Research Statement

My research examines two aspects of health and labor economics: employer based health insurance and human capital development. Below I provide a brief description my job market paper, ongoing research, and future research agenda.

The impact of high deductible health insurance plans on spending and enrollee behavioral response (JMP):

My dissertation, funded by an R36 grant from the Agency for Healthcare Research and Quality (AHRQ), examines the extent to which high deductible health plans (HDHPs) reduce *ex post* moral hazard. Recently, HDHPs have become commonplace in the employer insurance market; however, the effect of adding an HDHP option into an individual’s offer set remains understudied.

I address two main themes in the literature: (1) are HDHPs merely a way to shift costs to individuals or do they prompt a behavioral response and reduce utilization and spending, and; (2) if reductions and savings are realized which services are being utilized less and to what effect? To accomplish this, I employ a unique dataset, with several large employers that allow me to observe a national sample of individuals over time where all firms add an HDHP to their existing offer set of preferred provider organization plans.

I estimate the effect of enrollment in an HDHP on health care utilization and spending, paying particular attention to potential selection issues that are commonly raised in the literature. I find HDHPs lower spending by 16% and reduce utilization as predicted by demand theory. Second, I find reductions in hospital-based medical care spending account for 60% of the savings. Finally, contrary to recently published papers, I find evidence of price shopping and discriminatory cutbacks in service utilization and no evidence that these cutbacks impact health outcomes.

Employer Based Health Insurance:

I am currently working on additional projects involving wellness programs with financial incentives and insurance plan choice.

The first project builds on the previous work I have done with a collaborative team examining the impact of financial incentives on wellness programs. Two incentive structures have become especially common: a linear, $1 per point design and an all-or-nothing threshold design. In the current project, we explore how these two designs affect participation. Preliminary results show threshold designs encourage actions by individuals and that missing the threshold in the first year of a wellness program discourages future participation.

The second project is also collaborative and studies plan choice. The goal of our study is to determine (1) how HDHPs affect the shape of the distribution of health expenditures relative to alternative health insurance plans; and (2) what are the welfare impacts of plan choice. To do this, we study employee behavior in small and medium sized firms over
Our results indicate that spending effects are concentrated in the range below the deductible level. After modeling plan choice, the parameter estimates are then used to estimate the dollar value of losing a traditional plan option as well as the symmetric case of gaining a traditional plan option relative to only being offered an HDHP plan. Both cases imply a roughly $500 monthly welfare cost.

My proposed research agenda will continue focusing on plan design. In particular I will examine tradeoffs individuals are willing to make between HDHPs and narrow network plans, which draws on my previous research. Additionally, Anthony Lo Sasso and I will be working with health savings account (HSA) data from multiple firms. We will identify how individuals invest in their HSAs and examine the impacts of HSAs on health care spending and outcomes over time. I anticipate this work to be in line with funding priorities from AHRQ and the National Institute on Aging (NIA).

**Human Capital Development:**

My paper *Measles Vaccination and Human Capital Development in the United States*, evaluates changes in human capital development after the introduction of the measles vaccine.

When the measles vaccine was introduced in the United States there were mass vaccination initiatives resulting in universal take-up and near full reductions in incidence rates. I use a difference-in-difference identification strategy, taking advantage of cross-area differences in pre-vaccine measles incidence rates, with the introduction of the vaccine in 1963 as my exogenous policy change. I observe gains in health and education following the introduction of the measles vaccine. Not only do children benefit from not getting the measles, but they also experience a protective effect from the measles vaccine. Since children no longer experience the weakened immune effects from measles that increase their susceptibility to other childhood infectious disease for up to four years, children are in better overall health post-vaccine introduction. These gains in childhood health translate into increases in school enrollment and full-time school attendance in the short-run and higher earnings in the long run.

In the future I plan to expand this work to include long run health outcomes in the US, adding the United Kingdom and Denmark to the analysis, and examine the long run impacts of the measles vaccine in developing countries. I anticipate this work to be in line with funding priorities from AHRQ, the Centers for Disease Control and Prevention (CDC), the National Institute for Minority Health and Health Disparities (NIMHD), the National Institute of Child Health and Human Development (NICHD), and the National Institute on Aging (NIA).