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**DOCTORAL
STUDIES**

Massachusetts Institute of Technology (MIT)
PhD, Economics, Expected completion June 2027
DISSERTATION: “Essays on Market Power and Technology in Healthcare
Labor Markets”

DISSERTATION COMMITTEE AND REFERENCES

Professor Daron Acemoglu
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**PRIOR
EDUCATION**

Yale University
B.A., Economics and Mathematics
B.A., Computer Science
Summa Cum Laude

2019

CITIZENSHIP

USA

GENDER: Male

FIELDS

Primary Fields: Labor Economics, Industrial Organization
Secondary Fields: Health Economics

**TEACHING
EXPERIENCE**

Empirical Topics in IO (14.274, graduate; planned)
TA to Professors Tobias Salz and Michael Whinston
MIT Kaufman Teaching Certificate Program

2027

2026

MIT Economics

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RELEVANT POSITIONS	Research Intern, Microsoft Research	2021, 2022
	Pre-Doctoral Fellow to Professor Amy Finkelstein, MIT	2019–2021
FELLOWSHIPS, HONORS, AND AWARDS	NBER Pre-Doctoral Fellowship in Aging and Health Research	2023–2025
	George and Obie Shultz Fund (3x)	2022–2024
	NSF Graduate Research Fellowship	2021–2026
	NSF Graduate Research Fellowship (awarded, declined)	2019
PROFESSIONAL ACTIVITIES	Phi Beta Kappa, Yale University	2019
	Presentations: Chicago Federal Reserve (scheduled)	2026
	NBER Summer Institute, IO/Digitization*	2023
	ASSA Annual Meeting	2022
	NBER Summer Institute, Health Economics*	2021
	*co-author presenting	
	Service: Organizer, MIT Industrial Organization Lunch	2025
	Organizer, MIT Public Finance Lunch	2024–2025
	Treasurer, MIT Graduate Economics Association	2023–2024

RESEARCH PAPERS

“Worker Training and Firm Screening: Evidence from Hospital Technologies” (Job Market Paper)

Workers accumulate specific skills through work experience, and firms often screen for workers with precisely those skills. On-the-job training may therefore have value through selective job offers, and these job offers, in turn, may shape labor market competition. I study how on-the-job training affects worker choice sets in hospital nursing labor markets, where hospitals value experience with their electronic health record (EHR) platform but do not specifically compensate this experience with higher wages. Instead, the returns to training manifest in the data through worker sorting. An event study around EHR adoption shows that training increases nurses' probabilities of moving to a same-technology hospital by 15 percent. A dynamic labor supply model with firm screening, identified using vacancy shocks to relax hospital screening and commuting distance to shift workers' job valuations, attributes most of this sorting to additional job offers rather than worker preferences for familiar technologies. EHR training is worth \$16,000 (about 20 percent of one year's salary) to new nurses, with almost none of it reflected through wages. Because additional offers expand workers' outside options, training makes nurses 30 percent more wage-elastic toward same-system hospitals, the opposite sign of the standard full-choice-set model prediction.

PUBLICATIONS “What Drives Risky Prescription Opioid Use? Evidence from Migration”

(with Amy Finkelstein and Matthew Gentzkow)

Quarterly Journal of Economics, Volume 140, November 2025

We develop and estimate a dynamic model of risky prescription opioid use that allows us to unpack the role of person- and place-specific drivers of the opioid epidemic and to assess the impact of state opioid policies. Event studies indicate that, among adults receiving federal disability insurance from 2006 to 2019, moves to states with higher rates of risky use produce an immediate jump in the probability of risky use, followed by an additional gradual increase for the next several years. Using a potential outcomes framework, we show how these results map to the person- and place-specific factors in the model. Model estimates imply large effects of place on both the likelihood of transitioning to addiction and the availability of prescription opioids; they also indicate that these place effects change significantly when state laws restricting pain clinics are enacted. A one standard deviation reduction in all place effects would have reduced risky use by about 40 percent over our study period. One particular source of place effects, pain clinic laws, reduced risky use by 5 percent, but could have reduced it by 30 percent if they had been enacted earlier, with much of this magnification operating through the dynamics of addiction.

“Data, Privacy Laws, and Firm Production: Evidence from the GDPR”

(with Mert Demirer, Diego Jiménez Hernández, and Sida Peng)

Journal of Political Economy, Forthcoming

By regulating how firms collect and use data, privacy laws may alter firm demand for information technology inputs. We study how firms respond to privacy laws in the context of the EU’s General Data Protection Regulation (GDPR) by using seven years of data from a global cloud-computing provider. Our difference-in-difference estimates indicate that, in response to the GDPR, EU firms decreased data storage by 26% and data processing by 15% relative to comparable US firms, becoming less “data-intensive.” To estimate the costs of the GDPR for firms, we propose and estimate a production function where firms combine data and computation in firm production. We find that data and computation are strong complements and that firm responses are consistent with the GDPR representing a 20% increase in the cost of data. This increase translates into only a 0.1–0.5% rise in overall production costs because data plays a relatively small role in firm production compared to computation.

**RESEARCH
IN PROGRESS**

“Health Care Employment Growth and the Transformation of the Labor Market”

(with Amy Finkelstein and Matthew Notowidigdo)

Most net employment growth in the United States over the past 40 years has come from the expansion of healthcare employment. We show that the aging of the population is an important factor behind this growth and explore how this rising demand for health care workers has reshaped local labor markets between 1980 and 2019. Our empirical strategy isolates plausibly exogenous variation across commuting zones in initial differences in the age distribution. We estimate that every 1 percentage point increase in the share of the population 80+ increases the health care employment-to-population ratio for 25-54 year olds by 0.53 (standard error = 0.11), with increases in both clinical and non-clinical occupations. Employment gains are highly concentrated among direct-care workers and other low-wage occupations. Increased demand for direct care workers in turn generates spillovers to the broader local labor market, with a non-health care local employment multiplier of approximately 1, again concentrated in low wage service jobs. Both aging-induced increases in health care employment and their local labor market spillovers are highly concentrated in female employment. Aggregating our local estimates to the national level, we find that between 1980 and 2019, the growth in the share of the population that is 80+ can explain about one-fifth of the rise in health care employment, about one-quarter of the growth in female employment, and about one-fifth of the growth in low-wage service employment. Essentially all of the aging-induced increase in low-wage service employment is female.

“Medical Graduate Training and the Spatial Distribution of Physicians”

Geographic disparities in physician supply have significant implications for healthcare access, with rural regions facing particularly severe shortages. A key friction is that residency location anchors doctors in space: nearly one-quarter of residents take jobs within ten miles of their training hospital, and almost three-fifths remain in the same state. We study how the institution of residency training shapes the geographic distribution of physician supply, highlighting the role of two key forces. Economies of scale in physician education concentrate training in large academic centers, while moving costs drive geographic stickiness. We combine these in a trade-style gravity framework to model physician mobility across training and practice locations. To estimate this model, we link two decades of national physician flows from Medicare claims and residency training information with novel data from a major physician recruitment platform and variation in residency slots and funding across programs. Our framework enables counterfactual evaluation of alternative funding designs for reducing physician shortages in underserved areas.

“Specialist Concentration and Returns to Scale in Physician Labor Markets”

(with Bradley Setzler and Benjamin Vatter)

Specialist physicians have become markedly more concentrated over the past two decades, both across hospital systems and within facilities. We document this shift using two decades of physician–hospital affiliation data and show that it is not simply a byproduct of hospital consolidation: specialist concentration has risen faster than the concentration of hospitals or of primary care physicians. We then use Medicare data to map labor shares into product market shares by assigning procedures to specialties, and we supplement this with all-payer claims data for Massachusetts. Across most specialties, the mapping is convex: a hospital with five percent of a market’s specialists performs roughly five percent of its procedures, but a hospital with twenty percent performs thirty to forty percent. These increasing returns admit two different stories. Concentration may raise productivity through specialization and volume, improving patient outcomes; or it may reflect market power as patients face fewer outside options. We aim to distinguish these mechanisms and quantify their consequences for the quality of specialist care.

“Physician Shortages and Allocative Mechanisms: Evidence from a Year-Long National Strike”

(with Sehyun Hong)

We study a national physician strike in South Korea that disrupted physician supply for eighteen months, providing a rare natural experiment on how labor adjusts within and between hospitals. Using national administrative claims and hospital records, we study how hospitals re-allocate work across the remaining labor force and how patients are prioritized in the face of capacity constraints.