

Yuulin An

✉ Yuulin.An@colostate.edu | 🌐 www.yuulinan.com | 🔗 LinkedIn | 🎓 Google Scholar

Department of Economics, Colorado State University
1771 Campus Delivery, Fort Collins, CO 80523

RESEARCH INTERESTS & SKILLS

Fields Applied Microeconomics, Health, Aging, Environmental, Labor

Software R, Python, Stata, Git, \LaTeX

Causal Inference Difference-in-Difference, Event Studies, Regression Discontinuity, Instrumental Variable

Language Khmer (native), English (fluent)

EDUCATION

Colorado State University

Ph.D., Economics (Candidate)

M.A., Economics

Fort Collins, CO

Expected 2027

2024

Coe College

B.A., Economics and Business Administration (Cum Laude)

Cedar Rapids, IA

May 2022

POSITIONS

Graduate Teaching Instructor

Department of Economics, Colorado State University

May 2025 – present

Fort Collins, CO

Graduate Teaching Assistant

Department of Economics, Colorado State University

Aug. 2022 – May 2025

Fort Collins, CO

RESEARCH EXPERIENCE

Regional Economic Development Institute

Research Assistant to Dr. Ray Miller

Fort Collins, CO

Summer 2025

Future of Work, Russel Sage Foundation

Research Assistant to Dr. Zachary Schaller

Fort Collins, CO

Summer 2024

JOB MARKET PAPER

The Effect of Leaded Gasoline on Infant Health: Evidence from NASCAR Fuel Transition.

Abstract: NASCAR-sanctioned races used leaded gasoline through 2006, generating concentrated bursts of airborne lead emissions around active racetracks. I study how these exposures affected infant health using detailed Texas birth records linked to race events at Texas Motor Speedway (TMS) in Fort Worth. Identification relies on within-TMS variation in distance, wind direction, race timing, and race-specific emissions among mothers living within 25 km of the same track. Pre-ban trimester-specific log emissions reduce birthweight, shorten gestation, and increase the probability of low birthweight. A post-ban placebo yields coefficients near zero, suggesting that the estimated effects are not driven by factors correlated with race activity. To translate intermittent race-day exposures into pregnancy-relevant blood lead burdens, I develop a pregnancy-specific physiologically based pharmacokinetic (PBPK) model that simulates daily maternal and fetal blood lead trajectories using each mother's race-event history. A one-standard-deviation increase in second-trimester PBPK blood lead reduces birthweight by approximately 73 grams. A significant post-2007 birthweight decline near a former Houston racetrack, unrelated to lead exposure, suggests the limitations of cross-track comparisons and highlights the importance of exploiting within-track variation. I then examine potential mechanisms and find that lead exposure increases gestational hypertension and shortens gestation, with both effects disappearing after the transition to unleaded fuel. These findings suggest that even relatively small and intermittent sources of airborne lead can have meaningful effects on infant health.

PEER-REVIEWED ARTICLES

An, Y., Chin, S. & Miller, R. (2025). Growing Old in Rural America: Measuring Late Life Health and Economic Well-being. *The Journal of the Economics of Ageing*, 31, 100565.

WORKING PAPERS

Population Aging, Regional Integration, and Economic Growth Across U.S. Counties, with Tim Komarek and Ray Miller. *Draft available upon request.*

Maternal Lead Exposure and Birth Outcomes: Evidence from Natural Experiments in the Phase-out of Leaded Gasoline, with Sammy Zahran, Christopher Keyes and Sayorn Chin. *Draft available upon request.*

SELECTED WORKS IN PROGRESS

When Football Comes to Town: Provider Decision-Making and Delivery Complications, with Sayorn Chin and Sammy Zahran.

Urban Heat Island and Health, with Tim Komarek and Sayorn Chin.

TEACHING EXPERIENCE

Department of Economics, Colorado State University

Fort Collins, CO

Graduate Teaching Instructor

Aug. 2025 - present

- Summer 2026: Working with Data (1 section)
- Spring 2026: Working with Data (2 sections)
- Fall 2025: Working with Data (2 sections)
- Summer 2025: Working with Data (1 section)

Department of Economics, Colorado State University

Fort Collins, CO

Graduate Teaching Assistant

Aug. 2022 - 2025

- Spring 2025: Principles of Macroeconomics (3 sections)
- Fall 2024: Principles of Microeconomics (3 sections)
- Spring 2024: Principles of Microeconomics (3 sections)
- Fall 2023: Principles of Macroeconomics (3 sections)
- Spring 2023: Principles of Microeconomics (3 sections)
- Fall 2022: Principles of Microeconomics (3 sections)

HONORS & AWARDS

Dissertation Fellowship

Fall 2026

Awarded a departmental Dissertation Fellowship to support accelerated progress on dissertation research in the Fall semester.

Graduate Student Workshop

Summer 2026

Selected for the highly competitive Western Economic Association International's Graduate Student Workshop, focused on job market paper presentation and academic career preparation.

Graduate Teaching Assistantship

2022 – 2027

Awarded a full tuition scholarship and monthly stipend from the Department of Economics at Colorado State University.

NBER Mentoring Program on Aging and Health Economics Research

May 2024

Selected for NBER's mentoring program in aging and health economics supported by the National Institute on Aging.

Harley W. Howell Prize

May 2022

This award is given to a senior business and economics major for superior academic achievement, promise of leadership career in the field, sound moral character and campus citizenship (issued by the Stead Department of Business Administration & Economics from Coe College).

Spellman Optimum Optimorum

May 2022

This award is given to a senior who will be entering an economics Ph.D. program immediately following their graduation from Coe College.

CONFERENCE

Western Economic Association International	Summer 2026
North American Regional Science Council (NARSC)	Fall 2025
NBER Summer Institute Economics of Health Conference	Summer 2025
NBER Racial and Ethnic Health Disparities Conference	Spring 2024

REPORT

Regional Economic Development Institute (REDI)

Population Aging and Economic Growth in Colorado: Why Regional Connectivity Matters for Rural Communities (with Ray Miller and Tim Komarek). *Regional Economic Development Institute*, March 2026.

SERVICES

Brown Bag Seminar Series

Aug. 2024 - May 2025

Organizer

PROFESSIONAL MEMBERSHIPS

Columbine Health Systems Center for Healthy Aging at Colorado State University, member
Western Economic Association International, member
American Economic Association, member
American Society of Health Economists, member

REFERENCES

Ray Miller

Associate Professor
Department of Economics
Colorado State University
ray.miller@colostate.edu

Sammy Zahran

Professor
Department of Economics
Colorado State University
sammy.zahran@colostate.edu

Tim Komarek

Associate Professor
Department of Economics
Colorado State University
tim.komarek@colostate.edu

Jesse Burkhardt

Associate Professor
Department of Agricultural and Resource Economics
Colorado State University
jesse.burkhardt@colostate.edu