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Gabriel Durbin Lewis

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Education

Ph.D. in Economics, University of Massachusetts Amherst, May 2024 (expected)
(Major Fields: Labor, Econometrics, Microeconomics)

M.A. in Economics, University of Massachusetts Amherst, Sept 2020
(Major Fields: Microeconomics, Labor, Econometrics)

B.A. in Economics, Whitman College, May 2014
(Major Field: Economics; Minor Fields: Mathematics)

Primary Fields

- Labor Economics
- Econometrics
- Microeconomics

Dissertation

Title: Essays on Worker Voice and Bayesian Econometrics

Committee:

- Ina Ganguli Department of Economics
- Arindrajit Dube Department of Economics
- Maryclare Griffin Department of Mathematics and Statistics

Papers

- Lewis, Gabriel. In Progress. Worker Voice, Surveillance, and Remote work: Results from a Survey Experiment. (Job Market Paper)
- Lewis, Gabriel. In Progress. Heteroskedasticity and Cluster-Robustness from a Bayesian Perspective. Working Paper.
- Freeman, Richard, Ina Ganguli, and Gabriel Lewis. In Progress. Working-From-Home to the Rescue? WFH in the COVID-19 Pandemic Recession and Recovery. Working Paper.
- Dube, Arin, Ina Ganguli, and Gabriel Lewis. In Progress. Willingness-to-Pay for Workplace Health and Safety during COVID-19. Working Paper.
- Brown, Jordan. Gabriel Lewis. 2023. Inferring shell-fishing seasonality from the isotopic composition of biogenic carbonate: A Bayesian approach. CAA2023 Conference Proceedings. <https://doi.org/10.5281/zenodo.8401325>.

Work Experience

Research Assistant, Applied Economics Clinic, Oct 2021 – May 2022

- Wrote environmental and economic policy analyses and reports, commissioned by state and national regulators.

Research Assistant, University of Massachusetts, Jan 2021 – May 2021

- Developed Bayesian methods to account for heteroskedasticity and clustering in regression.

Research Assistant, National Bureau of Economic Research, Sept 2019 – May 2020

- Cleaned and analyzed data from over a dozen real-world datasets, including U.S. Census databases, web-scraped documents, and a novel survey experiment. Presented results to colleagues and research partners.

Research Assistant, METRICS Institute at Stanford University, Aug 2015 – Aug 2016

- Collected and analyzed data for a Bayesian meta-study of hypothesis testing in medical literature, writing R code to parse large numbers of documents.

Research Intern, Palo Alto Medical Foundation, Jan 2015 – March 2015

- Evaluated efficacy of new patient care technologies: using data from over 90,000,000 patient records, conducted data analyses and summaries in R and Excel. Reviewed literature on integrated patient care strategies.

Policy Intern, Santa Clara Valley Audubon Society, Aug 2015 – Aug 2016

- Researched local environmental policies, presenting input at city planning meetings, resulting in changes of city programs.

Research Interests

- Labor economics and labor history, particularly issues pertaining to worker voice and representation.
- Technological change and its effects on economic inequality
- Econometrics and causal inference, from Bayesian and frequentist perspectives.

Teaching Experience

Statistics and Data Research Counselor, Spinelli Quantitative Learning Center at Smith College, Sept 2023 – Present

- Provide support, including tutoring and research consultation, for students and faculty in any academic work relating to probability, statistics, data science, and data management. Conduct and support institutional research.

Teaching Assistant, Department of Economics at the University of Massachusetts Amherst, Jan 2023 – May 2023

- Courses: Intermediate Macroeconomics (Spring 2023)

Teaching Assistant, Department of Economics at the University of Massachusetts Amherst, Jan 2018 – Dec 2020

- Courses: Game Theory (Spring 2018), Economics and Ethics (Fall 2018), Game Theory [Graduate-level] (Spring 2019), Econometrics [Graduate-level] (Fall 2020)

Teaching Interests

Labor Economics

- Labor history and modern institutions
- Contemporary theories of the labor market: monopsony, incomplete contracts
- Empirical findings and their implications for labor theory and policy

Econometrics

- Applications, particularly to socially relevant outcomes
- Theory
- Bayesian methods
- Causal inference: theory and modern methods

Economics, Ethics, and Social Choice

- Normative and positive economics
- Definitions, measurement, and comparisons of utility, wellbeing, and capabilities
- Social choice, from Arrow's impossibility theorem to Ostrom's practical possibilities

Awards, Fellowships, and Grants

Economics Department and SBS Dean's Summer Research Fellowship, University of Massachusetts Amherst.
A \$4,200 grant to support dissertation research.

Dissertation Fellowship, Political Economy Research Institute.
A fellowship with a \$12,000 stipend to support the completion of promising dissertation work.

University Fellowship, University of Massachusetts Amherst.
A one-semester fellowship with a \$9,000 stipend to support academic studies.

James F. Shepherd Award, Whitman College.
Instituted to recognize each year's outstanding senior student in the Economics Department.

Conferences and Presentations

- The Work-From-Home Shock to Labor Markets, *NBER*, Nov 2023
 Paper presented: *Preferences for Remote Work and Workplace Health Precautions: Results from Two Survey Experiments*
- European Seminar on Bayesian Econometrics, *ESOBE*, Oct 2022
 Paper presented: *Heteroskedasticity and cluster-robust regression from a Bayesian perspective*
- Symposium on Data Science and Statistics, *American Statistical Association*, Oct 2021
 Paper presented: *Bayesian heteroskedasticity-robust regression*
- Technology, Business Practices, and Covid-19: Impacts on the Future of Work, *Harvard Law School*, Aug 2020
 Presentation: *How much can aggregate data really tell us about COVID-19*

References

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|------------|---|
| Name | Ina Ganguli |
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| Name | Maryclare Griffin |
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| Name | Michael Ash |
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Dissertation Summary:**Essays on Worker Voice and Bayesian Econometrics**

My dissertation consists of three papers. My work is united by a combination of topic and method. The topic is worker voice: workers' influence over the decisions of the firm, whether through unions or employer-controlled institutions. The method is econometric modeling in a Bayesian framework, while seeking reliable frequentist performance.

Worker voice, surveillance, and remote work: evidence from a survey experiment

I design and implement a survey experiment to quantify workers' preferences, in the form of willingness-to-pay, for worker voice: influence in the decisions of the firm, whether through unions or employer-controlled institutions. I study workers' preferences for digital surveillance or remote work, and how these may interact with preferences for worker voice. My analysis uses Bayesian hierarchical models to corroborate and extend my conclusions from standard econometric techniques.

Heteroskedasticity and cluster-robustness from a Bayesian perspective

I develop and evaluate a Bayesian regression model, constructing a novel proof that the model converges asymptotically to an Ordinary Least Squares estimator with heteroskedasticity-robust or cluster-robust standard errors, depending on the way in which data was sampled; this model is applicable to the questions of the first paper.

The rise and fall of worker voice in the United States

Using a variety of historical evidence, including primary sources, I examine how U.S. workers gained and then lost influence in the day-to-day management of the firm during the 20th century, discussing implications for the present day.