## **Erik M. Conway**

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### **Employment**

- Purdue University, 2025-Present
- Historian, Jet Propulsion Laboratory, California Institute of Technology, 2004-2024
- Historian, NASA Langley Research Center, 1999-2004
- Fellow, National Air and Space Museum, 1997-1999
- United States Navy, 1990-1994

**Publication Summary:** >25 scholarly publications with >9300 citations, H-index 19, I10 index 26, 10 books, including *Merchants of Doubt* (>100,000 copies, nine foreign editions, History of Science Society Watson-Davis Prize, short-listed for Los Angeles Times book prize, made into a documentary film distributed by SONY Pictures Classics); and *The Collapse of Western Civilization* (>50,000 copies, twelve foreign editions).

#### **Honors and Awards**

- Fellow, American Association for the Advancement of Science, elected 2023
- Senior Fellow, Research Institute in History of Science and Technology at Caltech and the Huntington, 2019-2020.
- Guggenheim Foundation Fellowship, 2018-2019
- Athelstan Spilhaus Award, American Geophysical Union, 2017
- Watson Davis and Helen Miles Davis Prize, History of Science Society, 2011
- NASA History Division Award, 2009
- 2008 American Institute of Aeronautics and Astronautics History Manuscript Award
- 2004 American Institute of Aeronautics and Astronautics History Manuscript Award

#### **Teaching**

 SIOC 292, Introduction to Climate Science and Policy, Scripps Institution of Oceanography, Winter 2016-2018.

### Fellowships, Grants, Contracts

- NASA Contract for oral histories of NASA's Discovery Program. 2022-present
- NASA Contract for a history of Near-Earth Object Research, 2016-2019.
- NASA Contract for a History of Atmospheric Science, 2002-2005.
- NASA Contract for a History of Supersonic Transport Research, 1999-2002.
- Guggenheim Postdoctoral Fellowship, National Air and Space Museum, 1998-1999.
- National Science Foundation Dissertation Improvement Grant #NSF/SBR-9729517, 1997.
- Guggenheim Pre-doctoral Fellowship, National Air and Space Museum, 1997-1998.

### **Education**

- 1998: Ph.D., History of Science and Technology, University of Minnesota
- 1990: B.S., Geomechanics, University of Rochester

#### **Professional Service**

- History of Science Society Council, 2014-2017.
- Watson Davis and Helen Miles Davis Prize committee, 2014-2017.
- Dibner Prize committee member, 2009-2011.
- Isis advisory editor, 2009-2011.
- Co-organizer, Dibner workshop in history of science at Caltech, on Science and the Cold War, May 2010.
- Co-organizer, Dibner Institute Workshop on History of Ocean and Atmospheric Sciences, Woods Hole Marine Biology Laboratory, May 2006.
- Robinson Prize Committee, Society for the History of Technology, 2004-2006.
- Founding editor of the "Envirotech Newsletter," SHOT Environment and Technology Special Interest Group, 2001-2004.
- Co-organizer (with Hugh Gorman), "Monitoring the Environment" workshop, Hagley Museum and Library, 17-18 July 2003.
- Chairman, Forum for the History of American Science, History of Science Society, 2001-2003
- Steering Committee, Earth and Environment Forum, HSS, 2000-2003

### **Documentary Film**

### JPL and the Space Age series

- "The Hunt for Space Rocks," Jet Propulsion Laboratory, 2023.
   <a href="https://www.youtube.com/watch?v=1wNzTyu36WA&list=PLTiv\_XWHnOZqFn">https://www.youtube.com/watch?v=1wNzTyu36WA&list=PLTiv\_XWHnOZqFn</a>

   <a href="https://www.youtube.com/watch?v=1wNzTyu36WA&list=PLTiv\_XWHnOZqFn">wWJs393RhIMQoeCnwjhV&index=16</a>
- "Sky High," Jet Propulsion Laboratory, 2022. https://www.youtube.com/watch?v=0KBI0QmEWuo&t=1266s

- Landing on Mars", Jet Propulsion Laboratory, 2020.
   <a href="https://www.youtube.com/watch?v=7aKewWHXXRE&list=PLTiv\_XWHnOZqF">https://www.youtube.com/watch?v=7aKewWHXXRE&list=PLTiv\_XWHnOZqF</a> nWQs393RhIMQoeCnwjhV&index=12
- "Mission to Mars," Jet Propulsion Laboratory, 2020.
   <a href="https://www.youtube.com/watch?v=f">https://www.youtube.com/watch?v=f</a> sSzn87ljM&list=PLTiv XWHnOZqFnWQ s393RhIMQoeCnwjhV&index=11
- "Triumph at Saturn" (parts 1 and 2), Jet Propulsion Laboratory <a href="https://www.youtube.com/watch?v=oGsajLIALJE">https://www.youtube.com/watch?v=oGsajLIALJE</a>
   <a href="https://www.youtube.com/watch?v=SY-hQJ5pMd4">https://www.youtube.com/watch?v=SY-hQJ5pMd4</a>
- "Saving Galileo," Jet Propulsion Laboratory, 2019.
   <a href="https://www.youtube.com/watch?v=aezcXjKYZkM&list=PLTiv\_XWHnOZqFn">https://www.youtube.com/watch?v=aezcXjKYZkM&list=PLTiv\_XWHnOZqFn</a> WQs393RhIMQoeCnwihV&index=10
- "The Pathfinders," Jet Propulsion Laboratory, 2017.
   <a href="https://www.youtube.com/watch?v=kuYDkVRyMkg&list=PLTiv\_XWHnOZqFn">https://www.youtube.com/watch?v=kuYDkVRyMkg&list=PLTiv\_XWHnOZqFn</a> WQs393RhIMQoeCnwjhV&index=9
- "To the Rescue," Jet Propulsion Laboratory, 2017.
- "The Footsteps of Voyager," Jet Propulsion Laboratory, 2015. https://www.youtube.com/watch?v=4bim5EEwvVI
- "The Stuff of Dreams," Jet Propulsion Laboratory, 2014. https://www.youtube.com/watch?v=Qj 62FWfH78&t=13s
- "The Changing Face of Mars," Jet Propulsion Laboratory, 2013.
   <a href="https://www.youtube.com/watch?v=Qj">https://www.youtube.com/watch?v=Qj</a> 62FWfH78&list=PLTiv XWHnOZqFn WQs393RhIMQoeCnwjhV&index=5
- "The American Rocketeer," Jet Propulsion Laboratory, 2010.
   <a href="https://www.youtube.com/watch?v=qyphzmuzF18&list=PLTiv\_XWHnOZqFn">https://www.youtube.com/watch?v=qyphzmuzF18&list=PLTiv\_XWHnOZqFn</a> WQs393RhIMQoeCnwjhV&index=2
- "Explorer 1," Jet Propulsion Laboratory, 2008.
   <a href="https://www.youtube.com/watch?v=UupndWI0G">https://www.youtube.com/watch?v=UupndWI0G</a> I&list=PLTiv XWHnOZqFn WQs393RhIMQoeCnwjhV&index=3

Merchants of Doubt, Participant Media, 2014.

#### Website development

Served as initial writer and consultant for NASA's Webby award winning Climate Change website, 2007-2009. https://science.nasa.gov/climate-change/

### **Publications**

#### **Books**

W. Bernard Carlson and Erik M. Conway, eds., *Electrical Conquest* (Springer, 2024).

Naomi Oreskes and Erik M. Conway, *The Big Myth* (Bloomsbury USA: February 2023).

Erik M. Conway, Donald K. Yeomans, Meg Rosenburg, *A History of Near-Earth Objects Research* (NASA: July 2022).

- Erik M. Conway, *Exploration and Engineering: JPL and the Quest for Mars*, (Johns Hopkins University Press, 2015).
- Naomi Oreskes and Erik M. Conway, *The Collapse of Western Civilization: A View from the Future* (Columbia University Press, 2014).
- Naomi Oreskes and Erik M. Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming* (Bloomsbury USA, 2010).
- Erik M. Conway, *Atmospheric Science at NASA: A History* (Johns Hopkins University Press, 2008).
- Michael Reidy, Gary Kroll, and Erik M. Conway, *Science and Exploration* (ABC-Clio, 2007).
- Erik M. Conway, *Blind Landings: Faith, Progress, and Nature in the Development of Aircraft Landing Aids, 1918-1960* (Johns Hopkins University Press, 2006).
- Erik M. Conway, *High Speed Dreams: NASA and the Technopolitics of Supersonic Transportation*, 1945-1999 (Johns Hopkins University Press, 2005).

#### Research Articles

Naomi Oreskes and Erik M. Conway, "From Anti-Government to Anti-Science: Why Conservatives Have Turned Against Science," *Daedalus* (Fall 2022).

- Naomi Oreskes and Erik M. Conway, "The Magic of the Marketplace," in *Myth America: Historians Take on the Biggest Legends and Lies About Our Past*, eds. Kevin M. Kruse and Julian E. Zelizer (NY: Basic Books, 2022).
- Naomi Oreskes, Erik M. Conway and Charlie Tyson, "How American Businessmen Made Us Believe that Free Enterprise was Indivisible from American Democracy," in *The Disinformation Age: Politics, Technology, and Disruptive Communication in the United States*, eds. W. Lance Bennett and Steven Livingston, Cambridge University Press, 2021.
- "Designing Mars Sample Return, From Viking to the Mars Science Laboratory," Solar System Exploration at 50 Proceedings, NASA, 2022.
- Naomi Oreskes, Erik Conway, David J. Karoly, Joelle Gergis, Urs Neu, Christian Pfister, 2018. "The denial of global warming" in *Palgrave Handbook of Climate History* Sam White, Christian Pfister, and Franz Mauelshagen, eds. London: Palgrave Macmillan, 149-171.
- Erik M. Conway, "Simulation and Spacecraft Design: Engineering Mars Landings," *Technology and Culture*, October 2015.

- Erik M. Conway, "Bringing NASA Back to Earth," *Science and Technology in the Global Cold War*, eds. Naomi Oreskes and John Krige, MIT Press, 2014.
- Naomi Oreskes and Erik M. Conway, 2012. "Perspectives on global warming: A Book Symposium with Steven Yearley, David Mercer, and Andy Pitman." *Metascience*: 21:531-559. DOI 10.1007/s11016-011-9639-9.
- Erik Conway and Naomi Oreskes, 2011. "Communicating the science of climate change," Judy Lawrence, Alana Cornforth, Peter Barrett, eds., Climate Futures: Pathways for Society, New Zealand Climate Change Research Institute, December 2011.
- Erik M. Conway, "The International Geophysical Year and Planetary Science," in *Making Polar Science Global*, ed. Roger D. Launius, Palgrave McMillan, 2010.
- Erik M. Conway, "Earth and Planetary Science: A Symbiotic Relationship?" in *NASA's First 50 Years: Historical Perspectives*, ed. Steven J. Dick, NASA SP-1010-4704, 2010, pp. 563-586.
- Naomi Oreskes, and Erik Conway, 2008, "Challenging knowledge: How climate science became a victim of the Cold War," *Agnotology: The Making and Unmaking of Ignorance*, edited by Robert N. Proctor and Londa Schiebinger, Stanford University Press, pp. 55-89.
- Naomi Oreskes, Erik M. Conway, and Matthew Shindell, 2008. "From Chicken Little to Dr. Pangloss: William Nierenberg, global warming, and the social deconstruction of scientific knowledge," *Historical Studies in the Natural Sciences* 38 (1): 109–152.
- Erik M. Conway, "Satellites and Security: Space in Service to Humanity," in *Societal Impact of Spaceflight*, eds. Steven J. Dick and Roger D. Launius, NASA SP-2007-4801, 2007, pp. 267-288.
- Erik M. Conway and Mirella Flores, "Deep Space 1: A Revolution in Space Exploration," *Quest 14: 2* (2007), 41-51.
- Erik M. Conway, "The World According to GARP: Scientific Internationalism and the Construction of Global Meteorology, 1961-1980," Barton C. Hacker and Margaret Vining, eds., Science in Uniform, Uniforms in Science: Historical Studies of American Military and Scientific Interactions (Scarecrow Press, 2007).
- Naomi Oreskes and Erik M. Conway, "Deny, Deny, Deny: How to Sow Confusion over Climate Change," in *Agnotology: The Social Construction of Ignorance*, Robert Proctor and Londa Schiebinger, eds. (Stanford University Press, 2008).

- Erik M. Conway, "Drowning in Data: Satellite Oceanography and Information Overload in the Earth Sciences," *Historical Studies in the Physical and Biological Sciences* 37:1 (2006), 127-153.
- Hugh S. Gorman and Erik M. Conway, "Monitoring the Environment: Taking a Historical Perspective," *Environmental Monitoring and Assessment* (2005) 106:1-10, DOI: 10.1007/s10661-005-0755-0.
- "Echoes in the Grand Canyon: Public Catastrophes and Technologies of Control," History and Technology 20:2 (June 2004).
- "The Politics of Blind Landing," Technology and Culture (January 2001), 81-106.
- "Simon Lake" and "Carl Lukas Norden," biographical sketches in <u>American National</u> <u>Biography</u>, 1999.

### Essays, Reviews, and Posters

- Naomi Oreskes and Erik M Conway, "Faith in Markets," *Claremont Review of Books*, September 22, 2023, 23:4, pp. 6-8.
- Naomi Oreskes and Erik M Conway, "Out of Business," *RSA Journal*, January 1, 2023 169:2, pp. 31-33.
- Erik M Conway, "Digitizing and Automating Near-Earth Object Discovery: A Brief History, AGU Fall Meeting 2022, poster: NH12C-0298.
- Naomi Oreskes and Erik M Conway. "Trump's Big Lie is Getting Him Impeached," *The Los Angeles Times*, February 9, 2021. <a href="https://www.latimes.com/opinion/story/2021-02-09/impeachment-big-lie-donald-trump-republican-party-climate-change-tax-cuts">https://www.latimes.com/opinion/story/2021-02-09/impeachment-big-lie-donald-trump-republican-party-climate-change-tax-cuts</a>
- Naomi Oreskes and Erik M. Conway, 2020. "Trump's coronavirus failures? Thank Ronald Reagan," *The Los Angeles Times*, April 9, 2020, <a href="https://www.latimes.com/opinion/story/2020-04-09/op-ed-trumps-coronavirus-failures-thank-ronald-reagan">https://www.latimes.com/opinion/story/2020-04-09/op-ed-trumps-coronavirus-failures-thank-ronald-reagan</a>.
- Naomi Oreskes and Erik M Conway, "Unlimited Information is Transforming Society," *Scientific American*, September 2020.
- James Burke and Erik Conway, "The Jet Propulsion Laboratory and Planetary Exploration," Oxford Research *Encyclopedia of Planetary Science*, 2020.
- Erik M. Conway and Randal K. Jackson, "Communicating climate change to a Suspicious Public: How best to explain what we know?," Poster ED33B-3510, AGU annual meeting 2014.

- Erik M. Conway and Naomi Oreskes, "Why Conservatives Turned Against Science," *The Chronicle Review*, 9 November 2012.
- Naomi Oreskes and Erik M. Conway, "The Collapse of 'Western' Civilization: A View from the Future," *Daedalus* 142:1, Winter 2013.
- Scott Hubbard, "Exploring Mars: Chronicles from a Decade of Discovery," *Quest* 19:3 (2012), 59.
- "Climate in Context: A Review of Klima," *Metascience* 2012, doi:10.1007/s11016-012-9695-9.
- Naomi Oreskes and Erik Conway, H-Net Environment Review Response to "Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming," 2011.
- Naomi Oreskes and Erik M. Conway, 2010. "Where to from here?" The Climate Spectator, November 15, 2010.

http://www.climatespectator.com.au/commentary/where-here.

- Naomi Oreskes and Erik M. Conway, 2010. "Will we ever get action on climate change?" September 8, 2010. http://minnesota.publicradio.org/display/web/2010/09/08/oreskes/
- Naomi Oreskes and Erik M. Conway, 2010. "Distorting science while invoking science," Science Progress, August 10, 2010. <a href="http://www.scienceprogress.org/2010/08/distorting-science-while-invoking-science-2/">http://www.scienceprogress.org/2010/08/distorting-science-while-invoking-science-2/</a>.
- Naomi Oreskes and Erik M. Conway, 2010. Shadow Elite: Merchants of Doubt—Do scientific denialists have no shame? Huffington Post, June 17, 2010. <a href="http://www.huffingtonpost.com/naomi-oreskes">http://www.huffingtonpost.com/naomi-oreskes</a>
- Naomi Oreskes and Erik M. Conway, 2010. "Global Warming Deniers and their Proven Strategy of Doubt," Environment 360, June 10, 2010. <a href="http://e360.yale.edu/content/feature.msp?id=2285">http://e360.yale.edu/content/feature.msp?id=2285</a>
- Naomi Oreskes and Erik M. Conway, 2010. "Defeating the Merchants of Doubt," *Nature* 465: 686-687, June 10, 2010. http://www.nature.com/nature/journal/v465/n7299/full/465686a.html
- Naomi Oreskes and Erik M. Conway, 2010. "Attack on Climate Scientist just Latest in a Long Line." CNN.com June 9, 2010. http://edition.cnn.com/2010/OPINION/06/07/oreskes.climate.change/index.html

- Naomi Oreskes and Erik M. Conway, 2010. "Seeds of Doubt Against Climate Science," Los Angeles Times, June 8, 2010, print edition and on line at http://articles.latimes.com/2010/jun/08/opinion/la-oe-oreskes-20100608
- Naomi Oreskes and Erik M. Conway, 2010. "Climate Change Denial: A History," *The New Statesman*, June 1, 2010, on line at <a href="http://www.newstatesman.com/global-issues/2010/05/climate-scientists-science">http://www.newstatesman.com/global-issues/2010/05/climate-scientists-science</a>
- Naomi Oreskes and Erik M. Conway, 2010. "Scientists Who Favor Ideology over Fact," *The Washington Post*, May 28 2010, on line at <a href="http://voices.washingtonpost.com/political-bookworm/2010/05/scientists">http://voices.washingtonpost.com/political-bookworm/2010/05/scientists</a> who favor ideology.html
- Naomi Oreskes and Erik M. Conway, "Defeating the Merchants of Doubt," *Nature* (10 June 2010), 465: 686-687.
- David A. Mindell, "Between Human and Machine," Isis, 2008.
- Erik M. Conway, "From Rockets to Spacecraft: Making JPL a Place for Planetary Science," *Engineering and Science* 70 (4), 2007, pp. 2-10.
- William F. Ruddiman, "Plows, Plagues, and Petroleum: How Humans Took Control of Climate," *Journal of the History of Biology*, March 2007.
- J. Samuel Walker, "Three Mile Island: A Nuclear Crisis in Historical Perspective," *Environmental History*, 2006.
- Frank N. Laird "Solar Energy, Technology Policy, and Institutional Values," *Environmental History*, April 2003.
- Thomas Parramore, "First in Flight," Technology and Culture, January 2003.
- Janet Bednarek, "America's Airports," *Technology and Culture*, October 2002.
- Michael H. Gorn, "Expanding the Envelope: Flight Research at NACA and NASA," Public History, 2002.
- Johan Sanne, "Creating Safety in Air Traffic Control," *Technology and Culture*, July 2001.

#### **Recent Presentations**

- "The Astrobiological Imperative and Mission Planning at JPL," AGU Fall Meeting 2023, December 13, 2023.
- Erik M. Conway and Naomi Oreskes, "The Big Myth," Midwest Renewable Energy Association, June 24, 2023.

- Zocalo panel on distrust of science, Los Angeles County Natural History Museum, July 19, 2019. <a href="https://www.zocalopublicsquare.org/2019/07/19/distrust-of-science-is-as-american-as-apple-pie/events/the-takeawa">https://www.zocalopublicsquare.org/2019/07/19/distrust-of-science-is-as-american-as-apple-pie/events/the-takeawa</a>
- "Thinking about Climate Denial," Columbia History of Science Group, Friday Harbor Marine Laboratory, March 1, 2018.
- "Modes of Denial," Paris Festival of Ideas, November 12, 2017.
- "Using Models to Understand Near-Earth Object Hazards, AAAS Pacific Division annual meeting, June 22, 2017.
- "Merchants of Doubt: Turning Americans against Science after the Cold War," Glendale Community College, April 27, 2016; Bodega Marine Laboratory, October 19, 2016.
- "Boundary work on anti-science: A view from the climate war," AAAS annual meeting, January 21, 2016.
- "Dreaming of Rocks from Mars: Scientific Desires and the Engineering of Mars Missions, University of Minnesota, Twin Cities, April 22, 2016.
- "The Penumbra Falls," University of California, Santa Barbara, February 12, 2015; and University of Minnesota, Duluth, April 21, 2016.
- "Communicating Climate Science," American Society for Environmental History annual meeting, 2015.