

DAVID M. HART
Professor; Director, Center for Science, Technology, Innovation Policy
Schar School of Policy and Government
George Mason University

Founders Hall, Room 609
Mail code: MS 3B1
3351 Fairfax Drive
Arlington VA 22201
schar.gmu.edu

Phone (office): 703-993-2279
Phone (cell): 202-276-4733
Fax (office): 703-993-8215
Email: dhart@gmu.edu
Web: davidhart.gmu.edu

EDUCATION

Ph.D., Department of Political Science, M.I.T., 1995.

B.A. with University Honors, Science in Society Program, Wesleyan University, 1983.

ACADEMIC POSITIONS

Professor, School of Public Policy/School of Policy, Government, and International Affairs/Schar School of Policy and Government, George Mason University, 2010-present.

Associate Professor, School of Public Policy, George Mason University, 2004-2010.

Associate Professor, Kennedy School of Government, Harvard University, 1998-2004.

Assistant Professor, Kennedy School of Government, Harvard University, 1994-1998.

ACADEMIC ADMINISTRATION AND GOVERNMENT SERVICE

Senior Associate Dean, School of Public Policy/School of Policy, Government, and International Affairs; George Mason University, 2013-2015.

Assistant Director for Innovation Policy, Office of Science and Technology Policy, Executive Office of the President, 2011-2012.

SELECTED CURRENT AFFILIATIONS

Senior Fellow, Information Technology and Innovation Foundation

Co-chair, Innovation Policy Forum, National Academies of Science, Engineering, and Medicine

RESEARCH AND WRITING

A. Books.

Unlocking Energy Innovation (with Richard K. Lester), (MIT Press, 2012). [Honorable Mention, 2011 American Publishers Award for Professional and Scholarly Excellence (PROSE Award) in the Business, Finance & Management category.]

The Emergence of Entrepreneurship Policy: Governance, Start-Ups, and Growth in the U.S. Knowledge Economy (edited volume) (Cambridge University Press, 2003).

Forged Consensus: Science, Technology, and Economic Policy in the United States, 1921-1953 (Princeton University Press, 1998). [Excerpted in Albert H. Teich, et al., eds., *AAAS Science and Technology Policy Yearbook 1999* (American Association for the Advancement of Science, 1999), 293-304.]

B. Peer Reviewed Articles

“Beyond the Technology Pork Barrel? An Assessment of the Obama Administration's Energy Demonstration Projects,” *Energy Policy* 119:367-376 (2018).

“An Agent, Not a Mole: Assessing the White House Office of Science and Technology Policy,” *Science and Public Policy* 41:411-418 (2014).

“Founder Nativity, Founding Team Formation, and Firm Performance in the U.S. High-Tech Sector,” *International Entrepreneurship and Management Journal* 10:1-22 (2014).

“High-Technology Immigrant Entrepreneurship in the U.S.” (with Zoltan J. Acs), *Economic Development Quarterly* 25:116-129 (2011).

“Making, Breaking, and (Partially) Remaking Markets: State Regulation and Photovoltaic Electricity in New Jersey,” *Energy Policy* 38:6662-6673 (2010).

“International Cooperation To Manage High-Skill Migration: The Case of U.S.-India Relations” (with Ted Davis), *Review of Policy Research* 27:509-526 (2010).

“Accounting for Change in National Systems of Innovation,” *Research Policy* 38:647-654 (2009).

“The Politics of “Entrepreneurial” Economic Development Policy in the U.S. States,” *Review of Policy Research* 25:149-168 (2008).

“Red, White, and ‘Big Blue’: IBM and the Business-Government Interface in the U.S., 1956-2000,” *Enterprise and Society* 8:1-34 (2007).

“Understanding Immigration in a National Systems of Innovation Framework,” *Science and Public Policy* 34:45-53 (2007).

- "Managing the Global Talent Pool: Sovereignty, Treaty, and Intergovernmental Networks," *Technology in Society* 28:421-434 (2006).
- "The Political Development of William C. Norris and Control Data Corporation, 1957-1986," *Enterprise & Society* 6:197-223 (2005).
- "Business Is Not an Interest Group (And, By the Way, There's No Such Thing as 'Business'):
On Companies in American National Politics," *Annual Review of Political Science* 7:47-67 (2004).
- "Political Representation Among Dominant Firms: Revisiting the Olsonian Hypothesis," *Business and Politics* 5:261-286 (2003).
- "Private Technological Capabilities as Products of National Innovation Systems: Four Ways of Looking at the State," *Science and Public Policy* 29:181-188 (2002).
- "Why Do Some Firms Give? Why Do Some Firms Give a Lot? High-Tech PACs, 1978-1996," *Journal of Politics* 63:1230-1249 (2001).
- "Antitrust and Technological Innovation in the U.S.: Ideas, Institutions, Decisions, and Outcomes, 1890-2000," *Research Policy* 30:923-936 (2001).
- "IBM in American Politics, 1970-1999," *Business and Economic History* 28(2):49-60 (1999).
- "Herbert Hoover's Last Laugh: The Enduring Significance of the 'Associative State' in the United States," *Journal of Policy History* 10:419-444 (1998).
- "Scientific Elites and the Making of U.S. Policy for Climate Change Research, 1957-1974," *Social Studies of Science* 23:643-680 (1993) (with David Victor).

C. Selected Other Publications (Book Chapters, Non-Academic Articles, Reports, etc.)

- "The Need for Continued Innovation in Solar, Wind, and Energy Storage," (with John Dabiri and Varun Sivaram) *Joule* forthcoming.
- "When Does Environmental Regulation Stimulate Technological Innovation?" Information Technology and Innovation Foundation, July 23, 2018.
- "Manufacturing USA at DOE: Supporting Energy Innovation" (with Peter L. Singer), Information Technology and Innovation Foundation, May 16, 2018.
- "Federal Energy RD&D: Building on Momentum in Fiscal 2019" (with Colin Cunliff), Information Technology and Innovation Foundation, April 23, 2018.
- "Energy Storage for the Grid: Policy Options for Sustaining Innovation" MIT Energy Initiative working paper (with William B. Bonvillian and Nathaniel Austin), April 2018.

- “ARPA-E: Versatile Catalyst for U.S. Energy Innovation,” (with Michael Kearney), Information Technology and Innovation Foundation, November 15, 2017.
- “Across the ‘Second Valley of Death’: Designing Successful Energy Demonstration Projects,” Information Technology and Innovation Foundation, July 26, 2017.
- “Bad Blueprint: Why Trump Should Ignore the Heritage Plan to Gut Federal Investment” (with Stephen Ezell and Robert D. Atkinson), Information Technology and Innovation Foundation, February 27, 2017.
- “Clean Energy Innovation: Priorities for the Trump Administration and the 115th Congress,” (with Varun Sivaram, Teryn Norris, and Colin McCormick), Information Technology and Innovation Foundation, December 13, 2016.
- “Rescuing the Low-Carbon Energy Transition from Magical Thinking,” Information Technology and Innovation Foundation, October 27, 2016.
- “America’s Advanced Industries: New Trends,” (with Mark Muro and Sid Kulkarni), Brookings Institution, Metropolitan Policy Program, August 4, 2016.
- “Deployment of Grid-Scale Batteries in the United States,” prepared for DOE EPSA-50, June 2016.
- “Deployment of Solar Photovoltaic Generation Capacity in the United States,” prepared for DOE EPSA-50, June 2016.
- “Enhancing the Usefulness of Science of Science and Innovation Policy (SciSIP) Research,” (with Jeffrey Alexander and Christopher T. Hill), prepared for National Science Foundation SciSIP program, April 2016.
- “The Demography of U.S. Innovation” (with Adams Nager, Stephen Ezell, and Robert D. Atkinson), Information Technology and Innovation Foundation, February 2016.
- “Closing the Energy-Demonstration Gap” (with Richard K. Lester), *Issues in Science and Technology*, Winter 2015, 48-54.
- “Why America Needs a National Network for Manufacturing Innovation” (with Robert D. Atkinson and Stephen Ezell), Information Technology and Innovation Foundation, December 2012.
- “The Future of Manufacturing – The United States Stirs,” *Innovations*, Summer 2012, 25-34.
- “Framework Conditions for High-Potential Entrepreneurship: A Theoretical Structure and Its Implications,” in Martin Andersson, *et al.*, eds., *Innovation and Growth* (Oxford University Press, 2012), 317-332.

- “Making, Breaking, and Remaking Markets: State Regulation, Entrepreneurship, and Photovoltaic Electricity in New Jersey,” in Rolf Wustenhagen and Robert Wuebker, eds., *Handbook of Research on Energy Entrepreneurship* (Edward Elgar, 2011), 305-325.
- “The Social Context for High-Potential Entrepreneurship in the U.S.: An Historical-Institutional Perspective,” in Chikako Usui, ed., *Comparative Entrepreneurship Initiatives* (Palgrave Macmillan, 2011).
- “The Northern Virginia Clean Energy Economy: A Preliminary Inventory,” George Mason University, School of Public Policy, Center for Science and Technology Policy, May 2011.
- “Immigration and High-Impact, High-Tech Entrepreneurship,” (with Zoltan J. Acs), Brookings Institution, February 2011.
- “Talent for a Knowledge- Based and Innovation-Oriented Economy: Hong Kong’s Challenges and Opportunities” (with Fangmeng Tian), in Douglas B. Fuller, ed., *Innovation Policy and the Limits of Laissez-Faire: Hong Kong’s Policy in Comparative Perspective* (Palgrave Macmillan, 2010), 21-38.
- “Introduction to the Special Issue,” *Review of Policy Research* 27:387-388 (2010).
- “Political Theory of the Firm,” in David Coen and Graham Wilson, eds. *Oxford Handbook of Business and Government* (Oxford University Press, 2010), 173-190.
- “Governing the Global Knowledge Economy: Mind the Gap!,” *Global Studies Review*, Summer 2010.
- “High-Technology Immigrant Entrepreneurship in the U.S.” Office of Advocacy, U.S. Small Business Administration. July, 2009.
- “Brain Gain,” *Princeton Encyclopedia of the World Economy* (Princeton University Press, 2008).
- “U.S. Politics, Economy, and Technology, *Blackwell Companion to the Philosophy of Technology* (Blackwell, 2007).
- “Governing the Global Knowledge Economy,” *FLAD Newsletter*, December 2006, 14-15.
- “Global Flows of Talent: Benchmarking the U.S.,” Information Technology and Innovation Foundation policy brief, November 17, 2006.
- “From Brain Drain to Mutual Gain: New Opportunities to Share the Benefits of High-Skill Migration,” *Issues in Science and Technology*, Fall, 2006, 53-62.
- “Political Economy of Science and Technology,” *Encyclopedia of Science, Technology, and Ethics* (Macmillan, 2005).

- “Bush-Kerry: More of the Change?” *The Scientist*, October 25, 2004.
- “Corporate Technological Capabilities and the State: A Dynamic Historical Interaction,” in Kenneth Lipartito and David B. Sicilia, eds., *Constructing Corporate America: Historical Perspectives on Big Business, Society, and Politics* (Oxford University Press, 2004).
- “Entrepreneurship Policy: What It Is and Where It Came From,” in David M. Hart, ed., *The Emergence of Entrepreneurship Policy* (Cambridge University Press, 2003).
- “Knowledge, Power, and Entrepreneurs: A First Pass at the Politics of Entrepreneurship Policy,” in David M. Hart, ed., *The Emergence of Entrepreneurship Policy* (Cambridge University Press, 2003).
- "High-Tech Learns to Play the Washington Game, or the Political Education of Bill Gates and Other Nerds," in Allan J. Cigler and Burdett Loomis, eds., *Interest Group Politics*, 6th ed. (CQ Press, 2002), 293-312.
- “New Economy, Old Politics: The Evolving Role of the High-Tech Industry in U.S. Politics,” in John D. Donahue and Joseph S. Nye, Jr., eds., *Governance in a World of Bigger, Better Markets* (Brookings Institution Press, 2001), 235-265.
- "Government Organization: Implications for Science and Technology Policy," in John de la Mothe, ed., *Science, Technology, and Governance* (Pinter, 2001).
- “Research, Innovation, and Politics,” *Nature* 407:561-562 (5 October 2000).
- “Technology Policy in the First Clinton Administration,” in *Triumphs and Tragedies of the Modern Presidency: Seventy-Six Case Studies in Presidential Leadership* (Washington: Center for the Study of the Presidency, 2000).
- “Commentario: Ciencia – La Frontiera Sin Fin,” *Redes* 7(14):143-146 (1999).
- “Antitrust and Technological Innovation,” *Issues in Science and Technology*, Winter, 1998-99, 75-82.
- “U.S. Technology Policy: New Tools for New Times,” *NIRA Review*, Summer, 1998, 3-6.
- "Managing Technology Policy at the White House," in Lewis M. Branscomb and James H. Keller, eds., *Investing in Innovation* (MIT Press, 1998), 438-461.
- "Investing in Innovation," Competitiveness Policy Council, April 24, 1997 (with Lewis Branscomb, Richard Florida, James Keller, and Darin Boville).
- "Facilitating Technological Change in Developing Country Energy Systems: Lessons from Development Experience," in Henry Lee, ed., *Shaping National Responses to Climate Change: A Post-Rio Guide* (Island Press, 1995) (with Vicki Norberg-Bohm), 261-288.

Guest editor, special issue on "Science, Technology, and Individual Responsibility," *Technology in Society*, volume 8, number 4 (1986).

D. Unpublished working papers.

"Immigrant Entrepreneurship and Internationalization and Globalization of Successful U.S. High-Tech Start-Ups." GMU School of Public Policy Research Paper No. 2011-15. April 2011.

"Alignment and Misalignment of Technology Push and Regulatory Pull: Federal RD&D Support for SO₂ and NO_x Emissions Control Technology for Coal-Fired Power Plants, 1970-2000" (with Kadri Kallas). MIT Industrial Performance Center Working Paper 10-002. April 2010.

"Don't Worry About the Government? The LEED-NC 'Green Building' Rating System and Energy Efficiency in U.S. Commercial Buildings." MIT Industrial Performance Center Energy Innovation Project Working Paper 09-001. March 2009.

"Governing the Global Knowledge Economy" (with Dieter Ernst). Atlanta Conference on Science and Technology Policy, October, 2007; IDEFF Lisbon Conference, June 2008.

"Managing Complexity Within Complexity: IBM and the U.S.-Japan Semiconductor Trade Arrangement." Unpublished case study. 2002.

E. Book reviews.

Martin Junginger, Wilfried van Stark, and Andre Faaij, eds. *Technological Learning in the Energy Sector*, in *Science and Public Policy* 40:275-276 (2013).

John Sibley Butler, Alfonso Morales, and David L. Torres, eds., *An American Story: Mexican American Entrepreneurship and Wealth Creation*, in *Journal of Planning Education and Research*, 31:223-224 (2011).

Jagdish Bhagwati and Alan S. Blinder, *Offshoring of American Jobs: What Response from U.S. Economic Policy?* in *Issues in Science and Technology*, Spring 2010, 91-93.

Goran Marklund, Nicholas S. Vonortas, and Charles W. Wessner, eds., *The Innovation Imperative* in *Papers in Regional Science*, 89:881-882 (2010).

Sumon Gupta and Tope Omoniyi, eds. *The Cultures of Economic Migration: International Perspectives* in *Journal of International Migration and Integration* 9:429-430 (2008).

Alan P. Rudy et al., *Universities in the Age of Corporate Science*, in *Enterprise and Society* 9:400-402 (2008).

- David Nye, *Technology Matters* in *American Scientist*, November-December 2006.
- Frank Dobbin, ed., *The New Economic Sociology* in *Enterprise & Society* 6(3):495-497 (2005).
- Nelly Oudshorn, *The Male Pill* in *Step Forward*, Fall, 2005.
- Johann-Peter Murmann, *Knowledge and Competitive Advantage* in *Step Forward*, Fall, 2004.
- Louis Galambos and Eric John Abrahamson, *Anytime Anywhere: Entrepreneurship and the Creation of a Wireless World* in *American Historical Review*, 108:1115-1116 (2003).
- Guy Stever, *In War and Peace: My Life in Science and Technology* in *Chemical and Engineering News*, March 24, 2003, 37-38.
- Daniel S. Greenberg, *Science, Politics, and Money: Political Success and Ethical Erosion* in *Issues in Science and Technology*, Spring, 2002, 89-93.
- Alfred D. Chandler, *Inventing the Electronic Century: The Epic Story of the Computer and Consumer Electronics Industries* in *American Scientist*, January-February, 2002, 92-93.
- James D. Savage, *Funding Science in America: Congress, Universities, and the Politics of the Academic Pork Barrel* in *American Political Science Review* 94:465 (2000).
- William E. Leuchtenburg, *The FDR Years: On Roosevelt and His Legacy* in *Journal of Policy History* 11:94-96 (1999).
- David Plotke, *Building a Democratic Political Order: Reshaping American Liberalism in the 1930s and 1940s* in *Clio* (newsletter of APSA Politics and History Section), vol. 7, no. 1 (Fall/Winter, 1996), 23.
- Kim McQuaid, *Uneasy Partners: Big Business in American Politics, 1945-1990* in *Business History Review* 69:589-590 (1995).
- Alan Brinkley, *The End of Reform: New Deal Liberalism in Recession and War* (New York: Knopf, 1995) in *Clio*, vol. 5, no. 2 (Spring/Summer, 1995), 10.

F. Selected op-eds

- “Fuel Economy Freeze Will Leave U.S. Auto Industry in the Dust,” *Detroit Free Press*, August 10, 2018.
- “Accelerating Energy Innovation with DOE Lab Vouchers for Business” (with Stephen Ezell), *Crain’s Cleveland Business*, July 2, 2018.
- “DOE Research, Development, and Demonstration Funding: Keep on Growin’,” (with Colin Cunliff) *Utility Dive*, April 13, 2018.

“To Build a Battery Industry, New York Needs Help from Washington,” *Syracuse.com*, February 6, 2018.

“A Department of Energy Foundation: An Idea Whose Time Has Come” (with Stephen Ezell), *The Hill*, December 19, 2017

“From NIMBY to PIMBY on Wind Farms,” *Lincoln (NE) Journal Star*, October 25, 2017.

“Energy Dominance Is Un-American,” *Morning Consult*, July 6, 2017.

“We Can Cut Carbon Emissions, Trump or No Trump,” *Richmond Times Dispatch*, May 26, 2017.

“Alternative Energy Is Now Mainstream,” *Washington Examiner* (April 24, 2017).

“Why Secretary Perry’s Flip-Flop on Agency He Now Leads Is a Good Thing,” *The Hill*, March 2, 2017.

“It’s Time for America’s Own Paris Agreement,” *Austin American-Statesman*, March 1, 2017)

“Focus, Reform, and Invest: An Energy Innovation Agenda for the Trump Administration and the 115th Congress,” *Morning Consult*, December 13, 2016.

“Carbon Tariff Trade War or Innovation Race?,” *Europe’s World*, December 12, 2016.

“Clean Energy Innovation: A Way to Crack America’s Frozen Climate Debate?,” *Morning Consult*, October 27, 2016

“Advanced Industries: A New Mental Model for a New Economy,” *Industry Week*, August 15, 2016.

“Trump’s Plan for Manufacturing: Extreme, Unbalanced,” *St. Louis Post-Dispatch*, July 14, 2016.

G. Selected presentations

“Energy Storage for the Grid: Policy Options for Sustaining Innovation,” Industry Studies Association, Seattle WA, May 31, 2018.

Fireside chat interview of Georgia Tech president Bud Peterson, ARPA-E summit, Washington, DC, March 13, 2018.

“Environmental Regulation and Technological Innovation,” American Association for the Advancement of Science Annual Meeting, Austin, Texas, February 16, 2018.

- “The Role of U.S. States and Regions in Clean Energy Innovation, Mowat Centre, University of Toronto, “Confederation of Tomorrow 2.0” conference, December 11, 2017.
- “Securing Advanced Manufacturing in the United States: The Role of Manufacturing USA,” National Intelligence Science and Technology Committee (NISTC), October 19, 2017.
- “The Role of the Federal Government in Clean Energy Innovation,” Global America Business Institute/American Council on Renewable Energy, Washington, DC, July 20, 2017.
- “The Future of the Paris Agreement and Global Climate Change Cooperation Without U.S. Leadership,” Brookings Institution, June 6, 2017
- “Rescuing the Low-Carbon Energy Transition from Magical Thinking,” Bipartisan Policy Council, Washington, D.C., December 8, 2016; Texas Environmental Law Journal Annual Symposium, Austin, TX, March 24, 2017.
- “Science and Technology Policy for an Aging Society,” AAAS Annual Meeting, Boston, MA, February 20, 2017.
- “Beyond the Headlines: Science, Technology, and Innovation Policy and the 2016 U.S. Elections,” University of Manchester (UK), June 22, 2016.
- “Enhancing the Usefulness of Science of Science and Innovation Policy (SciSIP) Research,” Executive Office of the President, June 15, 2016.
- “Collaborative Regional Strategies to Accelerate America’s Advanced Industries,” Industry Studies Conference, Minneapolis, MN, May 25, 2016.
- “Understanding Science, Technology, and Innovation Policy in the U.S.,” SRI International Poland project, Arlington, VA, May 31, 2016; Pujiang Innovation Forum, Shanghai, October 26, 2014.
- “Coordination and Management of Government Science and Technology Investment in the U.S.” and “Prioritization Processes: How Governments Allocate Resources under Budgetary Constraints,” Joint IGCC-CASTED Dialogue on Comparing U.S. and Chinese Approaches to Science and Technology Budgetary and Resource Allocations, Beijing, October 22-23, 2014
- “Assessing the White House Office of Science and Technology Policy,” Ajou University, Suwon, Korea, October 30, 2014; Korean Institute for Advanced Science and Technology, October 27, 2014; Tsinghua University and Chinese Academy of Sciences Institute for Policy and Management, October 21, 2014; University of Cambridge, June 26, 2014; U.K. Government Office of Science, London, June 25, 2014; University of Waterloo, Canada, May 21, 2014; University of Maryland, September 19, 2013; University of California, San Diego, August 1, 2013; University of Maryland, April 2, 2013; George Mason University, March 7, 2013; White House Office of Science and Technology Policy, January 17, 2013.

- “National Network for Manufacturing Innovation and U.S. Manufacturing Policy,” Vinnova Annual Conference, Stockholm, November 27, 2013; Cisco Guanghua Leadership Program, October 22, 2013; Greater Phoenix Economic Development Council, April 22, 2013; EDA University Center Directors, March 19, 2013; National Public Radio “On Point,” February 25, 2013; American Society for Mechanical Engineers, Industrial Advisory Board, December 6, 2012; National Nanotechnology Coordination Office, September 27, 2012.
- “Unlocking Energy Innovation,” Clarkson University, March 3, 2013; American Clean Skies Foundation, April 19, 2012; Bipartisan Policy Center, February 7, 2012; George Mason University, November 16, 2011; MIT, November 10, 2011; Nanyang Technological University, Singapore, October 12, 2010.
- “Delegation and Divergent Interests: Global Universities, Global Corporations, and National Strategies for Migration Policy,” ICES Workshop on Internationalization and Competitiveness, George Mason University, March 1, 2013.
- “High-Tech Immigrant Entrepreneurship in the U.S.,” George Mason University, Institute for Immigration Research, April 24, 2013; Georgetown University, Institute for the Study of International Migration, May 13, 2011; Brookings Institution, February 7, 2011; National University of Singapore, October 13, 2010; AEGIS-DIME conference (keynote presentation), Athens, Greece, April 29, 2010; Seoul National University, January 7, 2009.
- “National Innovation and Competitiveness Strategy,” roundtable participant, AAAS Science and Technology Policy Forum, Washington, D.C., May 6, 2011.
- “Business Politics After the Global Financial Crisis,” American Political Science Association Annual Meeting, Washington DC, September 4, 2010.
- “American Economic Crises in Historical Perspective,” plenary session, Policy History Conference, Columbus, OH, June 4, 2010.
- “Regulation and Innovation in ICTs,” International Risk Governance Council, Scientific and Technical Committee, Washington, DC, June 30, 2009.
- “Talent for a Knowledge- Based and Innovation-Oriented Economy: Hong Kong’s Challenges and Opportunities,” Savantas Policy Institute, Hong Kong, January 9, 2009.
- “Global High-Skill Labor Markets,” Sloan Industry Studies Conference, Boston, May 1, 2008.
- “International Mobility of Human Resources,” Organization for Economic Cooperation and Development, Paris, February 19, 2008.
- “Global Flows of Talent,” National Institute of Science and Technology Policy, MEXT, Tokyo, January 18, 2007
- “What Are Interests, and Are They Special?,” Robert Wood Johnson Health Policy Fellows

- Synergy Conference, June 16, 2006; June 22, 2005.
- “National Strategy for Education and Innovation,” SUNY/CFR conference on “The Evolving Global Talent Pool,” New York City, June 16, 2005.
- “Research and Innovation Policy in the U.S.,” University of Cambridge (UK), January 20, 2005; January 27, 2004.
- “The Emergence of Entrepreneurship Policy,” George Mason University Entrepreneurship Conference, November 12, 2004; Diebold Conference on Entrepreneurship, London, April 27, 2004; University of Sussex, January 29, 2004.
- “The Political Education of the U.S. High-Tech Industry,” Illinois Institute of Technology, December 16, 2003; George Washington University, December 4, 2003; Northeastern University, November 14, 2002; Georgetown University, December 13, 2002.
- “Agenda-setting and Resource Allocation in the Think Tank ‘Industry’: The Case of the ‘Internet Revolution’,” American Political Science Association, Philadelphia, September 1, 2003.
- “India and Technological Innovation,” Harvard University, May 7, 2003.
- “Star Dust and Shoe Leather: The Globalization of Businesses’ Public Policy Capacities,” New England Political Science Association, Providence, May 1, 2003.
- “The Future of U.S. Science and Technology Policy,” Office of Personnel Management, August 21, 2002.
- “Roundtable: Corporations as Political Actors,” Midwest Political Science Association, Chicago, April 28, 2002.
- Visiting Faculty, Great Issues Forum, Public Policy Program, Denver University, January 2002.
- “Entrepreneurship and Public Policy,” US-China (NSF-CNSF) Joint Science Policy Seminar, Washington, D.C., March 20, 2002; Association for Public Policy and Management, Washington, D.C., November 2, 2001.
- “New Frontiers of Biomedical Research, 1945-1980,” National Library of Medicine, National Institutes of Health, October 29, 2001.
- “The Ecology of High-Tech Business Interests in Washington, D.C.: Assembly Rules and Resource Partitioning,” Midwest Political Science Association, April 10, 2001.
- “Antitrust and Technological Innovation: Microsoft and Beyond,” George Washington University, March 21, 2001.
- “Technology, the Corporation, and the State,” Seminar on New Directions in Business History,

- Kennedy School of Government, March 1, 2001.
- “Technology Policy and the New Economy in the Next American Administration,” Industry Canada, Ottawa, October 11, 2000.
- “The Context for International R&D Cooperation,” US-China (NSF-CNSF) Joint Science Policy Seminar, Beijing, October 25, 1999.
- “Globalization and Corporate Political Power: A Hypothesis,” KSG Visions of Governance Project, Bretton Woods, New Hampshire, July 12, 1999.
- “Government-University-Industry Relations,” Portuguese-American Postgraduate Society Forum, MIT, October 24, 1998.
- “Internationalization and Privatization: Implications for Science and Technology Policy,” Colloquium in Honor of Professor Eugene B. Skolnikoff, MIT, May 15, 1998.
- “The ‘Historical Turn’ in Political Science and the History of American Science and Technology Policy,” University of California, Los Angeles, March 7, 1998.
- “U.S. Technology Policy,” Brookings Institution, May 14, 1998.
- "Institutional Interference Patterns: Technology and Industrial Policy Since the 1920s," American Political Science Association, August 28, 1997.
- "A Confusion of Means and Ends: The Debate Over the Federal Role in Organizing, Managing and Funding the Nation's Science and Technology," Columbia University, September 21, 1996.
- "Bush, Science, Technology, and Economic Policy in the Late 1940s," Annual Meeting of the American Association for the Advancement of Science, February 21, 1995.
- "The Disappearance of 'Technological Unemployment' from the American Economic Policy Debate, 1937-1946," New England Political Science Association, April 3, 1993.
- "National Innovation Systems: An Appraisal," International Workshop for Rising Scholars and Practitioners in Science and Technology Policy, Honolulu, Hawaii, January 7-9, 1993.

TEACHING

Courses Taught:

American Politics: Institutions, Processes,
and Policies
Business as a Political Actor
Electoral and Advocacy Politics
Governance and Policy Processes
Government and International Politics
Honors Seminar
International Migration and Public Policy
Lobbying and Interest Representation

Mobilizing for Political Action
Science, Technology, and Public Policy
Technology, Science, and Innovation:
Governance and Institutions
Technology, Politics, and the Human Future
Theory and Practice in Public Policy
U.S. Immigration Policy
U.S. National Institutions and the Policy
Process

Completed Ph.D. dissertations (chair):

Sarkissian, Alfred, “Three Essays on Pharmaceutical Innovation” (December 2017)
Novak, Justin, “Use of Knowledge Commons in Open Innovation Systems: The Case of Free and Open Software” (December 2016)
Tingle, Anthony, “Essays on the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs” (December 2016)
Cohen, Marty, “Testing Theories of Innovation Diffusion: Analysis of Physicians’ Adoption of Electronic Health Records” (July 2015).
Sklarew, Jennifer, “Shock to the System: How Catastrophic Events And Institutional Relationships Impact Japanese Energy Policymaking, Resilience, And Innovation” (July 2015).
Kallas, Kadri. “Innovation in the Services Sector: Towards a New Typological Theory.” (July 2014).
Davis, Ted. “High-Skill Migration as a Positive-Sum Relationship for Tradable Services: The Case of India and the United States.” (December 2013).
Gutierrez, Juan Julio. “Plant-Level Innovation Patterns in a Globalized World: A Latin American Perspective.” (December 2013).
Zelnio, Ryan J. “A Complexity Approach to Evaluating National Scientific Systems through International Collaboration.” (May 2013).
Tian, Fangmeng, “Emigration of Chinese Scientists and Its Impacts on National Research Performance From A Sending Country Perspective.” (February 2012).
May, Kyle, “Internet-Disseminated Medical Information: A Study of Three Policy Tools,” (December 2008).

Current dissertation and doctoral field committee service:

Bolanos, Lisardo (dissertation, member)	Paterson, Andrew (field, member)
Hicks, Joel (dissertation, member)	Polcen, Michael (dissertation, member)
Khan, Salar (advisor)	Sandler, Ken (dissertation, member)
Lee, Joshua (dissertation, member)	Song, Abraham (field, member)

GRANTS, CONTRACTS, AND FELLOWSHIPS

- 2017: Subgrant, Spitzer Trust through Information Technology and Innovation Foundation (\$208,432).
- Science of Science and Innovation Policy Program, National Science Foundation (\$49,256)
- Subcontract, U.S. Department of Energy Sunshot Program, through SRI International (\$67,797).
- 2016: Office of Energy Policy and Strategic Analysis, U.S. Department of Energy (\$54,145)
- 2015: Science of Science and Innovation Policy Program, National Science Foundation (\$98,736).
- 2014: Subgrant, Smith Richardson Foundation, through Information Technology and Innovation Foundation (\$43,947).
- 2009: Subgrant extension, Doris Duke Charitable Foundation, through MIT Industrial Performance Center (\$51,015)
- 2008: Domestic Policy Program, Research Grant, Smith-Richardson Foundation (\$122,683.)
- 2008: Subgrant, Doris Duke Charitable Foundation, through MIT Industrial Performance Center (\$104,742)
- 2008: Faculty Research Grant, Center for Global Studies, George Mason University (\$2,500)
- 2007: Research Contract for Use of Large Data Bases, Office of Advocacy, U.S. Small Business Administration (\$97,870)
- 2005: Multidisciplinary Entrepreneurship Research Grant, Kauffman Foundation (\$29,850)
- 1995: Herbert Hoover Presidential Library Association Scholar
- 1993-94: Doctoral Research Fellowship, Industrial Performance Center, M.I.T.
- 1993: American Politics Dissertation Travel Grant, Political Science Department, M.I.T.
- 1991-93: Predoctoral Fellowship, Center for Science and International Affairs, Kennedy School of Government, Harvard University.

PROFESSIONAL SERVICE

Director, Center for Science, Technology, and Innovation Policy, George Mason University, 2009-present.

Co-chair, Innovation Policy Forum, National Academies of Science, Engineering, and Medicine, 2015- present.

Senior Fellow, Information Technology and Innovation Foundation, 2016-present.

Member, Board of Directors, Industry Studies Association, 2018-present.

Member, Editorial Board, *Science and Public Policy*, 2004-present.

Member, Program Committee, Industry Studies Conference, 2015-2018.

Non-Resident Senior Fellow, Metropolitan Policy Program, Brookings Institution, 2015-2018.

Steering Committee, “Securing Advanced Manufacturing in the United States: The Role of Manufacturing USA,” National Academies of Science, Engineering, and Medicine, 2017.

Participant, Aspen Institute Clean Energy Innovation Forum, 2017

Member, Program Committee, Technology Transfer Society Annual Meeting, 2017.

Member, Board of Directors, Information Technology and Innovation Foundation, 2006-2011, 2012-2017.

External Reviewer, Manufacturing Extension Partnership, 2016.

External Examiner, M.Phil. in Technology Policy, Judge Business School, University of Cambridge, 2014-2016.

Coordinator, Technology, Science and Innovation Policy Research Workshop, 2005-2014.

Faculty Advisor, Graduate Student Conf. on Science and Technology in Society, 2004-2013.

Co-director, Center for Energy Science and Policy, George Mason University, 2010-2013

Panel Organizer, “New Ideas for Strengthening Partnerships at DOE National Labs,” House Rayburn Building, June 27, 2018; “Manufacturing USA at DOE: Charting Progress, Seeking Stability,” ITIF, May 16, 2018; “Sustaining Innovation in Energy Storage,” ITIF, April 26, 2018; “ARPA-E: Versatile Catalyst for Innovation,” ITIF, November 15, 2017; “Crossing the “Valley of Death”: How to Design and Run Successful Clean-Energy Demonstration Projects,” Information Technology and Innovation Foundation, July 26, 2017; “Cracking a Frozen Debate: Where’s the Political Consensus on Clean Energy Policy?,” House Rayburn Building, April 27, 2016; “Clean Energy Innovation: Priorities

for the Trump Administration and the 115th Congress,” Information Technology and Innovation Foundation, December 13, 2016; “The Production-Innovation-Location Connection,” Industry Studies Association, May 30, 2013; “New Directions in Renewable Energy Policy,” Association for Public Policy and Management, November 5, 2009; “International Migration and Development,” Sloan Industry Studies Conference, May 1, 2008; “The Not So Silent Majority: Business Lobbying in Washington, D.C.,” Midwest Political Science Association, April 21, 2001; “Regimes and Orders in American Political Development,” American Political Science Association, August 28, 1997.

Workshop organizer, “The Innovation Gap in Energy Storage,” MIT, December 8, 2017; “Enhancing the Usefulness of Science of Science and Innovation Policy (SciSIP) Research,” George Mason University, December 7, 2015; “Immigration Policy: Highly Skilled Workers and U.S. Competitiveness and Innovation,” Brookings Institution, February 2011; “Innovation Policy in a Global Economy” (with Swedish Center of Excellence in Science and Innovation Studies), George Mason University, November 2009; “Governing the Global Knowledge Economy,” George Mason University, February 2008.

Conference Organizer, “Entrepreneurship and Public Policy,” Kennedy School of Government, April 10-11, 2001 (sponsored by National Commission on Entrepreneurship and Ewing Marion Kauffman Foundation); “The Politics of Economic Inequality in the Twentieth Century,” Kennedy School of Government, Harvard University, September 28, 1996; “Where Are We in American Political Development? Contemporary Politics in Historical Perspective,” Kennedy School of Government, Harvard University, October 14, 1995.

Commentator/Moderator, “Accelerating Energy-Climate Innovation,” AAAS Annual Meeting, February 11, 2016; “From Science to Marketplace: The Federal Role in Innovation,” Bipartisan Policy Center, February 3, 2016; “Science, Technology, and Innovation Outlook,” Organization for Economic and Development, October 24, 2012; “Advanced Manufacturing Partnership,” Information Technology and Innovation Foundation, September 20, 2012; “The Immigrant Workforce and the Future of U.S. Immigration Policy,” Brookings Institution, July 31, 2012; “New Sentinels of Progress,” Society for the Social Studies of Science, October 30, 2009; “The New Deal and Liberalism Across the Wartime Divide,” Policy History Conference, June 1, 2006; “American Business and Party Politics, American Political Science Association, September 3, 2005; “Interest Groups and Representation,” American Political Science Association,” September 1, 2004; “Dilemmas of Business and Government,” Policy History Conference, May 21, 2004; “Ideology, Interests, and Party Representation,” Midwest Political Science Association, April 18, 2004; “Strategies for Legislative Advocacy,” American Political Science Association, September 1, 2003; “Public Policy at War,” Policy History Conference, June 2, 2002; “Comparing the Trajectories of Science Policy in the United States and Japan in the Next Century,” American Political Science Association, Atlanta, Sept. 3, 1999; “Elitism and Democracy in the Regulatory State,” Organization of American Historians, Toronto, April 24, 1999.

Chair, Public Policy Process Search committee, 2013-2014

Member, Ph.D. Program committee, 2010-2013

Chair, SPP Executive Education Planning Task Force, 2012.

Assistant Director for Innovation Policy, Office of Science and Technology Policy, Executive Office of the President, 2011-2012.

Faculty Associate, Center for Global Studies, George Mason University, 2010–2011.

Faculty sponsor, Earth Week Community Fair, George Mason University, 2011.

Member, Expert Advisory Board, Accelerating Energy Innovation project, International Energy Agency, 2010-2011.

Member, SPP Search Committee, 2008-2009, 2010-2011.

Member, Dean's Advisory Committees on the ICP Program and Innovation and Entrepreneurship area of emphasis, George Mason University, 2011.

Participant, "Towards a New Diaspora Agenda" research project, World Bank Institute, 2011.

Guest Editor, *Review of Policy Research*, special issue on Governance of the Global Knowledge Economy, volume 27, issue 4, July 2010.

Member, Editorial Board, *Review of Policy Research*, 2007-2010.

Member, SPP Curriculum Committee, 2006-2010.

Consultant, Green Energy and Green Entrepreneurship Project, Corporate Research Board, 2010.

Track Director – Globalization, Atlanta Conference on Science, Technology, and Innovation Policy, 2009.

Coordinator, SPP Faculty Brown Bag Series, 2007-2009.

Faculty Advisor, *New Voices in Public Policy* (student journal), 2006-2009.

Member, Expert Advisory Group, Project on Energy Innovation from the Bottom Up (Clean Air Task Force/Arizona State University), 2009.

Faculty Advisor, SPP Writing Workshop, 2007-2008.

Consultant, MacArthur Foundation, International Peace and Security Program, 2007-2008.

Chair, SPP Search Committee, 2006-2008.

Member, Governing Council, Politics and History Section, American Political Science

Association, 2005-2007.

Member, Schattschneider Award Committee, American Political Science Association, 2006.

Chair, Don K. Price Award Committee, American Political Science Association, 2004-2005.

Faculty Chair, Political Advocacy Methodological Area of Concentration, 1997-2004.

Member, MPP Admissions Committee, 1995-2004.

Contributing Editor, "Evaluation of DOE's Technology Partnership Programs," Department of Energy, 2004.

Member, Academic Advisory Board, Center on Science, Policy and Outcomes, 1998-2002.

Member, Whitehead Institute Task Force on Genetics and Public Policy, 1994-2002.

Coordinator, Boston-area Workshop on American Political Development, 1994-1998.

Rapporteur, "Government's Role in Technology Innovation," Department of Energy, Washington, D.C., February 11, 2002.

Section Chair, Politics and History, New England Political Science Association, 2001.

Consultant, National Research Council panel on Government Performance and Results Act, 2000.

Chair, Policy Analysis Exercise Awards Committee, 1999-2000, 2002.

Member, Junior Politics Search Committee, 1997-1998.

Member, Senior/Junior History Search Committee, 1998-2000.

Member, Nominations Committee, APSA Politics and History Section, 1995-1996.

Member, Policy Analysis Exercise Awards Committee, 1995, 1997, 2001.

Staff, "International Relationships of M.I.T. in a Technologically Competitive World," M.I.T. faculty study group, May, 1991.

Peer reviewer (manuscripts, articles, reports, proposals, promotions – various dates):

- Academic Medicine*
- American Journal of Political Science*
- American Political Science Review*
- Army Research Office
- Bipartisan Policy Council
- Boston University

Business and Politics
Cambridge University Press
Carnegie-Mellon University
Canadian Journal of Higher Education
Carnegie-Mellon University
Center for Global Studies, George Mason University
Clarkson University
Columbia University
Comparative Policy Studies
Comparative Technology Transfer and Society
Environment and Planning C
Environmental Research Letters
George Washington University
Georgia Institute of Technology
Hong Kong University of Science and Technology
International Organization
Journal of Policy History
Journal of Politics
MIT Press
National Academy of Engineering
National Science Board
National Science Foundation
Nature Energy
Pacific Affairs
Political Research Quarterly
Research Policy
Review of Policy Research
Routledge Press
Science
Science and Public Policy
Sloan Foundation
Small Business Economics
Smith-Richardson Foundation
Social Studies of Science
Studies in American Political Development
University of Cambridge
Yale University Press

OTHER PROFESSIONAL EXPERIENCE

Conference Director, International Student Pugwash, 1984-1986.

- Organized and raised funds for international student conference on science, technology, and society; edited and published proceedings in peer-reviewed journal.

Research Assistant, ICF, Inc., 1983-84.

- Supported Department of Energy Headquarters High-Level Nuclear Waste Repository Siting Program.