Rayyan Saad Mobarak

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EDUCATION

University of Maryland, College Park, Ph.D. in Agricultural and Resource Economics Macalester College, B.A in Economics and Applied Mathematics & Statistics

exp. May 2028 May 2021

PEER-REVIEWED PUBLICATIONS

Katherine L. Milkman, Sean F. Ellis, Dena M. Gromet, Youngwoo Jung, Alex S. Luscher, **Rayyan S. Mobarak,** Madeline K. Paxson, Ramon A. Silvera Zumaran, Robert Kuan, Ron Berman, Neil A. Lewis Jr.,
John A. List, Mitesh S. Patel, Christophe Van den Bulte, Kevin G. Volpp, Maryann V. Beauvais, Jonathon K.
Bellows, Cheryl A. Marandola, Angela L. Duckworth. "**How Do Free Rides and Text Reminders Affect COVID-19 Vaccinations? A 3.66-Million Person Megastudy.**" *Nature* (2024).

https://doi.org/10.1038/s41586-024-07591-x

Kai Ruggeri, David G. Rand, Eli J. Finkel, Michele Gelfand, Alia Crum, Cass R. Sunstein, Jay J. Van Bavel, Robb Willer, Katherine L. Milkman, ... Rayyan S. Mobarak, et al. "A synthesis of evidence for policy from behavioural science during COVID-19." *Nature* (2023). https://doi.org/10.1038/s41586-023-06840-9

Katherine L. Milkman, Linnea Gandhi, Sean F. Ellis, Heather N. Graci, Dena M. Gromet, **Rayyan S. Mobarak**, Allison M. Buttenheim, Angela L. Duckworth, Devin Pope, Ala Stanford, Richard Thaler & Kevin G. Volpp. "A citywide experiment testing the impact of geographically targeted, high-pay-off vaccine lotteries." *Nature Human Behaviour* (2022). https://doi.org/10.1038/s41562-022-01437-0

WORKING PAPERS

Katherine L. Milkman, Sean F. Ellis, Dena M. Gromet, Isabella M. DeMay, Heather N. Graci, Youngwoo Jung, **Rayyan S. Mobarak**, Ramon A. Silvera Zumaran, Mia N. Simmons, Christophe Van den Bulte, Shlomo Benartzi, Matthew Hilchey, Laura Goodyear, Dean Karlan, Nina Mazar, Daniel Mochon, Avni M. Shah, Dilip Soman, Jonathan Zinman, Angela L. Duckworth. "Can Reminder Emails Compel Americans to Save? A Two-Million Person Megastudy." *R&R at PNAS Nexus*.

RESEARCH APPOINTMENTS

University of Maryland

Aug 2023 – Aug 2024

Research Assistant, Department of Agricultural and Resource Economics

- Assisted Prof. Lars Olson estimate demand functions for marine resource imports under international trade
- Collected, summarized, and visualized large trade datasets

The Wharton School, University of Pennsylvania

Jun 2021 – Jul 2023

Pre-Doctoral Fellow, Behavior Change for Good Initiative

- Coauthored, alongside a multidisciplinary team of scientists, three papers that implement and analyze:
 - o A city-wide geographically-targeted lottery, incentivizing adult first-dose COVID-19 vaccination rates
 - o An RCT nudging customers of a large U.S. bank to increase savings account transfers, and
 - o An RCT incentivizing and nudging eligible individuals to take the COVID-19 booster
- Designed large-scale field experiments and provided statistical tools needed for analysis
- Performed all data management and econometric analysis for each project
- Led journal submissions and responded to reviewer comments

Research Assistant, Department of Applied Economics

- Assisted Prof. Paul Glewwe with two papers:
 - o An RCT impacting educational outcomes through teacher training programs within Nepal, and
 - o A study of factors behind the strong academic performance of 15-year-olds in Vietnam
- Conducted literature reviews, proofread reports, and formatted tables of regression output

TEACHING EXPERIENCE

University of Maryland

Aug 2025 – present

Guest Instructor, Harvesting Big Data to Examine Agriculture (Undergraduate Course)

- Teach students R programming and data science skills to analyze large tabular and geospatial data
- Collect and prepare agriculture and climate datasets for use by students in homework and in-class exercises

University of Maryland

Jan 2025 – Aug 2025

Teaching Assistant, Microeconomic Analysis II (Ph.D. Core Course)

- Instructed students on general equilibrium models, welfare theorems, uncertainty, and asymmetric information
- Conducted weekly discussion sessions, to solve past exam questions in preparation for course exams

University of Maryland

Aug 2024 – present

Teaching Assistant, Optimization in Agricultural and Resource Economics (Ph.D. Core Course)

- Assist students on optimization, fixed point theorems, optimal control theory, and dynamic programming
- Solve problem sets in weekly discussion solutions and grade student solutions

AWARDS AND GRANTS

University of Maryland Dean's Fellowship (\$2500) Macalester Summer Internship Grant (\$2500) Kofi Annan Scholarship (\$100,000) Aug 2025 Jun 2020

Aug 2017- May 2021

ACADEMIC SERVICE

Referee for Energy Economics

President for Association of Agricultural and Resource Economists at UMD Graduate Representative for Department of Agricultural Resource Economics Mentor and Panelist for Pathways to Research and Doctoral Careers (PREDOC)

May 2025 - present May 2025 - present

Jun 2022

TECHNICAL SKILLS

Languages: Stata (advanced), R (advanced), Python (intermediate), SAS (beginner)

Other: LaTeX, Qualtrics, HTML & CSS