What makes us prosperous, healthy and happy across our lives?

Since 1957, UW-Madison has been tracking the lives of 1 in 3 Wisconsin high school graduates to answer this very question — which makes the Wisconsin Longitudinal Study (WLS) one of the longest running studies of its kind.

This has been possible only because more than 10,000 graduates, and many of their siblings and spouses, have been such willing and wonderful participants. The WLS has also brought to the state more than $35 million in federal National Institutes of Health (NIH) funding in the last five years alone.

So what have we learned?

The study began during the Cold War’s scientific competition between the United States and the Soviet Union. Working with state government, UW-Madison’s School of Education surveyed all high school graduates statewide in 1957 to learn their post-graduation plans. The conclusions drawn were the basis for the statewide expansion of Wisconsin’s colleges and universities—what is now one of the best public university systems in the country.

During the 1960s and 1970s, the late UW-Madison sociology professor William Sewell and Emeritus Professor Robert Hauser extended the project to explore how adolescent experiences are related to success in adult life. We learned that one’s own aspirations and parental support mattered more than IQ in determining who went to college and had later career success.

Our study participants are now in their 70s but the lessons we’re learning from them are more important than ever.

We’re learning how work, family and friends influence our well-being in later life. While access to quality medical care is critical, our broader social environment is just as, if not more, important.
The WLS has also been creatively incorporating cutting-edge changes in science. We are in the process of adding genetic data that will make the WLS one of the most promising ways of examining how genetics influences our well-being.

Another innovative new project focuses on the human microbiota. Humans are an amalgamation of cells, both human and microbial, with the number of microbial cells largely exceeding our H. sapiens cells. We are more microbial than human. There is already evidence that microbiome-based treatments offer dramatic breakthroughs for colitis and some bacterial infections, and we are just beginning to understand the broader implications for human health.

Everyone’s microbiome is different, shaped by our environment — the food we eat, the people we interact with, the houses we live in.

The WLS is the first study to link data on the human microbiota to comprehensive, longitudinal data on the broad array of environmental characteristics that shape the gut microbiota.

This gives researchers the opportunity to better understand how the microbiome influences human health — and ultimately, how we can use it to improve human health. It offers one more example of the path-breaking research that occurs every day at UW-Madison.

ABOUT THE SCHOLAR

Pamela Herd is a professor of public affairs and sociology and a faculty affiliate with the Institute for Research on Poverty. She is also the principal investigator of the Wisconsin Longitudinal Study, a groundbreaking long-term study of the life courses of a cohort of Wisconsin men and women. Her work focuses on aging, policy, health and inequality.

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