SAMUEL W. ARENBERG

Applied microeconomist

Curriculum vitae

PhD Candidate, Economics
The University of Texas at Austin

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Education

The University of Texas at Austin	PhD, Economics	2022 (Expected)
The London School of Economics	MSc, Economics	2014
George Washington University	BS, Economics	2009

Fields

Sequences:	Development economics, labor economics, public economics
Topics:	Demography, environment, health, incarceration, inequality

References

Prof. Mike Geruso [c]	The University of Texas at Austin	mike.geruso@utexas.edu
Prof. Dean Spears [c]	The University of Texas at Austin	dspears@utexas.edu
Prof. Rich Murphy	The University of Texas at Austin	richard.murphy@austin.utexas.edu

Teaching

Introduction to Econometrics	2021–Present
Development and Population Economics	2020
Labor Economics	2019
Education Economics	2018
Health Economics	2016–17

Experience

Prof. David Chan	Stanford University	2015–16
Prof. Rohini Pande	Harvard University	2015
Prof. Steve Machin	The London School of Economics	2014
Prof. Lori Beaman	Northwestern University	2011–12

Authorizations

US citizenship
Special Sworn Status (Census Bureau)

Research

Working papers

1. **The Impact of Youth Medicaid Eligibility on Adult Incarceration** [Draft]
   Job market paper, with Seth Neller and Sam Stripling
   Revisions requested from *American Economic Journal: Applied Economics*
   Awarded IPUMS Best Graduate Student Research Using Health Surveys

This paper identifies an important spillover associated with public health insurance: reduced incarceration. In 1990, Congress passed legislation that increased Medicaid eligibility for individuals born after September 30, 1983. We show that Black children born just after the cutoff are 5 percent less likely to be incarcerated by age 28, driven primarily by a decrease in incarcerations connected to financially motivated offenses. Children of other races, who experienced almost no gain in Medicaid coverage as a result of the policy, demonstrate no such decline. We find that reduced incarceration in adulthood substantially offsets the initial costs of expanding eligibility.

2. **Heritable Fertility Is Not Sufficient for Positive Long-term Population Growth** [Draft]

   with Kevin Kuruc, Nathan Franz, Sangita Vyas, Nicholas Lawson, Melissa LoPalo, Mark Budolfson, Michael Geruso, and Dean Spears

   Revisions requested from *Demography*

   All leading long-term global population projections agree on continuing fertility decline, resulting in a rate of population size growth that will continue to decline towards zero and would eventually turn negative. However, a literature inspired by mathematical biology has suggested that because fertility is heritable (*i.e.*, higher-fertility parents tend to have higher-fertility children) and heterogeneous within a population, long-term population growth must eventually be positive. In this research note, we show that heritable fertility is not sufficient for positive long-term population growth, for empirical and theoretical reasons. First, empirically, even higher-fertility sub-populations show declining fertility rates which may eventually be below replacement (and in some populations already are). Second, in a simple Markov model, because heritability is imperfect, the combination of heritability and fertility rates may be quantitatively insufficient: it may be that higher-fertility parents nevertheless produce too few children who retain higher-fertility preferences. These results underscore the importance both of understanding the possible consequences of long-term fertility decline and depopulation and of the causal importance of culture and choice in human populations.

3. **Ashes to Ashes: The Lifelong Consequences of Early-life Exposure to Wildfires** [Draft]

   with Seth Neller

   Part of FSRDC Project UT-02272

   This paper assesses the impact of *in utero* and early-childhood exposure to wildfire smoke on longevity as well as economic achievement, human capital accumulation, and disability in mid-to-late adulthood. To identify areas that were exposed to wildfire pollution, we leverage mid-20th century (1930-1969) California wildfires and smoke dispersion modeling. We then combine these wildfire pollution data with comprehensive, restricted-use administrative data from the Social Security Administration and Census Bureau. These linked data allow us to measure childhood wildfire smoke exposure for four decades of birth cohorts and to observe a rich set of later-life outcomes. Using these data, we exploit plausibly exogenous variation in smoke exposure—which is a function of fire timing and size as well as wind direction and speed—to identify long-run effects. We find that moving from the 25th to 75th percentile of early-life wildfire smoke exposure results in 1.7 additional deaths before age 55 per 1,000 individuals, conditional on surviving past early childhood. Aggregating these effects across

ages 30 to 80 translates to 46 life years lost per 1,000 persons. We further find that smoke exposure results in unfavorable changes to a wide range of later-life outcomes across economic achievement, educational attainment, and disability measures. From these results, we estimate that each child born in California during our sample period sustained, on average, approximately $22,000 of discounted damages in lost life expectancy and lost earnings due to wildfire smoke. These findings suggest that warming temperatures, which exacerbate the duration and intensity of wildfire seasons, are already meaningfully affecting the life cycles of exposed children through increased smoke exposure.

Works in progress

1. **The First Estimates of Life Expectancy by County of Birth in the United States: Implications for Geographic Inequality**

   Part of FSRDC Project UT-02603

   Life expectancy in the United States varies widely by geography: The gap between the top and bottom-ranking counties is over twenty years. These disparities, however, are based on where people die. This paper provides the first sub-state estimates of life expectancy based on where the deceased were born.

2. **From Classroom to Labor Market: The Divergent Paths of Black and White Americans**

   with Seth Neller and Anjali Verma

   Part of Texas ERC Project UTA-155

   This paper documents several features of the achievement and income gaps between Black and White Americans using linked administrative education and earnings data from the state of the Texas. Among those features: Black students at the 80th percentile of test scores have earnings similar to White students at the 20th percentile of test scores.

3. **The Later-life Impacts of Early-Life Lead Exposure: Evidence from Changes in Vehicle Emission Standards in the United States**

   with Seth Neller

   Part of FSRDC Project UT-02272

   Leveraging the phaseout of leaded gasoline in the United States, this paper uses restricted Census and Social Security data to estimate the impact of early-life lead exposure on later-life measures of economic well-being.