

ALEX CHAN
<https://www.alexchan.net/>
chanalex@stanford.edu

STANFORD UNIVERSITY

Director of Graduate Studies: Laurence Baker
PhD Administrative Director: Corinna Haberland

LCBAKER@STANFORD.EDU 650-723-4098
CORINNAH@STANFORD.EDU 650-498-5232

Office Contact Information

117 Encina Commons, Office 206
Stanford, CA 94305-6006
Office phone number: (1)650-497-6971

Home Contact Information

441 E Erie Street, Apt. 4303
Chicago, IL 60611
Mobile phone number: (1)781-888-8834

Education:

Stanford University, 2018 to present
Ph.D. Candidate in Health Economics
Thesis Title: "Who Gets What in Healthcare – and Why"
Expected Completion Date: May 2023

References: (all Stanford University)

Professor Laurence C. Baker
Department of Health Policy
118 Encina Commons
650-723-4098, lcbaker@stanford.edu

Professor Alvin E. Roth
Department of Economics
344 Landau Economics
650-725-9147, alroth@stanford.edu

Professor Michelle Mello
Stanford Law School
324 Neukom
650-725-3894, mmello@law.stanford.edu

Professor Muriel Niederle
Department of Economics
334 Landau Economics
650-723-7359, niederle@stanford.edu

M.P.H. in Health Policy, Harvard University, 2018

Teaching and Research Fields:

Primary fields: Experimental and Behavioral Economics, Market Design, Health Economics

Secondary fields: Labor Economics, Machine Learning

Teaching Experience:

Fall, 2021 *BIOS 203 Field Experiments and Market Design for Health Policy and Medicine*,
Stanford University, Primary Instructor
Fall, 2017 *HPM 206 Economic Analysis*, Harvard University, Head Teaching Assistant for
Professor David Hemenway
Fall, 2016 *HPM 206 Economic Analysis*, Harvard University, Teaching Assistant for
Professor David Hemenway

Research Experience and Other Employment:

2018 UnitedHealth Group, Senior Vice President of Market Strategy, Optum Analytics
2015-2018 UnitedHealth Group, Vice President of Market Strategy, Optum Analytics
2017-2018 Harvard University, Research Associate, Dana Farber Cancer Institute

2014-2015	Origyn Inc., Co-Founder and CEO
2014-2015	Liberty Mutual Insurance, Head of Strategy and Planning
2013-2014	Liberty Mutual Insurance, Director of Strategy and Planning
2013	The Economist Group, Senior Analyst, Economist Intelligence Unit
2011-2013	McKinsey and Company, Associate/Senior Associate

Honors, Scholarships, and Fellowships:

2021	All-California Labor Economics Conference Outstanding Poster Award
2021	Stanford Office of Graduate Education Travel Grant
2021-2022	Agency for Healthcare Research & Quality T32 Grant
2018-present	Gerhard Casper Stanford Graduate Fellowship for Science and Engineering
2019	<i>Palliative Medicine</i> Editor's Choice Paper

Publications:

Chan, A. (2021). "**Hypothermic Machine Perfusion in Liver Transplantation**". *New England Journal of Medicine* 385, 766-768.

Chan, A. (2020). "**U.S. Organ Policy**". *JAMA* 323(3):278-279.

Chan, A. and K. Schulman (2020). "**Examining Pharmaceutical Benefits in the United States—A Framework**". *JAMA Health Forum* e200291-e200291.

Chan A., I. Chien, E. Moseley, S. Salman, S. Kaminer Bourland, D. Lamas, A. M. Walling, J. A. Tulskey, C. Lindvall (2019) "**Deep Learning Algorithms to Identify Documentation of Serious Illness Conversations During Intensive Care Unit Admissions**". *Palliative Medicine* 33.2 (2019): 187-196.

Research Papers:

"Discrimination and Quality Signals: A Field Experiment with Healthcare Shoppers" (Job Market Paper) This paper provides evidence that customer discrimination in the market for doctors can be largely accounted for by inaccurate statistical discrimination. I evaluate customer preferences in the field with an online platform where cash-paying consumers can shop and book a provider for medical procedures based on a novel experimental paradigm called validated incentivized conjoint analysis (VIC). Actual paying customers evaluate doctor options they know to be hypothetical to be matched with a customized menu of real doctors, preserving incentives. Racial discrimination reduces patient willingness-to-pay for black and Asian doctors by 12.7% and 8.7% of the average colonoscopy price respectively; customers are willing to travel 100–250 miles to see a white doctor instead of a black doctor, and somewhere between 50–100 to 100–250 miles to see a white doctor instead of an Asian doctor. Further, providing signals of doctor quality reduces this willingness-to-pay racial gap by about 90%, which suggests that statistical discrimination is an important cause of the gap. The willingness-to-pay penalties on minority doctors are multiples of actual average quality differences, which suggest that inaccurate or behavioral statistical discrimination is at play. Actual booking behavior allows cross-validation of incentive compatibility of stated preference elicitation via VIC.

"Regulation of Organ Transplantation and Procurement: A Market Design Lab Experiment" (with Alvin E. Roth)

We conduct a lab experiment that shows current rules regulating transplant centers (TCs) and organ procurement organizations (OPOs) create perverse incentives that inefficiently reduce both organ recovery

and beneficial transplantations. We model the decision environment with a 2-player multi-period game between an OPO and a TC. In the condition that simulates current rules, OPOs recover only highest-quality kidneys and forgo valuable recovery opportunities, and TCs decline some beneficial transplants and perform some unnecessary transplants. Alternative regulations that reward TCs and OPOs together for health outcomes in the entire patient pool lead to behaviors that increase organ recovery and appropriate transplants.

“Optimal Liver Exchange with Equipoise”

The practical and ethical needs of liver exchange is different from kidney exchange, a new mechanism is proposed. Instead of just maximizing the number of exchanges, clinicians prioritize liver transplant candidates with the highest medical urgency as measured by MELD score first. Donation of the right liver lobe is five-fold riskier than the left lobe for the donor. An exchange that involves donors giving different lobes is deemed unfair. Existing mechanisms are not suited to identify optimal matchings for the organ exchange problem that needs to flexibly meet a finite exchange cycle-length constraint, accommodate indifferences in preferences, maximize transplants for highest priority patients and keep risk balanced for donors. The proposed mechanism yields optimal allocations, respects balanced donor risk, maximizes priority and is incentive compatible.

- Non-academic piece on implementation of liver exchange: Salman S. et al. (2021). “Liver Exchange: A Pathway to Increase Access to Transplantation” *Harvard Health Policy Review*.

Research Paper(s) in Progress:

Chan, A.. “Women in Emergency Medicine Improve Health Outcomes”

Chan, A. and K. Sweat. “Why Can You Buy a Body but Not a Kidney? An Experiment on Repugnance Conveyance”

Chan, A.. “Cherry Picking and Lemon Dropping to Meet Quality Standards: The Case of Abdominal Transplant Surgeons”

Seminar, Conference Presentations and Invited Talks:

2022	NBER Working Group on Race and Stratification
2022	Harvard Business School Negotiations, Organizations and Markets Unit
2022	Rising Stars in Market Design Conference (University of Tokyo)
2022	ESA Joint initiative for Latin American Experimental Economics Special Meeting
2021	Economic Science Association North America Conference
2021	All-California Labor Economics Conference – Poster Session
2021	Stanford Institute for Theoretical Economics (SITE) Conference
2021	University of Chicago
2021	Universidad de San Andrés
2021	International Health Economics Association Congress
2021	Annual Conference of the American Society of Health Economists (ASHEcon)
2021	Annual Agency for Healthcare Research and Quality (AHRQ) NRSA Conference

Professional Activities:

Referee for Journal of Public Economics, Journal of Political Economy

Creator and Organizer, Stanford Economics of Transplantation Workshop (weekly seminar with attendees from Stanford, Johns Hopkins, USC, Northwestern)

Co-Organizer, Stanford Economics Department Market Design Seminar

Healthcare industry expert, Gerson Lehrman Group

Graduate Resident Fellow/Graduate Resident Associate at Roble Hall/West Lag, Stanford University