Robert Baluja

Cornerstone Research, Los Angeles

EMPLOYMENT

Cornerstone Research

Associate

Los Angeles, CA 2025-

Email: RobertBaluja [at] gmail

Website: https://www.robertbaluja.com

EDUCATION

University of Arizona

Ph.D. (M.A. en route) - Economics

Tucson, AZ 2025

Columbia University

PER-IO Graduate Student Visitor, Department of Economics

New York, NY 2023

University of California, San Diego

B.S. - Mathematics & Economics: Summa Cum Laude

La Jolla, CA 2020

MiraCosta Community College

A.S. - Business Administration

Oceanside, CA 2018

**Publications** 

### PFAS-Contaminated Drinking Water Harms Infants

with Bo Guo, Wesley Howden, Ashley Langer, and Derek Lemoine Conditionally Accepted at *The Proceedings of the National Academy of Sciences* 

There is evidence of widespread human exposure to per- and polyfluoroalkyl substances (PFAS) but limited evidence of the human health impacts of this exposure. Using data on New Hampshire births from 2010–2019, we show that mothers receiving water that had flowed beneath a PFAS-contaminated site, as opposed to comparable mothers receiving water that had flowed towards a PFAS-contaminated site, had 191% [95% CI: 83–298%] higher first-year infant mortality (611 [268–955] additional first-year deaths per 100k births); 168% [42–294%] more births before 28 weeks of gestational age (466 [116–817] additional such births per 100k births); and 180% [57–302%] more births with weight below 1,000 g (607 [192–1022] additional such births per 100k births). Extrapolating to the contiguous U.S., PFAS contamination imposes annual social costs of approximately \$8 billion. These health costs are substantially larger than current outside estimates of the cost of removing PFAS from the public water supply.

# Working Papers

# Escape the Heat: The Dynamics of Migration as Adaptation to Climate Change (Job Market Paper)

Earth's climate is changing, which is widely expected to drive net reductions to human welfare. In this paper, I study how effectively migration will reduce experienced climate damages. To provide answers to my research questions, I develop and estimate a dynamic lifecycle model of migration within Mexico. I combine this with a non-stationary and spatially varying model of the climate, in which I allow for both fully informed and naive expectations of the future progression of climate change. Estimation of the climate model uses daily-level historical weather data and output from state-of-the-art climate simulations. Estimation of the lifecycle model uses a sample of life histories, covering the years 1950-2019, and follows a nested full solution pseudo-maximum likelihood routine. I find that climate damages from business-as-usual warming would be 28% higher if domestic migration within Mexico was no longer available as a tool of adaptation to climate change. Moreover, the fraction of the population that I estimate as forming naive expectations of the climate system would experience an average of 2% less lifetime climate damages from becoming fully informed on the climate transition. Given that most of the increased damages this population faces come from a reduced propensity to migrate, one way to reduce these losses is to subsidize migration. I find that subsidizing migration at the average level of the internality reduces their welfare losses by 8-19%. The exact value of this reduction depends on whether the policy forces people to use the subsidy in a particular period. Policies that allow individuals to choose when to use them are over twice as valuable to the affected population because they do not overly incentivize dynamically suboptimal moves. This sort of dynamically-available policy is common; examples include provisions from the recent Inflation Reduction Act and first-time homeowners tax credits.

### Presentations

2025: Cornerstone Research (Los Angeles), Stony Brook Department of Economics

2024: AERE Summer Conference, University of Arizona Econometrics Lunch

2023: AERE@OSWEET, AERE@WEAI, AZ ENREE Workshop, Columbia University IO Colloquium, Sacramento

Economics Roundtable, 2<sup>nd</sup> Summer School on the Economics of Migration

2022: CU Environmental & Resource Economics Workshop

2019: UCSD Faculty Mentor Program Symposium, UCSD Undergraduate Research Conference

#### Grants and Awards

2024: Dror Research Excellence Award, AERE Travel Scholarship, GPSC Travel Grant

2023: AEA Mentoring Program Travel Grant

2022: Steve Manos Prize for Best Second-Year Paper, GPSC Travel Grant

2020: Phi Beta Kappa

### Research Experience

Research Assistant

Prof. Ashley Langer

University of Arizona Spring 2022 - Fall 2024

Research Assistant

Prof. Derek Lemoine

University of Arizona Spring 2022 - Fall 2023

Research Assistant

Prof. Philip Roeder

University of California, San Diego Spring 2019

# Teaching

### Instructor of Record

Microeconomic Analysis for Business Decisions - Spring 2025 (Online)

Macroeconomic and Global Institutions and Policy - Summer 2024 (Online)

Basic Economic Issues - Summer 2023 (In-Person)

### Teaching Assistant

Environmental Economics - Spring 2024

Economics of Sports - Spring 2023

Mathematical Economics (PhD) - Fall 2021, Fall 2022

Math Camp (PhD) - Summer 2022

Economics of Strategy - Fall 2020, Spring 2021

Climate Science & Economics: How Should Policy Control Warming? - Fall 2021

Basic Economic Issues - Fall 2020

# SKILLS SUMMARY

Programming Languages: Julia, Python, R

(Non-Programming) Languages: English (Native), Spanish (Conversational)

### References

Prof. Ashley Langer

Department of Economics University of Arizona alanger [at] arizona [dot] edu Prof. Derek Lemoine

Department of Economics University of Arizona dlemoine [at] arizona [dot] edu

Prof. Juan Pantano

Department of Economics University of Arizona jpanta [at] arizona [dot] edu Prof. John Drabicki

Department of Economics University of Arizona drabicki [at] arizona [dot] edu