

# Curriculum Vitae

## Michael Aaron Dennis

US Naval War College  
Strategy & Policy Department  
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### Employment

Assistant Professor, Strategy and Policy Department, US Naval War College, Newport, Rhode Island., August 2014--.

Lecturer, Science, Technology & International Affairs Program, Georgetown University, Spring 2012-2013, 2014

Lecturer, Bio Defense Program, George Mason University, Fall 2012, 2013.

Lecturer, Security Studies Program, Georgetown University, 2006-2014.

Lecturer, National Security Studies, Advanced Academic Programs, The Johns Hopkins University, Fall 2009

Lecturer, History and Sociology of Science, University of Pennsylvania, Spring 2005.

Lecturer, Science and Technology Studies, Virginia Tech, Northern Virginia Campus, Spring 2003, Fall 2003.

Visiting Assistant Professor, Department of the History of Science, Technology and Medicine, The Johns Hopkins University, Spring 2003.

Assistant Professor, Department of Science and Technology Studies, Cornell University, 1995-2002.

Visiting Assistant Professor, Department of Science and Technology Studies, Cornell University, 1992-1995.

Lecturer, History Department, University of California, San Diego, 1991/1992.

Research Associate, Space Astronomy Oral History Project, National Air and Space Museum, Smithsonian Institution, 1982/3.

Intern, History Office, National Aeronautics and Space Administration, Summer 1982.

Intern, Department of the History of Science and Technology, National Museum of American History, Smithsonian Institution, Summer 1980.

### Education

Graduate: Ph.D., Department of History of Science, The Johns Hopkins University, 1991.

Thesis: A Change of State: The Political Cultures of Technical Practice at the MIT Instrumentation Laboratory and the Johns Hopkins University Applied Physics Laboratory, 1930-1945

Advisor: Stuart W. Leslie

Undergraduate: BA, 1982. College of Arts and Sciences, University of Pennsylvania.  
Major: History and Sociology of Science

BSE, 1982. Wharton School, University of Pennsylvania. Major: Decision Sciences

## Fellowships and Prizes

Article Prize from the Editorial Board of *Studies in Intelligence*, February 2014.

Forum for the History of Science in America Article Prize, 1999 for "Historiography of Science: An American Perspective."

Award for Outstanding Paper Presented at the Schloessman Seminar on "The Expert in Modern Societies: Historical and Contemporary Perspectives," Max Planck Society for the Advancement of Science, November 1998.

Lilly Teaching Fellowship, Cornell University, 1996.

Post-doctoral Fellowship, Science Studies Program, University of California, San Diego, 1991/1992.

Henry and Ida Schuman Prize, History of Science Society, 1990.

National Air and Space Museum Guggenheim Post-doctoral Fellowship, 1990/1991.

American Historical Association/National Aeronautics and Space Administration Fellowship in Aerospace History, 1988/89.

Hagley Dissertation Fellowship (declined), 1988/89.

Co-Winner, 1987 Robert H. Goddard Historical Essay Competition.

Smithsonian Institution Pre-Doctoral Fellow, 1986/7.

National Science Foundation Pre-Doctoral Fellow, 1984/5, 1985/6 and 1987/8.

Visiting Student Fellowship, Space Science and Exploration Department, National Air and Space Museum, Smithsonian Institution, Summer(s) 1981 and 1984.

## Publications

A change of state: political culture, technical practice and the origins of Cold War America, under contract with the Johns Hopkins University Press.

"Our monsters, ourselves: Reimagining the problem of knowledge in Cold War America." In *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*, edited by Sheila Jasanoff and Sang-Hyun Kim. 56-78. Chicago: University of Chicago Press.

"Tacit knowledge as a factor in the proliferation of WMD: The case of nuclear weapons," *Studies in Intelligence* 57, no. 3 (2013): 1-9.

"A Polar Perspective." In *Globalizing Polar Science: Reconsidering the International Polar and Geophysical Years*, edited by Roger D. Launius, James Rodger Fleming and David DeVorkin, 13-22. New York: Palgrave Macmillan, 2010.

"Secrecy and Science Revisited: From Politics to Historical Practice and Back." In *The Historiography of Contemporary Science, Technology, and Medicine: Writing Recent Science*, ed. Ronald E. Doel and Soderqvist, 172-184. New York: Routledge, 2006.

"Reconstructing sociotechnical order: Vannevar Bush and US Science Policy," in Sheila Jasanoff (ed.), *States of Knowledge: the co-production of science and social order* (New York: Routledge, 2004) 225-253.

"Earthly Matters (Postscript)," *Social Studies of Science* **33**(5) [2003]: 809-820.

"Count me out!" *Social Studies of Science* **31**(3) [2001]: 436-439.

"Secrecy and Science Revisited: From Politics to Historical Practice and Back," in *Secrecy and Knowledge Production*, edited by Judith Reppy (Cornell University Peace Studies: Occasional Paper #23, 1999) 1-16.

"Historiography of Science: An American Perspective." In *Science in the Twentieth Century*, edited by John Krige and Dominique Pestre, (Amsterdam: Harwood Academic Publishers, 1997) 1-26.

"Our First Line of Defense: Two University Laboratories in the Postwar American State," *Isis* **85** (1994) 427-455.

"Echoes of the Past: Henry Guerlac and Radar's Historiographic Problem," in Oskar Blumtritt et al (eds.), *Tracking the History of Radar* (Piscataway: IEEE, 1994) 285-298.

"Graphic Understanding: Instruments and Interpretation in Robert Hooke's Micrographia," *Science in Context* **3** (Autumn 1989) 309-364.

"Accounting for Research: New Histories of Corporate Laboratories and the Social History of American Science," *Social Studies of Science* **17** (1987) 479-518.

"Drilling for Dollars: The Making of US Petroleum Reserve Estimates, 1921-25," *Social Studies of Science* **15** (1985) 241-65.

## Reviews

"Scientific and technical knowledge and the making of political order," Review Roundtable of Eden Medina, *Cybernetic Revolutionaries, History and Technology* **28:4** (2012) 415-421.

Paul Lawrence Rose, *Heisenberg and the Nazi Atomic Bomb Project in Science, Technology and Human Values* **25** (Summer 2000) 380-392.

G. Pascal Zachary, *Endless Frontier: Vannevar Bush, Engineer of the American Century in Business History Review* **73** (Spring 1999) 136.

Steve Woolgar, *Science: The Very Idea in Isis* **81**(1990) 397-398.

## Other Publications

Dyer, D. and M. A. Dennis (1998). Architects of Information Advantage: the MITRE Corporation since 1958. Montgomery, Alabama, Community Communications.

Encyclopedia Britannica. Articles on Allen Newell, Big Science, Charles Stark Draper, Edward Feigenbaum, Fairchild Semiconductor, Gordon E. Moore, Jack Kilby, John Holland, Robert Noyce, Rodney Brooks, Silicon Valley, Texas Instruments, Vannevar Bush, Wikipedia, and Xerox PARC.

Oxford Companion of American History. Articles on Science since 1945 and Vannevar Bush.

Oxford Encyclopedia of the History of American Science, Technology and Medicine. Articles on Atoms for Peace, DARPA, OSRD, and a review essay on "Science, technology and the Military."

Instruments of Science: An Historical Encyclopedia. Article on inertial guidance.

The International Encyclopedia of the Behavioral and Social Sciences. Article on "Universities, Science and Technology, United States."

## Teaching

Science, technology and strategy, (with Tim Schultz), Electives Program, US Naval War College, Spring 2016-

Strategy & War and Strategy & Policy, Strategy and Policy Department, US Naval War College, 2014-present.

Political Economy (with Colin Jackson and Anand Toprani), Advanced Naval Strategy Seminar, US Naval War College, Winter Trimester, 2015—present.

Thesis Supervisor, Advanced Naval Strategy Program, US Naval War College, 2015-16 to present.

“From Dreadnoughts to Drones: Science, Technology and Warfare,” STIA 342, Science, Technology and International Affairs Program, Georgetown University, Spring 2014.

“National Security, Technology and Policy,” SEST 584, Security Studies Program, Georgetown University, Summer 2013, Summer 2014.

“The history of nuclear weapons,” STIA 427, Science, Technology and International Affairs, Edmund A. Walsh School of Foreign Service, Georgetown University, Spring 2012, Spring 2013.

“National Security Technology and Policy,” BIOD 760, Biodefense Program, George Mason University, Fall 2012, Fall 2013.

“Technology and Security: Research/Thesis Seminar,” SEST 750, Graduate Seminar, Security Studies Program, Edmund A. Walsh School of Foreign Service, Georgetown University, Spring 2007, 2008-2014.

“Technology and Security,” National Security Studies 406.682.51, Advanced Academic Programs, The Johns Hopkins University, Fall 2009.

“Technology and Security,” SEST 550, Graduate Seminar, Security Studies Program, Edmund A. Walsh School of Foreign Service, Georgetown University, 2006, Spring 2007.

“The Atomic Bomb,” HSSC 312, University of Pennsylvania, Spring 2005.

“History of American Science,” HSSC 100, University of Pennsylvania, Spring 2005.

“Cold War Science and Technology,” Graduate Seminar, Virginia Tech, Alexandria Campus, Fall 2003.

“Main themes in the history of science,” Graduate Seminar, Virginia Tech, Northern Virginia Campus, Spring 2003.

“The Rise of Modern Science,” The Johns Hopkins University, Spring 2003.

“Science Studies and the Politics of Science,” Graduate Seminar, Cornell University, Spring 2001.

“The Sciences in the Twentieth Century,” Science and Technology Studies, Cornell University, Spring 2000, Spring 2001, Fall 2002.

“Enlightened Science,” [with Peter Dear] Science and Technology Studies, Cornell University, Fall 1999, Spring 1997 [S&TS 416].

“Computers: From Babbage to Gates,” Science and Technology Studies, Cornell University, Fall 1997, 1999, 2000.

“Science, Technology, and Cold War,” Graduate Seminar, Science and Technology Studies, Cornell University, Fall 1996.

“Introduction to Science and Technology Studies,” Graduate Seminar, Science and Technology Studies, Cornell University, Fall 1995.

"Science in the American Polity, 1960-Present," Science and Technology Studies, Cornell University, Spring 1996, 1999, 2000, Fall 2001, 2002.

"Science in the American Polity, 1800-1960," Science and Technology Studies, Cornell University, Spring/Fall 1994, Fall 1995, 1996, 1997, 2000.

"American Science Policy," [with Sheila Jasanoff] Science and Technology Studies, Cornell University, Spring 1994.

"Science in the Western Tradition," Science and Technology Studies, Cornell University, Fall 1993, Spring 1997, Fall 2000.

"Atomic Consequences: The Incorporation of the Atomic Bomb into Postwar American Culture," Science and Technology Studies, Cornell University, Fall 1993, Spring 1995, 1996, 1997, 1998, 1999, 2001, 2002.

"The Politics of Technical Decisions," Science and Technology Studies, Cornell University, Fall 1992.

"Science, Technology and the State, 1700-1960," History Department, University of California. San Diego, Spring 1992.

"Science and Technology in the Twentieth Century," History Department, University of California, San Diego, Fall 1991.

### Dissertation Students

[These are students with whom I worked while they completed their dissertations and I served on their committee.]

Anna Katharina Maerker, "Model Experts: The production and uses of anatomical models at La Specola, Florence, and the Josephinum, Vienna, 1775-1814." Cornell University, 2005.

Sonja Schmid, "Envisioning a Technological State: Reactor Design Choices and Political Legitimacy in the Soviet Union and Russia." Cornell University, 2005.

Daniel J. Plafcan, "Between State and Transnational Community: US—Japan Technoscientific Diplomacy in Earth Observation." Cornell University, 2007.

Anand Toprani, "Oil and Grand Strategy: Great Britain and Germany, 1918-1941. Georgetown University, 2012.

Students on whose committees I have served as an outside reader:

At Cornell: Simon Cole (history of fingerprints), Arthur Daemmrich (US drug regulation), and Samer Alatout (Arab-Israeli water conflict).

After Cornell: Mary McPartland. "The Farm Hall Scientists: The United States, Britain, and Germany in the New Atomic Age, 1945-1946." George Washington University, 2013.

### Referee Work

*Social Studies of Science, History and Technology, Isis, Technology and Culture*, Oxford University Press, University of Chicago and the National Science Foundation.

### Professional Associations

American Historical Association, Organization of American Historians, American Association for the Advancement of Science, History of Science Society, Society for History in the Federal Government, and the Society for the History of Technology.

## Papers Presented

"What we forget when we forget about nuclear weapons: a provocation," Nuclear Imaginaries, Harvard University, 6-7 April 2017.

"Memex takes Manhattan: Vannevar Bush's other history of the future," STS Circle at Harvard, 5 October 2015.

"Tacit knowledge and the history of nuclear weapons," Paper presented at a National Intelligence Council Workshop on "The role of tacit knowledge in NBC [nuclear, biological, and chemical] weapons proliferation," 21 November 2011.

"Laboratories, Networks and Things: Draper v. Gamow," Paper presented at the Fifth Laboratory History Conference, The Johns Hopkins University, 3-5 June 2009.

"Wards of the State? The Sciences in Postwar America," Conference on Academic Pursuits and Government Initiatives," Department of History, George Washington University, 28 April 2006.

"Historiographic Contexts for 'Inventive Intersections'," Inventive Intersections Workshop, Dutch Academy of Sciences, Amsterdam, 22-24 September 2004.

"The government and university research in post-1945 USA," Governing University Research: Historical and Comparative Perspectives," Glasgow, Scotland, 10-11 September 2004.

"Libraries, Laboratories, Weapons and Scientists: History of Science Goes to War!" Fifth Joint Meeting of the British Society for the History of Science, the Canadian Society for the History and Philosophy of Science, and the History of Science Society, Halifax, Nova Scotia, 5-8 August 2004.

"Machine politics: Vannevar Bush and the Memex reconsidered," NASM Historical Seminar on Contemporary Science and Technology, 8 October 2003.

"Engineering Democracy: Vannevar Bush, the Memex and the politics of expertise," Department of History of Science, Technology, and Medicine, The Johns Hopkins University, 5 March 2003

"Can U.S. Historians and Historians of American Science Learn from One Another?," American Historical Association Annual Meeting, January 2001.

"Science and Democracy: Who Cares? Why Bother?" at the Science Studies Reading Group, Cornell University, 30 October 2000.

"From Civic Humanism to National Security: The Laboratory and the State," Owen Hannaway Symposium, Chemical Heritage Foundation, Philadelphia, Pennsylvania, April 1999.

"Gone to War: Henry Guerlac at the Radiation Laboratory," History of Science Society Annual Meeting, Pittsburgh, Pennsylvania, November 1999.

"Knowledge and Secrecy Revisited: Classified Knowledge in Cold War America," History of Science Society Annual Meeting, Kansas City, Missouri, October 1998.

"A Tale of Two Weapons," Schloessman Seminar on "The Expert in Modern Societies: Historical and Contemporary Perspectives," Max Planck Society for the Advancement of Science, November 1998.

"Living in the Garrison State: Science, Technology and Public Culture in Cold War America," Crossing Boundaries Conference, HSS/BSHS Edinburgh, July 1996.

"Do Numbers Count? Weapons and their Analysts in Cold War America," Cornell Credibility Workshop, April 1995.

Bushwhacked! The (Ir)relevance of Vannevar Bush to the History of Postwar American Science," History of Science Society Annual Meeting, New Orleans, LA, 13 October 1994.

"Between the Magnet and the Marketplace: Nuclear Physics at DTM during the 1930s," Philosophy of Science Association Annual Meeting, New Orleans, LA, 16 October 1994.

"Vannevar Bush and the Dilemmas of Science Policy," American Physical Society Meetings, Invited Paper, Washington, DC, 19 April 1994.

"Powerful Tools/Political Languages: Operations Research, Continental Defense, and Laboratory Practice at Johns Hopkins, 1945-1960," Organization of American Historians Annual Meeting, Atlanta, GA, 15 April 1994.

"Invisible Hands: The Research and Development Board and the Political Economy of Postwar American Science," Society for the History of Technology, Annual Meeting, Washington, DC, 14-17 October 1993.

"Technologies of War: The Proximity Fuze and the Applied Physics Laboratory," Naval History Conference, Annapolis, MD, October 1993.

"At Arms Length: Johns Hopkins and the Navy, 1945-1948," Colloquium, Department of History and Sociology of Science, University of Pennsylvania, 25 October 1993.

"The Original Conversion: Making the Future at the Applied Physics Laboratory after World War II," at "Defense Conversion and the Future of the National Nuclear Laboratories," Cornell University, 1-2 October 1993.

"Back to Work: Merle Tuve at the Department of Terrestrial Magnetism after World War II," History of Science Society Meetings, Washington, DC, 26-29 December 1992.

"Echoes of the Past: Henry Guerlac and Radar's Historiographic Problem," Radar History Workshop, Deutsches Museum, Munich, Germany, 14-16 December 1992.

"Our First Line of Defense: University Laboratories and the Making of the Postwar American State," VTSS Faculty Research Seminar, Stanford University, 24 February 1992 and History Department, Princeton University, January 1993.

*Modern Arms and Free Men*: Apologia of the National Security State," University of Delaware History of Technology Colloquium, 13 November 1990.

"Keeping the Faith: The Political Accounting of *Modern Arms and Free Men*," History of Science Society Meeting, Seattle, Washington, 25-28 October 1990.

"The Struggle for the Control of Guided Missiles at Johns Hopkins and MIT, 1944-48," 1989 Society of the History of Technology Annual Meeting, Sacramento, California, 13 October 1989.

"Reconstructing Technical Practice: The MIT Instrumentation Laboratory and the JHU Applied Physics Laboratory after WWII," at "Science and the Federal Patron: Post-World War II Government Support of American Science," Smithsonian Institution, 15-16 September 1989.

"Who Counts as an Observer?," Monthly Sky Lecture, Albert Einstein Planetarium, National Air and Space Museum, Smithsonian Institution, 6 January 1989.

"Knowledge and Authority in the Associative State: Draper's MIT and Tuve's DTM," The Johns Hopkins University, Department of History of Science Colloquium, 28 September 1987.

"No Fixed Position: University Laboratories and Military Patronage at Johns Hopkins and MIT, 1944-46," 1987 Society for the History of Technology/History of Science Society Meeting, Raleigh, North Carolina, 31 October 1987.

"Charles Stark Draper and MIT's Political Economy of Technology in the 1930s," Center for the Study of Science in Society Colloquium, Virginia Polytechnic Institute and State University, 21 October 1987.

"William Herschel: Natural Historian of the Heavens," Monthly Sky Lecture, Albert Einstein Planetarium, National Air and Space Museum, Smithsonian Institution, 3 August 1987.

"Discipline in the Marketplace: On Reading Rowland's 'A Plea for Pure Science,'" 1987 Graduate Student Conference in the History of Science, Technology, and Medicine, University of Pennsylvania, 14 February 1987.

"Making Space: Post-war Planning and the Origins of High Altitude Rocket Research at APL and NRL, 1944-1946," Conference on Academic Science and the Military, The Johns Hopkins University, May 1986.

"Seeing is Believing: Representation as Understanding and Strategy in Robert Hooke's *Micrographia*," Joint Atlantic Seminar in the History of Biology, Toronto, April 1986.

### Professional Activities

Interlocutor, Urban Imaginaries of the future project, Harvard University, December 2016.

Speaker, Science out of the Lab, ASU in Washington, DC, 2007--.

Panelist, Government Secrecy Panel, Peace Studies Program 40<sup>th</sup> Anniversary Celebration, Cornell University, Ithaca, NY, April 9-10, 2010.

Commentator, "Session on The Mindful Hand," 2007 Annual Meeting of the History of Science Society, Crystal City, Virginia.

Commentator, "Technology and Political Legitimation in the Twentieth Century," 2004 Annual Meeting of the Society for the History of Technology, Amsterdam.

Coordinating Committee of the Forum for the History of American Science of the History of Science Society, 1999-2001.

Session Organizer and Paper Presenter, "Real Science Wars: New Perspectives on a Classic Historiographic Problem, History of Science Society Annual Meeting, October 1999.

Commentator, History of Science Society Annual Meeting, October 1995.

Workshop Co-Organizer, "Doing is Believing: Credibility and Social Studies of Science and Technology," Cornell University, 21-23 April 1995.

Session Organizer, "Cold War Science: New Perspectives," History of Science Society Meetings, December 1992.

Speaker, UCSD Science Studies Colloquium, 13 April 1992.

Speaker, "Knowledge, Context, and Power," UCLA Tech Know Workshop, 16 May 1992.

Commentator, "Technology as Social Process" session, History of Science/Society for the History of Technology, Annual Meetings, Madison, October 1991.

Panel Speaker, "The Civilian Role in Military R&D," at the Vannevar Bush Centennial Symposium, "Remembering the Past and Shaping the Future of American Science Policy," held at MIT, 30-31 May 1990.



Session organizer, "ReReadings: The Public Texts of Vannevar Bush," History of Science Society Meetings, Seattle, Washington, 25-28 October 1990.

Session organizer, "A Question of Authority: Universities and the Military after World War II," Society for the History of Technology Annual Meeting, Sacramento, California, 13 October 1989.

Organizer, Graduate Student Conference in the History of Science, Technology, and Medicine, The Johns Hopkins University, February 1986.