1. Tell us something about yourself ...

I earned my PhD from Princeton in 2004. I have been at UH-Mānoa since then. I am also a fellow at the Institute for the Study of Labor Economics (IZA) in Bonn, Germany. My research lies in the field of human resource economics, which encompasses labor, population and health economics and tends to be very data intensive. These days I have been working a lot on inequality in various guises. One recent project is on the evolution of wage distributions in the United States and Mexico since the latter part of the 1980's. Another uses Bayesian econometric techniques to estimate the inter-generational transmission of health status.

2. Is this a good summary of your results: Unemployment kills!

More-or-less. This work seems to be suggesting that poor macroeconomic conditions do increase mortality risks but only for working-aged men. There is no such association for the elderly or for women. In some way, this makes sense since working-age men have the strongest attachment to the labor force. One important point is that this is one of the few studies that uses individual level data; others typically use aggregate state-level mortality rates which can be hard to measure. These studies actually show the opposite, namely, that poor macroeconomic conditions are associated with lower mortality, even, for the elderly. While we do not understand why there is this difference between the results at the differing levels of aggregation, we can say two things for sure. First, mortality is very easy to measure at the individual level; you are either alive or dead and that is easy to verify. On the other hand, a mortality rate for a given state is actually hard to measure because it is defined as the number of deaths in that state during a given period of time divided by the states population at a point-in-time. The fact that the denominator is moving is what makes this a challenge. Second, related work has shown that job displacement kills you. This work also uses microdata. It is a lot easier to reconcile my findings with this literature than the "recessions are good for you" literature with it.

3. Were you surprised to find such a big effect?

Yes, but there really isn't another study out there that does exactly what I did, so there is not a comparison that we can make. I find that a one percentage point increase in the unemployment rate results in about 24 more deaths per 100,000 workers which in epidemiological terms is quite large. However, the US economy has business cycles which means that the unemployment rate goes up and then comes down. So, over a prolonged period, on net, my estimates would indicate a smaller number of deaths since some years would be good, but that it is so responsive was surprising. Bottom line is that more work needs to be done.
using other large individual level data sets from the US to see what we get in other contexts.

4. **How did you get interested in this topic?**

When I was starting out in graduate school, I had initially wanted to work in development and much of my work is in developing countries. However, at that time, many of my advisers who had been working on savings and consumption started to think about health and how it fits into life-cycle economic behavior. This actually seemed like a natural progression since health is probably the most important component of human welfare. So, during one meeting with my adviser, Chris Paxson, she had mentioned Chris Ruhm’s work on recessions and health tangentially. This work is pretty much the consequence of that specific interaction.

5. **Are there policy implications?**

Yes. In fact, Harvey Brenner of Johns Hopkins who is probably the godfather of this literature has testified before the US Congress on numerous occasions. Although I am not sure if knowing that recessions increase mortality risks makes good stewardship of the macro-economy any more of a moral imperative; perhaps it does but it would be important even without these mortality effects. These results would possibly affect other cost-benefit calculations. For example, environmental regulations will confer long-term benefits down the pike but one immediate cost that might be ignored could be these mortality effects if the regulations increase unemployment.

Actually, I presented this paper once and Edward Lazear, who was the second George Bush’s chief economic adviser, was in the audience. He told me that the auto bailout, of which he was the chief architect, probably prevented the unemployment rate from going up a full percentage point. He said that my work tells how many lives this policy saved.