MIT Economics

ANNE CARLSTEIN

OFFICE CONTACT INFORMATION
MIT Department of Economics
77 Massachusetts Avenue, E52-301
Cambridge, MA 02139
aecarls@mit.edu
https://economics.mit.edu/people/phd-students/anne-carlstein

HOME CONTACT INFORMATION
500 Memorial Drive
Cambridge, MA 02139
Mobile: 919-265-3596

MIT PLACEMENT OFFICER
Professor David Autor
dautor@mit.edu
617-253-4669

MIT PLACEMENT ADMINISTRATOR
Mrs. Shannon Robinson
shmay@mit.edu
617-324-5857

DOCTORAL STUDIES

Massachusetts Institute of Technology (MIT)
PhD, Economics, Expected completion June 2026
DISSERTATION: "Essays on Education Economics and Market Design"

DISSERTATION COMMITTEE AND REFERENCES

Professor Parag Pathak
MIT Department of Economics
77 Massachusetts Avenue, E52-426
Cambridge, MA 02139
617-253-7458
ppathak@mit.edu

Professor Joshua Angrist
MIT Department of Economics
77 Massachusetts Avenue, E52-436
Cambridge, MA 02139
617-253-8909
angrist@mit.edu

Professor Glenn Ellison
MIT Department of Economics
77 Massachusetts Avenue, E52-424
Cambridge, MA 02139
617-253-8702
gellison@mit.edu

PRIOR EDUCATION

Harvard University 2020
A.B. *magna cum laude* with Highest Honors in Mathematics

CITIZENSHIP USA **GENDER:** Female

FIELDS

Primary Fields: Labor, Education
Secondary Fields: Market Design, Applied Econometrics

TEACHING EXPERIENCE

Microeconomic Theory III (PhD, 14.123, MIT)
TA to Prof. Drew Fudenberg 2026, 2023
TA to Prof. Muhamet Yildiz 2024
Game Theory (undergraduate, 14.12, MIT)
TA to Prof. Ian Ball 2025, 2024, 2022
TA to Prof. Tomasz Sadzik 2023

	Market Design (undergraduate, 14.19, MIT)	
	TA to Prof. Parag Pathak	2024
	Psychology & Economics (undergraduate, 14.13, MIT)	
	TA to Prof. Frank Schilbach and Prof. Kelsey Jack	2023
	Data, Economics & Design of Policy Program (MA, MIT)	
	Math Camp Instructor	2022
	Multivariable Calculus (undergraduate, Math 21, Harvard)	
	Course Assistant for Prof. Janet Chen	2018

RELEVANT POSITIONS

RA to Professors Parag Pathak and Joshua Angrist	2022
American Institute of Mathematics Summer School	2020
University of Chicago Mathematics REU participant	2019
IAS Women and Mathematics Program	2019
IAS/Park City Mathematics Institute	2018

FELLOWSHIPS, HONORS, AND AWARDS

NSF Graduate Research Fellowship Honorable Mention	2022
Clyo F. Castle Fellowship	2021-2022
Walter A. Rosenblith Presidential Fellowship	2020-2021
Friends of the Harvard Department of Mathematics Prize	2020
Harvard College Scholar Award	2018
National Merit Scholar	2016

PROFESSIONAL ACTIVITIES

Service:

Graduate Resident Advisor at MIT Next House	2021-2026
MIT-Harvard Application and Mentorship Program	2020-2024

RESEARCH PAPERS

"Randomizing Elite School Admissions" (Job Market Paper)

What happens if students are randomized to elite schools? This paper studies the causal effects of attending several highly sought-after public high schools in New York City (termed the "screened select") under two starkly different admissions regimes: a traditional screening process based on test scores and grades, and a partial lottery introduced in 2021. Leveraging this policy reform, I compare the impacts of screened select attendance before and after the admissions change using an IV strategy. While the screened select schools boosted overall SAT scores by approximately 30 points under traditional screened admissions, they had no positive impact in the post-reform lottery era. However, these effects are heterogeneous: students who would not be admitted under full screening saw positive impacts on SAT Math scores, and students who would have been admitted under screening saw negative impacts on SAT Math scores. I provide evidence that these effects are primarily driven by changes in the school peer composition rather than shifts in school resources or curricula. Using a stylized model of admissions, I formalize the tradeoff between equity and testing outcomes and derive conditions for when a partial lottery would be optimal.

"Right to Rank? Evaluating Ranked-Choice Voting Outcomes"

Ranked-choice voting has sparked intense debate in political circles as it has gained traction as an alternative to standard plurality rule (e.g., the New York City mayoral contest). Proponents of ranked-choice voting argue that it prevents spoiler effects and selects candidates that are widely accepted by the overall electorate (such as centrist candidates or the Condorcet winner, i.e., the candidate who would pairwise defeat all competitors if such a candidate exists). Restricting attention to the three-candidate case, I derive theoretical results which describe the performance of ranked-choice voting according to several metrics. These include the selection of consensus candidates, fairness to certain types of parties, and outcomes under strategic manipulation by voters. Under sincere voting, while ranked-choice voting dominates standard plurality rule in terms of Condorcet winner selection, it could further be strictly improved with a modified elimination rule. In comparison with a stylized sequential primary-then-general election setup, ranked-choice voting does not favor specific types of parties. Under strategic voting, ranked-choice voting rules out certain undesirable equilibria unfavorable to consensus candidates that plurality rule does not. I corroborate my theoretical findings with data from mayoral and congressional elections.

"Exploring Weak Strategy-Proofness in Voting Theory"

In the context of social choice theory, voting serves as a mechanism for aggregating individual preferences to determine a collective decision. Various voting rules (e.g., rank-order voting, plurality rule, majority rule, and approval voting) have been proposed to facilitate this aggregation. This paper examines the strategic manipulation by voters, where individuals may misrepresent their true preferences to influence the outcome in their favor. When no coalition of voters can strategically manipulate, then the voting rule is said to satisfy the axiom of Strategy-Proofness. A less restrictive axiom is Weak Strategy-Proofness (as defined by Dasgupta and Maskin (2019)), which allows for strategic manipulation by all but the smallest coalitions. Under certain intuitive conditions, Dasgupta and Maskin (2019) proved that the only voting rules satisfying Strategy-Proofness are rank-order voting and majority rule. I generalize their result, proving that rank-order voting and majority rule are surprisingly still the only voting rules satisfying Weak Strategy-Proofness.

RESEARCH IN PROGRESS

"Large-Scale Lotteries in the Wild"

In ongoing analysis, I study the impacts of using a partial lottery process for high school admissions across all screened programs in New York City (implemented in 2022). I consider the changes in school composition and use a preliminary difference-in-differences approach to evaluate the lottery impacts on enrollment effects on student outcomes. Next steps include studying the effects on exit from public high schools, and other city-wide impacts.