Uncertainty, **NSF**, \$5000, 05/15/2013 – 8/15/2013
 - REU Supplement for CAREER: Technology R&D, Climate Change, and Uncertainty, **NSF**, \$6000, 05/15/2012 – 8/15/2012
 - REU Supplement for CAREER: Technology R&D, Climate Change, and Uncertainty, **NSF**, \$6000, 05/15/2011 – 8/15/2011

- Decision Support for the Hitchcock Center Sustainable Building Demonstration Project, University of Massachusetts, Amherst Public Service Endowment Grant, \$14,715, 09/01/2007 – 06/01/2008
- Energy, Land-use, and Water: a framework for incorporating scientific information in sustainable planning. With Rick Taupier, Catherine Miller, and Sarah Dorner. U.S. **Environmental Protection Agency**, \$299,265 (about \$128,000 to my lab), 1/15/2007 – 1/15/2010, PI 2008-2010.
- Climate change R&D portfolio decision-making under environmental, economic, and technological uncertainty. PI, with co-PIs Jeffrey Keisler, Mathias Ruth, Detlof von Winterfeldt, and John Weyant. **Department of Energy**, \$347,000 (about \$145,000 to my lab), 3/1/2006 – 3/1/2008, PI
- Agent-based Modeling of Electricity Markets, **ISO-New England** and University of Massachusetts, Amherst \$27,642, 06/06/2005 – 06/01/2006, PI
- CADETS Technology Analysis, **NASA-JPL**, \$25,555, 09/21/2005 – 3/8/2006, PI
- Climate change policy in the face of uncertainty, Faculty Research Grant, University of Massachusetts, Amherst, \$10,000, 01/01/2003 – 01/01/2004, PI.

Co- Investigator

Funded

- Development of National Offshore Wind Research Agenda, co-PI (with UMass PI Manwell, Lackner, Arwade) **Massachusetts Clean Energy Center**, \$50,000, 9/1/2016 – 8/30/2017
- 2016 Department of Energy Collegiate Wind Competition, co-PI (with PI Lackner; Cowden, Hamin) **US Department of Energy**, \$20,000, 02/01/2015 – 06/01/2016
- Wind Energy Expert Elicitation, Lawrence Berkeley National Laboratory, **US Department of Energy**, Travel grant (PI Ryan Wiser of LBNL), 6/1/2014 – 12/31/2015
- Collaborative Development of Climate Information for the Connecticut River Basin using Shared Vision Forecasting, co-PI (with Brown, Palmer, Marquard), **NOAA**, \$299,833, 09/01/2010 – 9/01/2012
- Subcontractor on ICARUS: Innovation for Climate Change Mitigation: a Study of energy R&D, its Uncertain Effectiveness and Spillovers, **European Research Council**, \$45,000, 1/1/2010 – 12/31/2012

Consulting

- Report on Future Clean Energy Technologies, **OECD**, EU20,000, 09/2014 – 05/2015
- Consultant for ADVANCE: Advanced Model Development and Validation for Improved Analysis of Costs and Impacts of Mitigation Policies, **European Research Council**, EU500 , 4/1/2014 – 5/31/2014

C. Research Infrastructure

- Co-Organizer (with Leon Clarke): R&D Portfolio Analysis Tools and Methodologies, **Department of Energy**, Washington D.C. Dec. 2, 2010
- Co-Organizer (with Valentina Bosetti): First Meeting of Technology Elicitations and Modeling (TEaM) Project, September, 1-2, 2011, **ICCG**, Island of San Giorgio Maggiore, Venice, Italy
- Co-Organizer (with Valentina Bosetti and Laura Diaz Anadon): Second Meeting of TEaM, Project, April, 5-6, 2012, **EMF**, Harvard University, Boston, MA
- Co-Organizer (with Valentina Bosetti): Third Meeting of TEaM Project at Climate Change Impacts and Integrated Assessment, August 1-2, 2012, **EMF**, Snowmass CO.
- Co-coordinator (with Valentina Bosetti): EAERE European Summer School on: Uncertainty, Innovation, and Climate Change, June 30 – July 6 2013, **EAERE**, Venice, Italy.

IV. PUBLICATIONS

A. Submitted Papers

1. Cruikshank, Claire; Erin Baker, Karen Jenni, and Steve , *Comparing in-person and online modes of expert elicitation*, under submission at **PNAS**
2. Cranmer, Zana and Erin Baker, *The Environmental Value of Offshore Wind Energy*, under preparation for **PNAS**
3. Baker, E. and Khatami, N. *The Levelized Cost of Carbon: A Practical, if Imperfect, Method to Compare CO2 Abatement Projects*, Under submission at **Climate Policy**
4. Baker, E., Bosetti V., Salo A., *Finding common ground when experts disagree: Belief dominance over portfolios of alternatives*, Under revision for **European Journal of Operations Research**.
5. Nock, D. and Baker, E. *Sustainable Electric Generation Portfolios: A Multi-Criteria Decision Analysis Framework Applied to the New England Power System*, under revision for **Energy Policy**

B. Refereed Journal Publications

1. Cranmer, Zana, Erin Baker, Juuso Liesiö, Ahti Salo, *A Portfolio Model for Siting Offshore Wind Farms with Economic and Environmental Objectives*, **European Journal of Operations Research**, 267:304-314 (2018)
2. Verdolini, E., Anadon, L.D., Baker, E., Bosetti, V., Aleluia Reis, L., *Future Prospects for Energy Technologies: Insights from Expert Elicitations*, **Review of Environmental Economics and Policy**, 19(2):133-153 (2018)

3. Nock, Destenie, Erin Baker, *The Unintended Consequences of Northern Ireland's Renewable Obligation Credit Policy*, **Electricity Journal**, Volume 30, Issue 7, August–September 2017, Pages 47–54
4. Laura Diaz Anadon,* Erin Baker,* Valentina Bosetti *Integrating uncertainty into public energy R&D decisions*, **Nature Energy**, 2 (2017): 17071, * authors listed alphabetically, equal contribution
5. Cranmer, A., Smetzer, J., Welch, L., Baker, E. *A Markov Model for Planning and Permitting Offshore Wind Energy: A Case Study of Radio-Tracked Terns in the Gulf of Maine, USA*. **Journal of Environmental Management**, Volume 193, 15 May 2017, Pages 400–409
6. Ryan Wiser, Karen Jenni, Joachim Seel, Erin Baker, Maureen Hand, Eric Lantz, Aaron Smith, *Expert elicitation survey on future wind energy costs*, **Nature Energy**, September 2016, page 16135
7. Marshall Burke, Melanie Craxton, Charles D. Kolstad, Chikara Onda, Hunt Alcott, Erin Baker, Richard Carson, Kenneth Gillingham, Joshua Graff-Zivin, W. Michael Hanemann, Geoffrey Heal, Solomon Hsiang, Benjamin Jones, David Kelly, Raymond Kopp, Matthew Kotchen, Robert Mendelsohn, Kyle Meng, Gilbert Metcalf, Juan Moreno-Cruz, Robert Pindyck, Ivan Rudik, James Stock, and Richard Tol. *Opportunities for advances in climate change economics*. **Science**, 352.6283 (2016): 292-293
8. Laura Diaz Anadon,* Erin Baker,* Valentina Bosetti*, Lara Aleluia Reis, *Expert views - and disagreements - about the potential of energy technology R&D*, **Climatic Change** (June 2016), Volume 136, [Issue 3](#), pp 677–691 *First 3 authors listed alphabetically, equal contribution
9. Kaikai, Moijue, Erin Baker, *Engineering for Sustainable Energy Education within Suburban, Urban, and Developing Secondary Schools*, **Journal of Education for Sustainable Development**, 10.1 (2016): 88-100.
10. Gregory F. Nemet, Erin Baker, Bob Barron, Samuel Harms, *Characterizing the effects of policy instruments on the future costs of carbon capture for coal power plants*, **Climatic Change**, (2015) 133:155–168
11. Solak, S. and Baker, E., *Convexity Analysis of the Dynamic Integrated Model of Climate and the Economy (DICE)*, **Environmental Modeling and Assessment**, April 2015, pp1-9
12. Erin Baker, Olaitan Olaleye, Lara Aleluia da Silva Reis, *Decision Frameworks and the investment in R&D*, **Energy Policy**, 80 (2015): 275–285
13. Erin Baker, Valentina Bosetti, Laura Diaz Anadon, Max Henrion, Lara Aleluia Reis, *Future Costs of Key Low-Carbon Energy Technologies: Harmonization and Aggregation of Energy Technology Expert Elicitation Data*, **Energy Policy**, 80 (2015): 219–232
14. Olaitan Olaleye, Erin Baker, *Large scale scenario analysis of future low carbon energy options*, **Energy Economics**, 49 (2015): 203-216
15. Singh, K., Baker, E., Lackner, M., *Curtailing Wind Turbine Operations to Reduce Avian Mortality*, **Renewable Energy Journal**, 78 (2015): 351-356

16. Barron, B., Adoumbaye, N, and Baker, E, *Grid Integration Costs and the Optimal Climate Change R&D Portfolio*, **Sustainable Energy Technologies and Assessments**, Volume 7, Pages 22–29 (2014)
17. Baker, E. and Solak, S., *Management of Energy Technology for Sustainability: How to Fund Energy Technology R&D*, **Production and Operations Management**, Volume 23, Issue 3, pages 348–365, (March 2014)
18. Greg Nemet, Erin Baker, Karen Jenni, *Modeling the future costs of carbon capture using experts' elicited probabilities under policy scenarios*, **Energy**, Volume 56, 1 Pages 218-228 (2013)
19. Erin Baker, Meredith Fowlie, Derek Lemoine, and Stanley S. Reynolds, *The Economics of Solar Electricity*, **Annual Review of Resource Economics**, 5:387-426 (2013)
20. Jenni, K., Baker, E., and Nemet, G, *Expert Elicitations of Energy Penalties for Carbon Capture Technologies*, **International Journal of GHG Control**, 12:136-145 (2013)
21. Baker, E. and Olaleye, O., *Combining Experts: Decomposition and Aggregation Order*, **Risk Analysis**, 33 (6), 1116-1127 (2013)
22. Sundararagavan, S. and Baker, E., *Evaluating Energy Storage Technologies for Wind Power Integration*, **Solar Energy**, Volume 86, Issue 9, Pages 2707-2717 (2012)
23. Baker E., *Option Value and the Diffusion of Fuel Efficient Vehicles*, **The Energy Journal** , Vol. 33, No. 4, p 49-59 (2012)
24. Shrimali, G. and Baker, E. *Optimal Feed in Tariff Schedule*, **IEEE Transactions on Engineering Management**, Vol. 59, No. 2, p 310 – 322 (2012)
25. Baker, E. and Peng, Y., *The value of better information on technology R&D programs in response to climate change*, **Environmental Modeling & Assessment** 17 (1): 107-121 (2012)
26. Baker, E. and Solak, S., *Climate Change and Optimal Energy Technology R&D Policy*, **European Journal of Operations Research**, 213: 442 – 454 (2011)
27. Baker, E. and Keisler, J. *Cellulosic Biofuels: Expert Views on Prospects for Advancement*, **Energy** 36(1) Pages 595-605 (2011)
28. Baker, E., Chon H. and Keisler, J. *Battery Technology for Electric and Hybrid vehicles: Expert views about prospects for advancement*, **Technological Forecasting and Social Change**, 77: 1139-1146 (2010)
29. Shittu, E., and Baker, E. *Optimal Energy R&D Portfolio Investments in Response to a Carbon Tax*. **IEEE Transactions on Engineering Management** 57(4) 547 – 559 (2010)
30. Shittu, E., and Baker, E. *A Control Model of Policy Uncertainty and Energy R&D Investments*, **International Journal of Global Energy Issues** 34(2) 307-327 (2009).
31. Baker, E., Chon, H. and Keisler, J. *Carbon Capture and Storage: Combining Expert Elicitations to Inform Climate Policy*. **Climatic Change** 96 (3) Page 379 (2009)

32. Baker, E., *Optimal Policy under Uncertainty and Learning in Climate Change: A Stochastic Dominance Approach*, **Journal of Public Economic Theory** 11 (5): 721 - 747, (2009)
33. Ewing, B., and Baker, E. *Development of a Green Building Decision Support Tool: A Collaborative Process*. **Decision Analysis** 6 (3): 172 – (2009)
34. Kalowekamo, J. and Baker, E. *Estimating the Cost of Manufacturing for Purely Organic Solar Cells*. **Solar Energy** 83 (8), p.1224-1231, (Aug 2009)
35. Nemet G., and Baker, E. *Demand subsidies versus R&D: Comparing the uncertain impacts of policy on a pre-commercial low-carbon energy technology*. **The Energy Journal** 30(4): 49 - 80 (2009) (Winner of the 2009 Campbell Watkins Energy Journal Best Paper Award)
36. Baker, E., Chon, H. and Keisler, J. *Advanced Solar R&D: Applying Expert Elicitations to Inform Climate Policy*. **Energy Economics** 31:S37-S49 (2009)
37. Baker, E., Clarke, L., and Shittu, E., *Technical Change and the Marginal Cost of Abatement*, **Energy Economics** 30 (2008)
38. Baker, E. and Shittu, E. *Uncertainty and Endogenous Technical Change in Climate Policy Models*, **Energy Economics** 30 (2008).
39. Baker E. and Adu-Bonnah, K., *Investment in Risky R&D Programs in the face of Climate Uncertainty*. **Energy Economics**, 30:465-486 (2008).
40. Baker, E., *Increasing Risk and Increasing Informativeness: Equivalence Theorems*. **Operations Research**, 54:26-36 (2006)
41. Baker, E., Clarke, L., and Weyant, J., *Optimal Technology R&D in the Face of Climate Uncertainty*. **Climatic Change** 75:157 – 180 (2006)
42. Baker E. and E. Shittu, *Profit Maximizing R&D Investment in Response to a Random Carbon Tax*, **Resource and Energy Economics**, 28:105- 192 (2006)
43. Baker, E., *Uncertainty and Learning in a Strategic Environment: Global Climate Change*. **Resource and Energy Economics**, 27:19-40 (2005)

C. Editorials

1. Special issue on defining robust energy R&D portfolios; *Energy Policy, Volume 80, May 2015, Pages 215-218*; Erin Baker, Valentina Bosetti, Laura Diaz Anadon

D. Refereed Conference Publications

1. Kaikai, M., Baker, E. (2014, April). Energy for Education: Bringing Reliable Energy Where It's Needed Most: Schools. The 2014 Northeast Conference of the American Society for Engineering Education (ASEE-NE'14) University of Bridgeport, Bridgeport, CT.
2. Baker, E. Easter, R., Gray A., and Morse, E., *Architecting Space Exploration Campaigns: A Decision-Analytic Approach* IEEE Aerospace Conference 2006, Big Sky, Montana
3. Baker, E., *Institutional Barriers to Technology Diffusion in Rural Africa*, American Agricultural Economics Association General Meeting, Rhode Island, July 27, 2005

E. Book Chapters and Other Papers

1. Bosetti, V. L. Diaz Anadon, E. Baker, L. Aleluia Reis and E. Verdolini (2016), “The Future of Energy Technologies: An Overview of Expert Elicitations”, GGKP Research Committee on Technology and Innovation Working Paper, **OECD**, Paris.
www.greengrowthknowledge.org/sites/default/files/downloads/resource/The_Future_of_Energy_Technologies_An_Overview_of_Expert_Elicitations_1.pdf
2. Baker E., Barron R., Technological change and the marginal cost of abatement, **Encyclopedia of Energy, Natural Resource, and Environmental Economics**, Ed:Jason Shogren, pp 117- 122 (2013)
3. Baker, E., Nemet, G., and Rasmussen, P., Modeling the Costs of Carbon Capture, **Handbook of CO2 in Power Systems**, Qipeng P. Zheng, Steffen Rebennack, Panos M. Pardalos, Niko A.Iliadis, and Mario V. F. Pereira (Eds.) ISBN 978-3-642-27430-5, Springer, April, 2012.
4. Clarke, L. & Baker, E., (2011). *Workshop Report: RD&D Portfolio Analysis Tools and Methodologies*, Joint Global Change Research Institute Report.
5. Kalowekamo, J. and Baker, E. *Potential of Purely Organic Solar Cells to reduce cost of photovoltaics*, **Modern Energy Review** 2 (1): 78-81 (2010)

F. Working Papers

1. Baker, Erin, Chon, Haewon and Keisler, Jeffrey M., Advanced Nuclear Power: Combining Economic Analysis with Expert Elicitations to Inform Climate Policy (August 08, 2008). Available at SSRN: <http://ssrn.com/abstract=1407048> or <http://dx.doi.org/10.2139/ssrn.1407048>
2. Baker, E., Clarke L., Keisler, J., and Shittu, E. *Uncertainty, Technical Change, and Policy Models*, Technical Report 1028, College of Management, University of Massachusetts, Boston.
3. Chon, H., Baker, E. and Keisler, J. *Advanced Nuclear Power: Converting Expert Elicitations into Economic Parameters to Inform Climate Policy*, Available at SSRN: <http://ssrn.com/abstract=1289823>; (2008).
4. Zdybel, R. and Baker, E. *Generation of a Correlated Probability Distribution for End-User Energy Prices*,
5. Ricci, E., Bosetti, V, Baker, E Jenni, K. *From expert elicitations to integrated assessment: future prospects of carbon capture technologies*, FEEM
6. Pham, A., Baker, E., Marquard J., Brown, C., *Water Planning and Climate Change in the Northeast: A Review*

G. Invited Keynotes and Plenary Talks

1. “Offshore Wind: Where is it going, what can we do about it, and why do we care?”, WINDFARMS, Madrid, June 1, 2017
2. “Robust Energy Technology Policy: Finding common ground”, International Energy Workshop, College Park, MD, July 12, 2017

H. Workshop Presentations

1. *Robust Portfolio Decision Analysis*, Integrated Assessment Modeling Workshop, Joint Global Change Research Institute, College Park, Maryland, Dec. 2 2015
2. *Robust Portfolio Decision Analysis*, Frontiers of Climate Economics Workshop, Stanford, CA, October 9, 2015
3. *R&D Decision Frameworks: Integrating elicitation data, IAMs, and decision insights*, Advance Workshop: Uncertainty in climate change modeling and policy, Milan, Italy, May 13, 2014
4. *Energy Technology R&D Portfolio*, Workshop on Pathways To Climate Solutions: Assessing Energy Technology And Policy Innovation, Aspen Energy Institute, Aspen, CO, February 27. 2014
5. *Energy Technology R&D Policy*, Workshop on Modeling Social, Technical and Natural Systems for Policy, MIT, Boston MA, September 27, 2013
6. *Advice on technology elicitation*, Modeling Uncertainty Project, Yale University, New Haven, CO, February 4, 2013
7. *Decision Analysis Framework*, EMF meeting on Climate Change Impacts and Integrated Assessment, Snowmass Co, Aug. 1, 2012
8. *Harmonization and Aggregation of Elicitation Data*, EMF meeting on Climate Change Impacts and Integrated Assessment, Snowmass Co, July 31, 2012
9. *Aggregating Elicitation Data*, 2nd Meeting of the Technology Elicitation and Modeling Project, Harvard, Cambridge, MA, April 5, 2012
10. *Climate Change and Optimal R&D Technology Policy*, Workshop: R&D Portfolio Analysis Tools and Methodologies, Department of Energy, Washington D.C. Dec. 2, 2010
11. *Optimal Climate Change Policy: R&D Investments and Abatement under Uncertainty*, The OR in the Public Interest Workshop, Stanford University, June 16, 2010
12. *Implementing Uncertainty and Learning in Climate Change Policy Analysis*, Workshop on Uncertainty and Learning in Environmental Management, Santa Barbara, CA, November 15, 2009
13. *Climate Change Technology R&D Portfolio under Uncertainty*, The Research Workshop: Climate policy and Long Term Decisions - Investment and R&D, Milan, Italy, June 16, 2009
14. *Technology, R&D, and Climate Change*, EMF 22 Uncertainty Subgroup Meeting, Wesleyan, CN, October 29, 2008
15. *Decision Making Under Uncertainty: Modeling Innovation* (Poster), Uncertainty Workshop, University of Chicago, Illinois, July 21, 2008
16. *Climate Change, Uncertainty, and Technological Change*, Conference on the Economics of Climate Change and Sustainable Development, Sardinia, Italy, Sept. 27, 2007
17. *Uncertainties in Science-Driven Energy Innovations*, Climate Change Impacts and Integrated Assessment Workshop XIII, Snowmass, Colorado, July 23 to August 3, 2007
18. *Uncertainty, Climate Change, and Advanced Solar R&D*, Workshop on Technological Change and Uncertainty in Environmental Economics, Center for European Economic Research (ZEW) Mannheim, Nov. 27/28, 2006

19. *Climate Change, Representation of Technology, and Uncertainty*, Technological Change and the Environment Workshop, Dartmouth College, Hanover, NH, March 26, 2006
20. *Optimal Climate Policy under Uncertainty*, Conference on Adaptive Research on Global Climate Change, Ohio State, Columbus, OH, October 30, 2003

I. Invited Lectures

1. *Robust Portfolio Decision Analysis*, UT Austin, March 24, 2017.
2. *Robust Portfolio Decision Analysis*, Carnegie Mellon University, February 20, 2017.
3. *Energy Technology Policy: the investment in R&D: Applying Science to Science Policy*, North Carolina A&T, Feb. 27, 2015
4. *Decision Frameworks and the investment in R&D: Integrating elicitation data, IAMs, and decision insights*, The Bren School of the Environment UC Santa Barbara, January 12, 2015
5. *Choosing an Energy Technology R&D Portfolio in the face of Climate Change*, at University of Wisconsin, Madison, Nov 8, 2013
6. *Management of Energy Technology for Sustainability: Funding Energy Technology R&D*, MIT, Cambridge, MA, April 11, 2013
7. *Climate Change Energy Technology R&D Policy under Uncertainty*, Northwestern University, Chicago, IL, March 20, 2013
8. *Climate Change Energy Technology R&D Policy under Uncertainty*, Carnegie Mellon University, Pittsburgh, PA, October 24, 2012
9. *Optimal Climate Change Policy: R&D Investments and Abatement under Uncertainty*, RPI, Troy, NY, February 8, 2012
10. *Optimal Climate Change Policy: R&D Investments and Abatement under Uncertainty*, Naval Postgraduate School, Monterey, CA, July 28, 2011
11. *Expert Judgments on Battery Technology*, College of Nanotechnology Science and Engineering, SUNY Albany, Oct. 15, 2010
12. *Implementing Uncertainty and Learning in Climate Change Policy Analysis*, Agricultural & Environmental Economics, U.C. Berkeley, February 3, 2010
13. *Implementing Uncertainty and Learning in Climate Change Policy Analysis*, Economics Department, University of Arizona, Tucson; January 26, 2010
14. *Implementing Uncertainty and Learning in Climate Change Policy Analysis*, Environmental Economics Roundtable, Stanford University, January 21, 2010
15. *Optimal Climate Change Energy Technology R&D Portfolios under Uncertainty*, IEOR, U.C. Berkeley, April 26, 2010
16. *Climate Change Technology R&D Portfolio Analysis under Uncertainty*, The Kennedy School, Harvard University, Cambridge, MA April 9, 2009
17. *Climate Change Technology R&D Portfolio Analysis under Uncertainty*, Tulane Univ. New Orleans, March 21, 2009
18. *Uncertainty, Climate Change, and Technology R&D*, Department of Mechanical Engineering, University of Texas at Austin, Austin, TX, April 15, 2008
19. *Uncertainty, Climate Change, and Technology R&D*, Department of Industrial Engineering, Pittsburgh University, Pittsburgh, PA, March 4, 2008

20. *Uncertainty, Climate Change, and Technology R&D*, Department of Industrial, Welding, and Systems Engineering, The Ohio State University, Columbus, OH, Jan. 17, 2008
21. *Applying Expert Elicitations to Inform Climate Policy*, Energy Resources Group Seminar, U.C. Berkeley, CA, Aug. 13, 2007
22. *Uncertainty, Climate Change, and Advanced Solar R&D*, Davis Environmental Economics Seminar, U. C. Davis, CA, April 24, 2007
23. *Technology, Uncertainty, and Climate Change*, Yale Environmental Economics Seminar, New Haven, CN, March 29, 2006
24. *Optimal Technology R&D in the Face of Climate Uncertainty*, Seminar, Agricultural and Resource Economics, University of Connecticut, Storrs, CN, Oct. 7, 2004
25. *Energy Technology R&D As Greenhouse Insurance*, Seminar, Mechanical Engineering, Tufts University, Boston, MA, September 30, 2004
26. *R&D as Greenhouse Insurance*, Seminar, Resource Economics Department, University of Massachusetts, Amherst, MA, Nov.14 2003

I. Conference Presentations

1. *Finding Common Ground when expert disagree*, World Congress of Environmental and Resource Economists, Gothenburg, Sweden, June 28, 2018
2. *Robust Portfolio Decision Analysis*, INFORMS Houston, October 23, 2017
3. *Robust Portfolio Decision Analysis*, Advances in Decision Analysis, June 21, 2017
4. *Finding common ground when experts disagree: An application to Climate Change R&D Policy*, INFORMS, Nashville, Nov 13 2016
5. *Finding common ground when experts and models disagree: Belief dominance and Climate Change R&D Policy*, EAERE, Zurich, June 21, 2016
6. *Ambiguity Aversion as a policy hazard*, INFORMS, Philadelphia, Nov. 2 2015
7. *Robust Portfolio Decision Analysis*, INFORMS, Philadelphia, Nov. 1 2015
8. *Introduction to the Elicitation and Modeling Project*, INFORMS, San Francisco, CA, Nov. 10 2014
9. *Decision Frameworks and the investment in R&D: Integrating elicitation data, IAMs, and decision insights*, INFORMS, San Francisco, CA, Nov. 10 2014
10. *Decision Frameworks and the investment in R&D: Integrating elicitation data, IAMs, and decision insights*. World Congress of Environmental and Resource Economists, Istanbul, Turkey, June 29, 2014
11. *Grid Integration and R&D policy*, INFORMS General Meeting, Phoenix, Oct 14, 2012
12. *Harmonization and Aggregation of Energy Technology Elicitations*, INFORMS General Meeting, Phoenix, Oct 14, 2012
13. *R&D Portfolio Analysis of Low Carbon Energy Technologies for Climate Change Mitigation*, Presented by Rose Zdybel, INFORMS General Meeting, Phoenix, Oct 14, 2012

14. *Combining Probabilities: Decomposition and Aggregation Order*, INFORMS General Meeting, Charlotte, NC, Nov. 14, 2011
15. *Modeling Economic Interactions in Decision Analysis with Function-Valued Variables*, Presented by Jeffrey Keisler, INFORMS General Meeting, Charlotte, NC, Nov. 14, 2011
16. *Optimal Climate Change Policy: R&D Investments and Abatement under Uncertainty*, INFORMS General Meeting, Charlotte, NC, Nov. 15, 2011
17. *Modeling Returns to Scale in an IAM*, Presented by Robert Barron, INFORMS General Meeting, Charlotte, NC, Nov. 15, 2011
18. *Generating Correlated Probability Distributions for Future Energy Prices*, Presented by Rose Zdybel, INFORMS General Meeting, Charlotte, NC, Nov. 15, 2011
19. *Optimal Climate Change Policy: R&D Investments and Abatement under Uncertainty*, International Energy Workshop, Stanford, CA, July 7, 2011
20. *Optimal Climate Change Policy: R&D Investments and Abatement under Uncertainty*, AERE Summer Conference, Seattle, WA, June 9, 2011
21. *Generation of Correlated Probability Distributions for Future Energy Prices*, Presented by Rose Zdybel, INFORMS North East, Amherst, MA May 6, 2011
22. *The Value of Better Information on technology R&D Projects in response to Climate change*, , INFORMS General Meeting, Austin, TX, Oct. 8, 2010
23. *Optimal Climate Change Policy: R&D Investments and Abatement under Uncertainty*, INFORMS General Meeting, Austin, TX, Oct. 9, 2010
24. *Biofuels and Batteries: Technology, Transportation, and Climate Change*, INFORMS General Meeting, Austin, TX, Oct. 8, 2010
25. *Climate Change and Optimal Technology R&D Policy*, World Congress of Environmental Economists, Montreal, June 27,2010
26. *Climate Change Technology R&D Portfolio under Uncertainty*, INFORMS General Meeting, San Diego, CA, Oct. 13, 2009
27. *Expert Elicitations for Climate Change Technology Policy Analysis*, INFORMS General Meeting, San Diego, CA, Oct. 14, 2009
28. *Demand Subsidies versus R&D: Comparing the Uncertain Impacts of Policy on a Pre-commercial Low-carbon Energy Technology*, INFORMS General Meeting, San Diego, CA, Oct. 12, 2009
29. *Climate Change Technology R&D Portfolio under Uncertainty*, The International Energy Workshop, Venice, Italy, June 18, 2009
30. *Combining Expert Elicitation with Economic Analysis: Carbon Capture and Storage*, INFORMS General Meeting, Washington D.C. Oct 17, 2008
31. *Applying Expert Information to Inform Climate Policy: Advanced Solar R&D*, ASSA General Meeting, IAEE Track, New Orleans, LA, Jan. 5, 2008
32. *Technical Change and the Marginal Cost of Abatement*, ASSA General Meeting, AERE Track, New Orleans, LA, Jan. 5, 2008
33. *Applying Expert Information to Inform Climate Policy: Advanced Solar R&D*, INFORMS General Meeting, Seattle, WA, Nov. 17, 2007

34. *The Value of Technology for Climate Change Mitigation*, INFORMS General Meeting, Seattle, WA, Nov. 19, 2007
35. *Advanced Solar R&D: Using Expert Elicitations to Inform Climate Policy*, International Energy Workshop, Stanford, CA June 26, 2007
36. *Assessing Potential Electricity R&D Projects in the context of climate change*, INFORMS General Meeting, Pittsburg, PA, Nov. 6, 2006
37. *The Value of Non-definitive Information in Pure Science*, INFORMS General Meeting, Pittsburg, PA, Nov. 5, 2006
38. *Profit Maximizing R&D in Response to a Random Carbon Tax*, ASSA General Meeting, Boston, MA, January 8, 2006
39. *An Approach to Climate Change R&D Portfolio Decision Analysis*, INFORMS General Meeting, San Francisco, CA, Nov. 15, 2005
40. *Investment in Risky R&D Programs in the Face of Climate Uncertainty*, INFORMS General Meeting, San Francisco, CA, Nov. 14, 2005
41. *Investment in Risky R&D Programs in the Face of Climate Uncertainty*, Southern Economics Association General Meeting, Washington D.C., Nov. 19, 2005
42. *Profit Maximizing R&D in the Face of Climate Uncertainty*, American Agricultural Economics Association General Meeting, Rhode Island, July 25, 2005
43. *Optimal Technology R&D in the face of multiple uncertainties*, presented by Kwame-Adu Bonnah, INFORMS General Meeting, Denver, CA, October 26, 2004.
44. *The Value of Modeling Uncertainty in Climate Change*, INFORMS General Meeting, Denver, CA, October 26, 2004.
45. *Optimal Technology R&D in the Face of Climate Uncertainty*, American Agricultural Economics Association, Denver, CO, August 2004.
46. *R&D as Greenhouse Insurance*, International Energy Workshop, Paris, France, June 2004.
47. *R&D as Climate Insurance*, INFORMS General Meeting, Atlanta, GA October 21, 2003
48. *R&D as Climate Insurance*, NAREA General Meeting, Portsmouth, NH, June 7, 2003
49. *Global Climate Change: Uncertainty and Learning in a Strategic Environment*, INFORMS General Meeting, San Jose, CA, November 12, 2002
50. *Increasing Risk and Increasing Informativeness*, Microeconomics Theory Seminar, Graduate School of Business, Stanford University, October 2001.
51. *Risk, Institutions, and Technology Adoption in Africa*, Berkeley-Stanford Joint Center on Africa Spring Conference, April 24, 1999.
52. *Controlling Particulate Matter in the Bay Area*, Transportation, Energy, and Environmental Research Roundtable, Stanford University, May 1997.

J. Public Service Presentations

1. *Clean energy and the climate change challenge*, Mass PIRG Clean Energy Action day, November 16, 2016
2. *Finding Common Ground*, STEM Ambassadors Program, UMass, Feb. 2 2016.

3. *Climate Change and Personal Action*, Spirituality and Ecology Class, Newman Center, UMass, March 11, 2015
4. *Negotiation*, Path of Professorship, MIT, November 15, 2014
5. *Climate Change Energy Technology R&D Policy under Uncertainty*, UMass Retired Faculty, UMass, February 13, 2013
6. *Which Institution is right for you*, Path of Professorship, MIT, November 2013
7. *Funding*, Path of Professorship, MIT, November 2010
8. *Climate Change, Technology, and Decision Making under Uncertainty*, Climate Change Forum, State House, Boston, MA, April 3, 2006
9. *Uncertainty, Climate Change, and technology*, MassPIRG Professor Panel, UMass, Amherst, MA, April 23, 2008

VII. SERVICE

A. Department

- Section coordinator for Industrial Engineering 2015-2016
- Member Department Personnel Committee (2003-4, 2006-7, 2010-11, 2012-2013)
- Member Search Committee (IE 2006-7, 2007-8 (chair), 2013-2014 (chair) Energy 2006-7, 2007-8, 2008-9, 2014-2015, 2015-2016, 2016-2017 (chair))
- Member Undergraduate Committee (2005-6, 2007-8)
- Member Graduate Committee (2008-9, 2010-12, 2014-2015, fall 2017)
- Organizer, Department Graduate Graduation 2009, 2011
- Faculty Advisor Alpha Pi Mu (2004-6)
- Editor of MIE Faculty Newsletter (2002-2004)
- Member Public Relations committee (2003-4, 2006-7)

B. College

- Assistant Dean for Research, (2018 - present)
- Member, College Personnel Committee (2014-2017)
- New Student Program Advisor (2003,4,5,6,7,8,9,11, 14, 15, 16)
- Professional Education for Engineering and Applied Science, Advisory Board (2003-5)
- Faculty Advisor for Engineering Management Minor (2003 – present)
- College of Engineering Committee on Diversity and Social Justice (2005-6)
- Presenter, SWE Conference (2007)
- Member Search Committee, Civil & Environmental Engineering (2007-2008; 2010-2011)
- Member Search Committee, Electrical and Computer Engineering (2012-2013)
- Open House (2010, 2011, 2012, 2013,2014,2015)

C. University

- Member, Advisory Committee for School of Public Policy (2014-2015)
- Faculty Senate Council on the Status of Women (2002 – 5)
- Steering Committee for the Climate Change Working Group at UMass (2005 – 6)
- Steering Committee for the Water Resources Research Conference (2006-7)
- Active Member of North East Alliance (2006-8, 2011-2013)
- Member Search Committee for Resource Economics (2005-6)

D. Professional Organizations

- *Associate Editor*, IISE Transactions, 2019 - present
- *Member Editorial Board*, Energy Economics, 2009 – present
- *Member Editorial Board*, Decision Analysis, 2009 – present
- *Review Editor*, IPCC, 2010-2011
- **INFORMS positions:**
 - *Subdivision council member*, 2016
 - *President*, Energy, Natural Resources, and Environment (ENRE) subdivision of INFORMS, 2012 – 2014
 - *President-Elect*, Energy, Natural Resources, and Environment (ENRE) subdivision of INFORMS, 2010 – 2012
 - *Secretary-Treasurer* of the Energy, Natural Resources, and Environment (ENRE) subdivision of INFORMS, 2004 – 2010.
 - *Council Member*: Decision Analysis Society, 2007 – 2010
 - *Cluster Chair*: Decision Analysis Society Cluster at the 2007 INFORMS general meeting in Seattle; and at 2008 INFORMS general meeting in Washington D.C.
 - *Co-Chair*: Decision Analysis Society Student Paper Contest, 2006, 2009, 2010
 - *Chair*: Decision Analysis Best Publication Award, 2018
 - *Member*: Decision Analysis Best Publication Award, 2017
 - *Co-Chair*: ENRE Student paper contest 2006, 2007, 2008
- *Advisory Board Member*, Consortium on Atlantic Regional Assessment
- *Session Chair*: INFORMS 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2015; NAREA 2003, AAEA 2005. WCERE 2010.
- *Reviewer*, *Operations Research* 8th ed. by Hillier and Lieberman
- *Reviewer*, National Science Foundation (2003, 2006, 2006, 2015, ad-hoc, Site visits 2012, 2017)
- *Presenter*, Panel on Women in Engineering, Smith College (2007); Pathway to the Professorate, MIT (2010, 2012)

Reviewed papers for:

- Journal of Environmental Economics and Management,
- Journal of Public Economic Theory
- Journal of Public Economics
- Resource and Energy Economics,

- Energy Journal,
- Energy Economics,
- Management Science,
- Operations Research,
- Energy Policy,
- IIE
- Energy and Resource Economics
- Wind Energy
- IEEE Engineering Management
- Decision Analysis
- Solar Energy