Rachel Emma Rothschild

rrothsch@umich.edu | (508) 612-9498

Employment

University of Michigan School of Law Assistant Professor

July 2022 - Present

Institute for Policy Integrity, NYU School of Law Legal Fellow

March 2021 – June 2022

NYU Gallatin School of Individualized Study Assistant Professor and Faculty Fellow August 2015 – August 2017

Education

New York University School of Law, New York, NY

2020

J.D., cum laude, Furman Academic Scholars Program.

Yale University, New Haven, CT

2015

Ph.D., History, Program in the History of Science & Medicine. Awarded with Distinction.

M.A. and M.Phil.

2012

Princeton University, Princeton, NJ

2008

B.A., magna cum laude, History, Program in the History of Science.

Certificates in Environmental Studies and Creative Writing.

Publications

Book

Poisonous Skies: Acid Rain and the Globalization of Pollution, University of Chicago Press (2019).

Grounded in archival research spanning eight countries and five languages, as well as interviews with leading scientists from both government and industry, my book seeks to inform climate change policies by examining how societies grappled with another global environmental threat: acid rain. Acid rain was the first fossil fuel pollution problem found to cross international boundaries, prompting environmental regulators and scientists in the U.S., Canada, and Europe to cooperate on pollution controls. *Poisonous Skies* contributes to numerous legal and policy debates about environmental regulatory decisions that are highly dependent on scientific knowledge; for instance, the book challenges the notion that cost-benefit analysis and precautionary approaches to environmental law are as irreconcilable as their proponents often believe them to be.

Articles and Book Chapters

Unreasonable Risk: The Failure to Ban Asbestos and the Future of Toxic Substances Regulation (working draft, job market paper, 2021).

In 2016, Congress passed a bipartisan amendment to the Toxic Substances Control Act (TSCA). Many environmental groups, elected officials, and legal scholars had long ago concluded that TSCA was irredeemably flawed after the U.S. Court of Appeals for the Fifth Circuit struck down an Environmental Protection Agency (EPA) regulation banning asbestos in the 1991 case of *Corrosion Proof Fittings v. EPA*. The court vacated the ban largely because it found EPA had not sufficiently justified the regulation on cost-benefit grounds, and EPA never again attempted to prohibit a chemical currently in use. As bipartisan momentum grew to amend the law, the accepted wisdom about why EPA was unsuccessful in regulating asbestos led Democrats to lobby for one of the

biggest changes in TSCA: removing the requirement that EPA consider the costs and benefits of regulation when determining whether a chemical poses an "unreasonable risk." In exchange for amending the law, Republicans sought sweeping preemption provisions that would prevent states from controlling toxic pollutants.

Using archival documents that have never been viewed outside EPA, this paper argues that Democrats struck the wrong bargain in the 2016 amendments and left EPA vulnerable to the same pitfalls that plagued the asbestos ban. Disagreements with the Office of Management and Budget over whether EPA or OSHA should address asbestos and EPA's refusal to fully quantify harms and monetize benefits were largely responsible for the problems with issuing the regulation and marshalling enough support to withstand judicial review. In fact, EPA could have justified the ban on cost-benefit grounds if the agency had quantified and monetized the health benefits using information available to it at the time. The article concludes by offering several suggestions for how EPA can address the issues that led to the asbestos ban failure under the new 2016 TSCA amendments.

State Nuisance Law and the Climate Change Challenge to Federalism, 27 NYU ENV'T L. J. 412 (2019).

Several cities have recently brought nuisance suits against major fossil fuel companies, seeking damages to help pay for the costs of adapting to climate change. I identify significant legal precedent for allowing state nuisance suits over transboundary pollution harms and argue that courts should not find that federal law preempts these claims.

The Environment in the Atomic Age, OXFORD RES. ENCYCLOPEDIA AM. HIST. (Nov. 2017).

This article analyzes how nuclear technologies have influenced environmental science, law and policy. It argues that our ongoing attempts to harness the benefits of the atomic age will need to confront the substantial environmental and public-health issues that have plagued nuclear technology since its inception.

Détente from the Air: Monitoring Air Pollution in the Cold War, 57 TECH. & CULTURE 831 (2016).

This article examines one of the first environmental monitoring programs to study fossil fuel pollution across national boundaries and argues that it played an extremely important role in détente negotiations between the Soviet Union and Western governments during the Cold War. It also discusses how environmental monitoring systems can shape government strategies for controlling pollution.

Burning Rain: The Long-range Transboundary Air Pollution Project, in Toxic Airs: Body, Place, Planet in Historical Perspective (James Rodger Fleming & Ann Johnson eds., 2014).

This book chapter looks at the earliest attempts to study and regulate fossil fuel pollution under the auspices of the Organisation for Economic Cooperation and Development. It argues that Western governments turned to national regulatory approaches for addressing transboundary pollution problems like acid rain after proposals to resolve such disputes through national judicial systems failed to receive widespread support.

Environmental Awareness in the Atomic Age: Radioecologists and Nuclear Technology, 43 HIST. STUD. NAT. SCI. 492 (2013).

This article describes how the Atomic Energy Commission's investigations into radioactive fallout and waste spurred the first sustained scientific attention to environmental pollution. It then shows how these studies influenced Congressional approaches to managing nuclear weapons testing and nuclear power.

Essays and Other Publications

Will Cities Get Their Day in Court to Litigate Climate Change Harms?, BLOOMBERG L. (May 10, 2021).

There's a Part of Obama's Trade Deal that Could Become a Big Problem for Hillary Clinton, Business Insider (July 24, 2016).

The Turn toward Toxins: An Essay Review, 40 ENDEAVOUR 128 (Jun. 2016).

Comments on Fritz Davis, Banned: A History of Pesticides and the Science of Toxicology, H-Environment Roundtable Reviews (Sep. 2015).

Acid Wash: How Cold War Politics Helped Solve a Climate Crisis, FOREIGN AFFAIRS (Aug. 24, 2015).

Populations on the Brink: Reducing Vulnerability to Climate Change Can Reduce a Population's Vulnerability to Poverty, EARTH (Jan. 2009) (second author).

Fellowships, Awards and Honors

NYU School of Law, Environmental Law Award	2020
Robert McKay Scholar (Top 25% of students at NYU law after four semesters)	2019
Furman Academic Scholarship (Full tuition scholarship to NYU law)	2017 – 2020
Council on Foreign Relations International Affairs Fellowship (Declined)	2017
Hans Gatzke Prize, Yale University (Outstanding Dissertation in European History)	2015
Princeton Society of Fellows Finalist	2015
Science History Institute Rumford Scholarship	2013
Society for the History of Technology (SHOT) Joan Cahalin Robinson Prize	2012
American Meteorological Society Graduate Fellowship in History of Science	2012
American-Scandinavian Foundation Research Grant	2012
Yale MacMillan Center International Dissertation Research Grant	2012
National Science Foundation Graduate Research Fellowship	2010 – 2015
Jonathan Bourne Fellow – Yale Graduate School	2009
The Horace H. Wilson '25 Senior Thesis Prize in the History of Science, Medicine	2008
and Technology, Princeton University	
Environmental Studies Thesis Prize (Honorable Mention), Princeton University	2008
Selected Talks and Conference Presentations (Invited talks indicated by *)	

^{*} Panelist, "Regulation and the World Economy," Global Legal Histories: A Symposium, Shelby Cullom Davis Center & Fung Global Fellows Program, Princeton University, March 6-7, 2020.

Panel Organizer, "Toxic Knowledge in a Global Context: Science and the Regulation of Chemical Risks," and Presenter "Globalizing Toxic Threats to Health," History of Science Society Annual Meeting, Atlanta, Georgia, November 3-6, 2016.

 ^{* &}quot;Poisonous Skies: Acid Rain and the Globalization of Pollution,"
Natural Resources Defense Council, July 24, 2019
NYU Uncommon Salon, March 20, 2018.

^{* &}quot;Energy Industry Research and the Politics of Doubt," Harvard Business School, Business, Government and International Economy Unit, Cambridge, MA, January 24, 2017.

^{* &}quot;Environmental Expertise in a Global Commons." Futures Past: Experts, Development and Sustainability. Institute for Advanced Sustainability Studies, Potsdam, Germany, April 28-29, 2016.

- * "Environmental Science and International Governance at the United Nations, European Communities, and Organisation for Economic Cooperation and Development," *Organizing Science for Humanity, from the World Brain to the World Bank*, Columbia University Committee on Global Thought, February 12, 2016.
- *"History for a Toxic Planet," McMaster University, History Department Colloquium, January 14, 2016.
- *"Transnational Air Pollution and Environmental Diplomacy," *Nature Protection, Environmental Policy and Social Movements in Communist and Capitalist Countries*, German Historical Institute, Washington D.C., May 29-30, 2015.
- * "Provocations: New Directions in Energy and Environmental History," Joint Center for History and Economics, Harvard University, November 14, 2014.
- * "The European Air Chemistry Network and the Construction of a 'Global' Climate," Science History Institute, Philadelphia, Pennsylvania, October 21, 2014.
- "Beyond National Needs: Acid Rain and Environmental Protection in Europe," Panel: The Toxic Century: Discovering & Quantifying Poisons in the Environment, American Society for Environmental History Annual Meeting, San Francisco, CA, March 12-16, 2014.
- * "Modeling without 'Target' Maps: Scientific Cooperation on Atmospheric Pollution in the Cold War," STS Circle, Program on Science, Technology and Society, Harvard University, February 10, 2014.
- * "Scientific Uncertainty and 'Sufficient Knowledge': The Development of a European-wide Research Program on Acid Rain," Cambridge University, Department of History and Philosophy of Science, Twentieth Century Think Tank, February 21, 2013.
- * "Meteorology in the 'New Era' of Environmental Diplomacy," American Meteorological Society Annual Meeting, Austin, Texas, January 8, 2013.

"Détente from the Air: Monitoring Pollution and European Integration in the Cold War," Panel: Airy Curtains, Society for the History of Technology, Annual Meeting, Copenhagen, Denmark, October 4-7, 2012. *Awarded Joan Cahalin Robinson Prize.

Panel Organizer, "Costs and Benefits: Life Scientists and the Assessment of Wartime Technologies, from 1945 to the Vietnam War," Presented Paper "Environmental Consciousness in the Cold War: Radioecologists, Nuclear Technology, and the Atomic Age." History of Science Society Annual Meeting. Cleveland, Ohio, November 3-5, 2011.

"Burning Rain in the Cold War: Transboundary Air Pollution, Atmospheric Science, and the Development of International Law and Policy," *Chemical Weather and Chemical Climate: Body, Place, Planet in Historical Perspective,* Science History Institute, Philadelphia, Pennsylvania, March 31-April 2, 2011.

Academic and Professional Service

Reviewer, Environmental History, Isis, Scandinavian Journal of History, and The British Journal for the History of Science.

Executive Editor, NYU Environmental Law Journal, 2019-2020; Staff Editor, 2018-2019.

Coordinator, New York City History of Science Consortium Lecture Series and Workshop, 2015-2017.

Organizing Committee Member, Yale University's Environmental History Northeast Regional Conference, "Two Kingdoms: New Perspectives on Flora and Fauna in Environmental History." 2011-2012.

Coordinator, Yale University's Environmental History Colloquium, 2011-2012.

Co-Coordinator, Yale University's History of Science and Medicine Holmes Workshop, 2010-2011.

Other

Admitted to the New York Bar

Language Skills: French (proficient), German, Norwegian and Swedish (reading knowledge)