## Research proposal

A HUCE Environmental Fellowship would allow me to answer important questions about environmental rulemaking in the United States, building on Harvard initiatives like the Regulatory Rollback Tracker and Professor Carpenter’s work on inequality in agency rulemaking.

If the United States sees landmark climate legislation, it will inspire, indeed require, a massive amount of agency rulemaking. A green new deal, carbon pricing scheme, or plan to mitigate solar radiation could each task dozens of agencies with writing the implementing rules. If instead, legislative gridlock continues, US climate policy will continue to be made as it has for decades–by executive branch agencies interpreting and reinterpreting old landmark statutes (Layzer [2012](#ref-Layzer2012); Freeman [2014](#ref-Freeman2014)). For example, in just one of many executive orders, President Obama ordered 30 agencies, from the Army Corps of Engineers to the Department of Agriculture, to make ‘changes to policies, programs, and regulations…to manage climate risks’ leading to thousands of pages of new legal requirements. Rulemaking is the executive branch’s primary policymaking vehicle under divided government and is even more prolific under unified government (Yackee and Yackee [2009](#ref-Yackee2009RegGov)). Lobbying the bureaucracy is thus a major way to affect policy (Yackee [2006b](#ref-Yackee2006JPART), [2019](#ref-Yackee2019)), for regulated interests (Gordon and Rashin [2018](#ref-Gordon2018); J. W. Yackee and Yackee [2006](#ref-Yackee2006JOP)), activists (Judge-Lord [2019](#ref-Judge-Lord2019)), and even legislators (Judge-Lord, Grimmer, and Powell [2018](#ref-Judge-Lord2018APSA); Powell, Judge-Lord, and Grimmer [2020](#ref-Powell2020); Ritchie [2018](#ref-Ritchie2018)).

Rulemaking is a critical part of US policy process and a major focus of environmental law but understudied in political science. While political science and sociology research by Bartels ([2016](#ref-Bartels2016)), Baumgartner ([2009](#ref-Baumgartner2009)), Hacker and Pierson (2010), Gilens (2012), Skocpol et al. ([2012](#ref-Skocpol2012)), and Schlozman, Verba, and Brady ([2012](#ref-Schlozman2012)), among others, has documented different relationships between economic and political inequality. These studies have not, generally, focused upon specific policy mechanisms of unequal influence. Scholars of political inequality have focused on legislation rather than the agency rules that fill environmental and administrative law textbooks. Because rulemaking is understudied, environmental politics have often been overlooked in political science.

This broader trend in political science holds for the study of environmental politics. To the extent that students of American Politics have answered calls to study the climate crisis (Javeline [2014](#ref-Javeline2014)), work has advanced our understanding of public opinion (Mildenberger and Tingley [2017](#ref-Mildenberger2015)), explaining variation among states and local governments (Stokes [2020](#ref-Stokes2020)), and failed efforts in Congress (Skocpol [2013](#ref-Skocpol2013); Mildenberger [2020](#ref-Mildenberger2020)).

With the large share of rules across agencies that target environmental problems and the even larger share of advocacy efforts by environmental groups, the politics of environmental rulemaking offers an opportunity to policy influence across venues. Indeed, over 80% of public comments on proposed rules are mobilized by groups lobbying in coalition with environmental groups like the Sierra Club and NRDC, who are among the most active groups in rulemaking after regulated businesses (Judge-Lord [2019](#ref-Judge-Lord2019)). The prevailing wisdom is that rulemaking is dominated by business interests (J. W. Yackee and Yackee [2006](#ref-Yackee2006JOP); Yackee [2015](#ref-Yackee2015JPART)), but studies of environmental rulemaking yield mixed results. One recent study focused on EPA rulemaking found little effect of public comments on policy (Balla et al. [2018](#ref-Balla2018)), but another found that public comments raising environmental justice concerns are associated with agencies addressing concerns where they had previously ignored them (Judge-Lord [2018](#ref-Judge-Lord2018)).

Major scholarship on rulemaking has focused on health and safety regulation ([Carpenter1998;@Carpenter2002](mailto:Carpenter1998;@Carpenter2002); Carpenter [2003](#ref-Carpenter2003), [2004](#ref-Carpenter2004), [2014](#ref-Carpenter2014); Carpenter and Grimmer [2009](#ref-Carpenter2009); Yackee [2013](#ref-Yackee2013)) and financial regulation (Carpenter, [n.d.](#ref-Carpenter2011); Libgober and Carpenter [2018](#ref-LibgoberCarpenter2018); Libgober [2019](#ref-LibgoberQJPS))

Collaborating with Harvard faculty studying government, environmental and administrative law, and political methodology would allow me to launch a similarly ambitious effort to understand the politics of environmental rulemaking: Which groups are empowered and disempowered by existing institutions? How have decades of agency rules interpreting and reinterpreting environmental statutes shape the political terrain on which US climate policy is, and will be, made? Do findings from studies of failed legislative efforts hold for rulemaking, or do the politics of rulemaking empower different interests?

**Research questions building on bureaucratic politics research:**

* How can the influence of regulated businesses and environmental groups on rules be measured systematically? (Following the concept of “policy influence” articulated in Yackee ([2014](#ref-Yackee2014capture))]
* Are business interests systematically advantaged over environmental interests in rulemaking? If so, is this influence limited to when they lobby uncontested (J. W. Yackee and Yackee [2006](#ref-Yackee2006JOP)), or are groups with superior resources also more effective when opposed by environmental groups?
* How unified are the lobbying messages sent by regulated businesses and environmental groups to regulators during rulemaking? Does lobbying unity correlate with regulatory policy change as suggested by Nelson and Yackee ([2012](#ref-Nelson2012)), or are is policy change more a function of coalition diversity as suggested by Dwidar ([2019](#ref-Dwidar2019))?
* Does the attention of legislators to rulemaking constrain interest group influence (Yackee [2006a](#ref-Yackee2006BJPS)), or is it mobilized by interest groups (Powell, Judge-Lord, and Grimmer [2020](#ref-Powell2020))

**Research questions building on environmental politics research:**

* Skocpol ([2013](#ref-Skocpol2013)) finds that efforts to pass climate legislation failed due to a lack of broad-based public pressure. Is this also true in rulemaking?

*Hypothesis:* (1) The scale of policy change in environmental regulation correlates with the scale of public pressure. Rulemaking efforts with little public pressure are more likely to be withdrawn or rolled back.

* Layzer ([2012](#ref-Layzer2012)) finds deregulatory efforts have dominated environmental rulemaking, in part by shaping the ideas and discourse.

*Hypothesis:* In environmental rulemaking, (1) Final rules tend to move in a deregulatory direction relative to the draft rule and (2) Language articulated by deregulatory interests are more likely to be added to final rules (or, more precisely, in the preambles to final rules, where agencies justify their decisions and respond to commenters).

* Do coalitions between businesses and unions that have blocked legislative efforts on climate issues (Mildenberger [2020](#ref-Mildenberger2020)) also lobby together in rulemaking?

*Hypothesis:* High-profile rulemaking (e.g., those with over 1000 public comments) will see similar political formations to legislative politics, but most rulemakings (less visible), influence will hinge on resources rather than electoral coalitions. Elected official interventions in rulemaking will resemble the legislative politics, but because legislators are not the primary policymakers, they will more likely intervene to stop a regulatory agenda (in Democratic administrations) or deregulatory agenda (in Republican administrations).

## Data on agency rulemaking and public comments

The dataset I have collected for my dissertation uniquely allows such a cross-agency study. With millions of comments on hundreds of thousands of draft and final rules across over a hundred agencies, I have the raw data required to map the influence of various actors across venuses of environmental policymaking. My data include comments from regulated businesses, environmental activists, and elected officials.

A first step will merge my data with the Environmental and Energy Law Program’s Regulatory Rollback Tracker and similarly detailed trackers so that my data and analysis can directly add to those efforts (I have already merged my data with the Sabin Center’s Climate Deregulation Tracker). A deep study of the politics behind these rules (and their likely reversal under a Biden administration) was out of the scope of my dissertation but would be a core focus of my research at HUCE.

## Research design

This research will require theorizing and qualitative and quantitative methods. It will use established hand-coding methods and cutting edge computational and statistical approaches to the study of influence across in policy texts.

The first task in the proposed project will be to establish criteria in order to subset my broader dissertation data for a deeper study of environmental rules. As Obama’s executive orders illustrate, limiting the scope of research to traditional environmental agencies is too narrow. The US response to climate change included agriculture, public lands, and infrastructure policy long before EPA began regulating greenhouse gasses under in Clean Air Act. Indeed, environmental groups are just as active on public lands and energy rules as those from agencies with “environmental” in their name. Defining the proper scope of environmental policy in the Anthropocene is a challenge. Residence in HUCE will be an excellent place from which to engage scholars from a range of disciplines on what policies (out of the full scope of federal rulemaking) merit inclusion. For example, to study environmental justice issues in rulemaking, I used both a narrow subset of rules (those were rules or comments explicitly discussed environmental justice) and a broader subset (all rules at agencies that published an environmental justice analysis on any rule).

**Inequality in participation:** The first research product will be descriptive: who participates in environmental policymaking? Building on recent work on inequality in Financial rulemaking following the 2008 financial crisis (Carpenter, [n.d.](#ref-Carpenter2011); Libgober and Carpenter [2018](#ref-LibgoberCarpenter2018); Libgober [2019](#ref-LibgoberQJPS)), we will study several dimension of inequality in environmental rulemaking.

**Inequality in representation:** The second task is to identify the societal and ideological constituencies that various groups lobbying in rulemaking represent. This may take several forms.

We can estimate the racial distribution of commenters using the statistical probability with which surnames are associated with racial groups identified in the US Census. For example, even people using environmental justice and environmental racism rhetoric are overwhelmingly white (Judge-Lord [2018](#ref-Judge-Lord2018)). This is not to say these concerns are not sincere, merely to establish who is mobilized into the politics of rulemaking resembles broader biases in political participation (Verba and Nie [1987](#ref-Verba1987)).

Groups that lobby in rulemaking claim to represent constituencies ranging from small businesses and coal workers to outdoor enthusiasts and endangered species. Building on concepts like second-order representation [Seifter2016UCLA] and surrogate representation (Mansbridge [2003](#ref-Mansbridge2003)), a key qualitative part of this project will be to investigate and categorize representational claims made in environmental rulemaking. As Layzer ([2012](#ref-Layzer2012)) and others have found, deregulatory interest groups often claim to represent environmental interests. Likewise, national advocacy groups like the Sierra Club often claim to represent the frontline communities in rulemaking (Judge-Lord [2018](#ref-Judge-Lord2018)). For example, we might classify the Sierra Club’s advocacy on the Clean Power Plan as sincere efforts toward surrogate representation of people who live near coal plants while lacking second-order representation because those individuals lack power within the organization. The American Enterprise Institute’s claims to represent the same people as neither sincere surrogate representation nor second-order representation.

In addition to identifying the people behind various advocacy campaigns, qualitative and quantitative analysis of the text of rules and public comments can identify the ideas at stake–the topics of debate (Chuang et al. [2014](#ref-Chuang2014); Mildenberger and Tingley [2017](#ref-Mildenberger2015); Roberts, Stewart, and Tingley [2015](#ref-Roberts2015)), groups represent ideas about human relationships with the rest of our biotic community. The extent to which the politics of agency rulemaking center on anthropocentric concerns for different human values and values transcending human material interests (like endangered species)

Extending my dissertation work, which uses statistical models of text to identify lobbying coalitions (e.g., the many groups and individuals who supported or opposed regulation), I will use topic models to explore the dimensions of issues raised by commenters (similar to the aim of Mahoney ([2007](#ref-Mahoney2007JPP)) with more advanced modeling methods), providing the raw content for to analyze both policy influence broadly, and the contestations and evolutions of key legal issues and concepts (Carpenter and Tobbell 2011).

**Inequality in policy influence:** Having identified the participants and the stakes in rulemaking (both for people and potentially non-anthropocentric ideas), the next step will be to measure the influence of competing coalitions and ideas. To do this, I turn again to recent advances in statistical text analysis, many of them pioneered at the Harvard Department of Government and by collaborators of Carpenter (Grimmer [2010](#ref-Grimmer2010); Grimmer and King [2011](#ref-Grimmer2011), Grimmer and Stewart 2013) and advanced through my work with Carpenter, Yackee, Libegober, and Rashin’s work on Dodd-Frank rulemaking (building on Rashin [2017](#ref-Rashin2017)) and, separately, my own work on measuring influence across policy texts (Judge-Lord [2017](#ref-Judge-Lord2017)).

The knowledge gained through a study of climate-relevant rulemaking would inform policy, advocacy strategies, and perhaps even reforms to the rulemaking process itself. Legal scholars in the Administrative Conference of the United States and several executive branch agencies are actively exploring reforms to the notice and comment process. Large scale studies of inequality and influence in American Politics have yet to focus on environmental rulemaking, despite the massive and consequential policies made in this area. To the extent that political scientists have focused on environmental rulemaking, research has focused on the EPA. While important, many other agencies make critical policy decisions, and truly understanding climate policy requires studying the politics of rulemaking across agencies.

## Qualifications to conduct this research

This research would leverage the dataset that I compiled for my dissertation and my environmental policy experience in local government, UN Food and Agriculture Organization. I have long been invested in interdisciplinary environmental policy research and practice, serving leadership positions in the New Directions in Environmental Law conference, the Association for Environmental Studies and Sciences, and the Science, Technology, and Environmental Politics Section of the American Political Science Association and helping to form an environmental studies certificate at Reed College and co-founding the Environmental Law student interest group at Yale’s School for the environment. In short, environmental policy has been at the center of my career from the beginning. While my dissertation focuses on bureaucratic policymaking more broadly, a focused study of environmental rulemaking is the logical next step in my research agenda.

Professor Carpenter is the ideal mentor for this research. As a leading scholar of bureaucratic policymaking, Carpenter has a detailed understanding of agency rulemaking and scholarship on bureaucratic policymaking that includes both deep historical work and cutting-edge statistical analysis. His first book (Carpenter [2001](#ref-Carpenter2001)) includes a canonical history of bureaucratic politics at the Forest Service and Department of Interior, two key agencies for environmental policymaking, and his subsequent work has included research on the Farm Extension Service (Carpenter [2002](#ref-Carpenter2002)) and other relevant agencies. Combined with his broad knowledge of the field, this deep substantive expertise will anchor the research proposed above in a rich qualitative.

# References

Balla, Steven J, Alexander R Beck, William C Cubbison, and Aryamala Prasad. 2018. “Where’s the Spam? Mass Comment Campaigns in Agency Rulemaking.”

Bartels, Larry M. 2016. *Unequal Democracy: the Political Economy of the New Gilded Age*. Princeton University Press.

Baumgartner, Frank R. 2009. *Lobbying and Policy Change: Who Wins, Who Loses, and Why*. University of Chicago Press.

Carpenter, Daniel. 2014. *Reputation and power: organizational image and pharmaceutical regulation at the FDA*. Princeton University Press.

Carpenter, Daniel, and Justin Grimmer. 2009. “RWJF Scholars in Health Policy Research Program: The Downside of Deadlines,” no. February.

Carpenter, Daniel P. 2003. “Why Do Bureaucrats Delay? Lessons from a Stochastic Optimal Stopping Model of Agency Timing, with Applications to the FDA.” *Politics, Policy, and Organizations Frontiers in the Scientific Study of Bureaucracy*, 23–40.

———. 2004. “The political economy of FDA drug review: processing, politics, and lessons for policy.” *Health Affairs* 23 (1): 52–63.

Carpenter, Daniel P. n.d. “The Contest of Lobbies and Disciplines: Financial Politics and Regulatory Reform in the Obama Administration.” In *Reaching for a New Deal: Obama’s Agenda and the Dynamics of U.s. Politics*, edited by Lawrence Jacobs and Theda Skocpol. New York: Oxford University Press.

———. 2001. *The forging of bureaucratic autonomy: Reputations, networks, and policy innovation in executive agencies, 1862-1928*. Princeton University Press.

———. 2002. “Groups, the Media, Agency waiting Costs, and FDA Drug Approval.” *American Journal of Political Science*, 490–505.

Chuang, Jason, John D Wilkerson, Rebecca Weiss, Dustin Tingley, Brandon M Stewart, Margaret E Roberts, Forough Poursabzi-Sangdeh, et al. 2014. “Computer-Assisted Content Analysis: Topic Models for Exploring Multiple Subjective Interpretations.” In, 8–13. Montreal: Advances in Neural Information Processing Systems Workshop on Human-Propelled Machine Learning. <http://scholar.princeton.edu/sites/default/files/bstewart/files/nipshpml2014.pdf>.

Dwidar, Maraam. 2019. “‘(Not so) Strange Bedfellows? Lobbying Success and Diversity in Interest Group Coalitions’.” In. Southern Political Science Association Annual Conference.

Freeman, Jody. 2014. “Old Statutes, New Problems.” *University of Pennsylvania Law Review* 163 (1): 1–94.

Gordon, Sanford C. Gordon, and Steven Rashin. 2018. “Citizen Participation in Policymaking:Evidence from Medicare Fee Schedule Revisions.” <https://www.dropbox.com/s/6ydopca7mx8ugqt/Gordon-Rashin-Private-Influence-10-24.pdf?dl=0>.

Grimmer, Justin. 2010. “A Bayesian Hierarchical Topic Model for Political Texts: Measuring Expressed Agendas in Senate Press Releases.” *Political Analysis* 18: 1–35. <https://doi.org/10.1093/pan/mpp034>.

Grimmer, Justin, and Gary King. 2011. “General purpose computer-assisted clustering and conceptualization.” *Proceedings of the National Academy of Sciences of the United States of America* 108 (7): 2643–50. <https://doi.org/10.1073/pnas.1018067108>.

Javeline, Debra. 2014. “The Most Important Topic Political Scientists Are Not Studying: Adapting to Climate Change.” *Perspectives on Politics* 12 (June): 420–34. <https://doi.org/10.1017/S1537592714000784>.

Judge-Lord, Devin. 2017. “Measuring change and influence in budget texts.” In. American Political Science Association Annual Conference.

———. 2018. “Social Movements, Science, Bureaucracy, and Democracy: The Impact of Environmental Justice Campaigns in Rulemaking.” In.

———. 2019. “‘Why Do Agencies (Sometimes) Get so Much Mail?’.” In. Southern Political Science Association Annual Conference.

Judge-Lord, Devin, Justin Grimmer, and Eleanor Powell. 2018. “How Legislators Actually Spend Their Time: Constituents, Donors, or Policy.” In. American Political Science Association Annual Conference.

Layzer, Judith. 2012. *Open for Business: Conservatives’ Opposition to Environmental Regulation*. MIT Press.

Libgober, Brian. 2019. “‘Meetings, Comments, and the Distributive Politics of Administrative Policymaking’.” In. Southern Political Science Association Annual Conference.

Libgober, Brian, and Daniel Carpenter. 2018. “Lobbying with Lawyers: Financial Market Evidence for Banks’ Influence on Rulemaking.” <http://equitablegrowth.org/working>.

Mahoney, Christine. 2007. “Lobbying Success in the United States and the European Union Author.” 1. Vol. 27. <https://doi.org/https://doi.org/10.1017/S0143814X07000608>.

Mansbridge, Jane. 2003. “Rethinking Representation.” *American Political Science Review* 97 (4). <http://eurogender.eige.europa.eu/sites/default/files/3593021.pdf>.

Mildenberger, Matto. 2020. *Carbon Captured: How Business and Labor Control Climate Politics*. Cambridge, MA: MIT Press.

Mildenberger, Matto, and Dustin Tingley. 2017. “Beliefs about Climate Beliefs: Second-Order Opinions in the Climate Domain.” *British Journal of Political Science*.

Nelson, David, and Susan Webb Yackee. 2012. “Lobbying Coalitions and Government Policy Change: An Analysis of Federal Agency.” *Source: The Journal of Politics* 74 (2): 339–53. <https://doi.org/10.1017/s0022381611001599>.

Powell, Eleanor Neff, Devin Judge-Lord, and Justin Grimmer. 2020. “Campaign Contributions and Bureaucratic Oversight: A Case Study of the Federal Energy Regulatory Commission.” In.

Rashin, Steven. 2017. “Private Influence on the Regulatory Process: Evidence from Comments on Sec Rules.” In. Midwest Political Science Association Annual Conference.

Ritchie, Melinda N. 2018. “Back-Channel Representation: A Study of the Strategic Communication of Senators with the US Department of Labor.” <https://doi.org/10.1086/694395>.

Roberts, Margaret E, Brandon M Stewart, and Dustin Tingley. 2015. “stm: R Package for Structural Topic Models.” *Journal of Statistical Software* VV (2014). <https://doi.org/10.18637/jss.v000.i00>.

Schlozman, Kay Lehman, Sidney. Verba, and Henry E. Brady. 2012. *The Unheavenly Chorus: Unequal Political Voice and the Broken Promise of American Democracy*. Princeton University Press.

Skocpol, Theda. 2013. “Naming the Problem: What It Will Take to Counter Extremism and Engage Americans in the Fight Against Global Warming.”

Skocpol, Theda, Larry M Bartels, Mickey Edwards, Suzanne Mettler, and ebrary Inc. 2012. “Obama and America’s political future.” Cambridge, MA: Harvard University Press, <http://site.ebrary.com/lib/yale/Doc?id=10593873>.

Stokes, Leah. 2020. *Short Circuiting Policy: Interest Groups and the Battle over Clean Energy and Climate Policy in the American States*. Oxford University Press.

Verba, Sidney., and Norman H. Nie. 1987. *Participation in America: political democracy and social equality*. University of Chicago Press. [https://books.google.com/books?id=9K5fdvfmGREC{\&}dq=verba+and+nie+participation+in+america{\&}lr={\&}source=gbs{\\_}navlinks{\\_}s](https://books.google.com/books?id=9K5fdvfmGREC%7B\&%7Ddq=verba+and+nie+participation+in+america%7B\&%7Dlr=%7B\&%7Dsource=gbs%7B\_%7Dnavlinks%7B\_%7Ds).

Yackee, Jason Webb, and Susan Webb Yackee. 2006. “A Bias Towards Business? Assessing Interest Group Influence on the U.S. Bureaucracy.” *Journal of Politics* 68 (1): 128–39. <https://doi.org/10.1111/j.1468-2508.2006.00375.x>.

———. 2009. “Divided government and US federal rulemaking.” *Regulation & Governance* 3 (2): 128–44. <https://doi.org/10.1111/j.1748-5991.2009.01051.x>.

Yackee, Susan Webb. 2006a. “Assessing inter-institutional attention to and influence on government regulations.” *British Journal of Political Science* 36: 723–44. <https://doi.org/10.1017/S000712340600038X>.

———. 2006b. “Sweet-talking the fourth branch: The influence of interest group comments on federal agency rulemaking.” *Journal of Public Administration Research and Theory* 16 (1): 103–24. <https://doi.org/10.1093/jopart/mui042>.

———. 2013. “Assessing Regulatory Participation by Health Professionals: A Study of State Health Rulemaking.” *Public Administration Review* 73: S105–S114. <https://doi.org/10.1111/puar.12080>.

———. 2014. “Reconsidering Agency Capture During Regulatory Policymaking.” *Preventing Regulatory Capture: Special Interest Influence and How to Limit It*, 292–325.

———. 2015. “Participant Voice in the Bureaucratic Policymaking Process.” *Journal of Public Administration Research and Theory* 25 (2): 427–49. <https://doi.org/10.1093/jopart/muu007>.

———. 2019. “The Politics of Rulemaking in the United States.” *Annual Review of Political Science* 22 (1). <https://doi.org/10.1146/annurev-polisci-050817-092302>.