

# Robert Baluja

Department of Economics, University of Arizona

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## RESEARCH FIELDS

Environmental Economics, Industrial Organization, Labor Economics

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## EDUCATION

### University of Arizona

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

Tucson, AZ

*Expected 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*

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## WORKING PAPERS

### Escape the Heat: The Dynamics of Migration as Adaptation to Climate Change

*Climate change will continue to cause large-scale changes to global weather patterns and extreme events. To understand the effectiveness of migration in limiting exposure to future climate damages, I specify and estimate a dynamic lifecycle model of migration within Mexico. I combine this with a non-stationary and spatially-varying model of the climate, of which I allow for both fully-informed and naive expectations of the future progression. Estimation of the 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 predicted warming under a business-as-usual climate scenario will lead to an increase in the value placed on the ability to migrate domestically of 70% across a single generation. I also use the model to understand the value of information on the climate system in aiding adaptation to climate change. I find that the value of migration would increase by 5%, for the climate-naïve, if they become informed on the climate transition. I further use the model to understand the different incentives that are created by the dynamic structure of policy. I find that dynamic reductions to moving costs induce positive selection from the portion of the population marginal to moving. Warming will diminish the relative benefits of such dynamic policy. This finding is generalizable to settings where policymakers seek to induce costly and long-lasting behaviors.*

### PFAS-Contaminated Drinking Water Harms Infants

with Bo Guo, Wesley Howden, Ashley Langer, and Derek Lemoine

In revision for *Science*

*There is evidence of widespread human exposure to per- and polyfluoroalkyl substances (PFAS) but limited evidence of human health impacts. Using data on all New Hampshire births from 2010–2019, we show that receiving water that has flowed beneath a PFAS-contaminated site increases first-year infant mortality by 161% [95% CI: 70–251%], the chance of a birth before 28 weeks of gestational age by 120% [95% CI: 30–210%], and the chance of birthweight below 1,000 g by 152% [95% CI: 48–257%]. Extrapolating to the contiguous U.S., PFAS contamination imposes annual social costs of approximately \$8 billion. These health costs are substantially larger than the cost of removing PFAS from the public water supply.*

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## PRESENTATIONS

**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

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**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

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**Research Assistant**

*Prof. Ashley Langer*

University of Arizona

*Spring 2022 - Present*

**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

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**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

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**Programming Languages:** Julia, Python, R

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

## REFERENCES

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**Prof. Ashley Langer**

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**Prof. Derek Lemoine**

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