A groundbreaking experimental research method that began in a collaboration between UC Berkeley economics professor Edward Miguel and Michael Kremer — a current Harvard University economics professor and Miguel’s former doctoral adviser — led to the awarding of a Nobel Memorial Prize in Economic Sciences on Monday.

The prize was awarded to Kremer and Massachusetts Institute of Technology economics professors Esther Duflo and Abhijit Banerjee “for their experimental approach to alleviating global poverty,” according to the Royal Swedish Academy of Sciences winner announcement video. While Miguel himself was not awarded a Nobel Prize, Miguel and Kremer’s project was one of the first to use the new research method.
Some of the research recognized is Miguel and Kremer’s work in Kenya during the mid-1990s studying the educational impacts of providing deworming drugs to children in a highly infected area.

“We certainly did not think about the Nobel prize — at least I didn’t,” Miguel said. “We did know that it was new. It was groundbreaking.”

According to the Royal Swedish Academy of Sciences, the approach used by Miguel and Kremer helps to identify effective ways of reducing global poverty by defining specific subquestions of a broader inquiry. These smaller questions are then answered through field studies and randomized controlled experiments.

Kremer said he and Miguel were both surprised that the entire community in Kenya was positively impacted by the deworming of school children. Even people who were not originally treated benefited from the treatments; Miguel attributed this result to reduced disease transmission, meaning the treated children were no longer able to pass on the infection to other people, according to Kremer.

Kremer explained that many scientists look at the differences between the group receiving treatment and the control group to evaluate the impacts of the treatment. The research in Kenya showed, however, that it is important to recognize that the control group can sometimes be impacted by the treatment group — in this case how those untreated were affected by those who were treated. Kremer added that this impact can mean scientists underestimate the effects of the treatment, as it is generally assumed that the control group represents the baseline and that it does not change.

Thus, the study pioneered a new statistical way of approaching research that took into account the broader community effects.

Miguel’s personality is what made him a “brilliant” researcher, according to Kremer. While there are many types of economics research, field research — like the research studies in Kenya — requires scientists to spend ample time with people to understand results.

“(Miguel) is extremely outgoing — he listens to people and treats everyone with immense respect, and those things really make a difference,” Kremer said. “He was able to get things done in the field because of those amazing personal qualities.”

Miguel said the motivation behind the research was the potentially large impact on global poverty prevention. He added that infectious and tropical diseases are major concerns in sub-Saharan Africa. By studying the best way to treat the infections, Miguel and Kremer were able to create policies and practices that were then copied by other countries with similar issues.

The most important thing to consider when deciding what to study is whether the topic is significant to the researcher, according to Miguel. He added that he believes young scholars can easily get caught up in the details and lose sight of the bigger picture.

“Even if the Nobel prize hadn’t recognized us or we were not recognized by our colleagues, we would always have the satisfaction of doing something we knew was important,” Miguel said.

Contact Maria Young at myoung@dailycal.org and follow her on Twitter at @maria_myoung.