I am an applied microeconomist interested in the design and evaluation of policies that address inequalities in education, employment, and critical healthcare access. My independent research focuses on two broad topics: (1) the role of state-policies and local interventions in improving access to critical mental-health and health services for low-income individuals; and (2) the determinants of, and potential solutions to, race and gender gaps in STEM fields.

At the intersection of these two research strands is the fundamental issue of identifying barriers to long-run academic and labor market productivity, especially those that may adversely impact individuals from disadvantaged or underrepresented backgrounds. This research agenda was first motivated from personal experiences: in my own public high school I observed how school-based healthcare filled a critical gap for many students; in my volunteer work teaching computer science in low-income public schools, I witnessed how misinformation can deter girls and minority-background youth from pursuing STEM fields; and in my own collegiate experiences, I learned how gaps that form in early education can impact college decisions and employment outcomes. I employ strong econometric skills and context-specific knowledge to study these issues. I hope to continue expanding this work with the goal of producing research that can benefit a diverse set of individuals.

Access to Critical Healthcare

The primary paper in my dissertation, *The Effect of School-Based Healthcare on Adolescent Mental Health and Behavior*, attempts to fill a gap in the literature on interventions to address the worsening adolescent mental health crisis. I study the impact of access to school-based health centers (SBHCs) on delinquent behaviors and mental health. SBHCs are full-service health clinics located in or near K-12 schools, that provide adolescent-focused health services at low or no cost to students. While these clinics originated to fill gaps in primary healthcare for low-income students, they have expanded to serve students of all backgrounds and to provide a wide range of services, including mental health care. The SBHC model of healthcare provision is well-positioned to address the three main documented barriers to take-up of mental health services: financial cost, physical distance, and stigma; yet, there is little rigorous evidence of the impact of SBHC access on adolescent behavior.

In this paper, I link data on SBHC openings between 2011-2019 in California to school-level data on suspensions, dropout rates, and self-reported mental health from the California Department of Education (CDE) to examine the effects of SBHC access on behaviors linked to poor mental health. To address selection into opening an SBHC, I use a propensity-score matching approach to select control schools in combination with a difference-in-differences identification strategy. I find that in the years following the opening of an SBHC, school-level suspension rates decrease by 1.2 percentage points, a 20% decrease from the control baseline rate. Exploring mechanisms, I find suggestive evidence that this decrease may be driven by a decrease in suspensions caused by disruptive behavior rather than suspensions caused by other offenses. I find no effect on dropout rates, suggesting that the decline in suspensions is unlikely to be caused by the crowd-out of delinquent behavior by an increase in dropouts. I also provide descriptive evidence that worse reported mental health and school climate are positively correlated with higher suspension rates but not necessarily with higher dropout rates. These results suggest that school-based health centers warrant further consideration as an effective means of addressing adolescent mental health.

I am currently expanding my work on healthcare access in a joint project with Yashna Nandan, an incoming post-doctoral researcher at UCLA. This project aims to study the impact of state abortion bans on the location-decisions of practicing and aspiring OBGYNs. This question is critical for improving access to maternal care, which is sparse in many parts of the United States.

Gender and Racial Gaps in STEM Majoring

The second strand of my research agenda focuses on understanding the barriers to majoring in certain high-return fields for women and underrepresented minority (URM) students. Low levels of racial and gender diversity in STEM fields have been well documented for multiple decades; yet there is minimal evidence on the exact barriers that preclude individuals from entering these fields. One potential barrier that may be especially relevant for URM students is incomplete information about STEM fields due to a lack of exposure prior to college.

In my primary paper on this topic, What You Don't Know Might Deter You: The Effect of Information Provision on Minority Retention in Undergraduate Economics, I run two waves of a large-scale randomized controlled trial at a research university to test whether incomplete information poses a barrier to majoring in Economics for URM students, and whether this barrier can be addressed with a simple information intervention administered in an introductory undergraduate Economics course. I design an information intervention that addresses misconceptions about the types of research topics, types of careers, and expected income associated with Economics, and emphasizes the diversity of Economics researchers. In addition to partnering with university staff to collect administrative data on students' course selections, performance, and major declarations, I design and administer baseline and endline surveys to examine belief-updating. The results suggest that the intervention increased the likelihood of taking a subsequent Economics course for URM students by around 9.9 percentage points and that this increased enrollment is concentrated amongst lower-performing students. Additionally, I find evidence that URM students primarily update their beliefs on the areas of study and research covered by Economics. These results suggest that information on the breadth of the Economics field may change perceptions of the field for a URM student who is "on the margin" between staying in the field and dropping out. Absent this information, those students may be deterred from pursuing the field by poor performance in difficult introductory courses.

A related paper (joint work with Tara Sullivan) examines the determinants of college-major switching behavior and how those determinants differ by gender in STEM fields. We use the Beginning Postsecondary Students Longitudinal Study, a nationally representative, longitudinal survey of first-time beginning students at postsecondary institutions in the U.S. After controlling for several different measures of GPA, we find that women initially in a STEM major are still more likely than men to switch fields and switch out of STEM entirely. There is suggestive evidence, however, that this differential switching may be strongest in response to low GPAs in within-major courses or STEM courses. To identify the quasi-experimental effect of GPA signals on major switching, I develop a propensity-weighted difference-in-differences approach. The quasi-experimental analysis presents similar patterns to the non-weighted regressions, suggesting that the gaps identified in our simpler predictive models are not entirely driven by selection bias.

Other Policy Areas: Job-Training in Critical Sectors

In my time at Abt Global, I had the opportunity to study strategies to improve the effectiveness and accessibility of job-training programs. In one of these projects, we studied the impact of employer-engaged, worker-centered workforce strategies designed to create access to high quality career paths for workers from underserved populations while growing high-demand industries. In a separate project, I led the proposal for a report studying the source of disparities in the completion og job-training programs in the nursing sector. I would be excited to pursue future projects in this domain in addition to my work on issues in education and health.