

UW-Madison: La Follette Assistant Professor Lauren Schmitz awarded prestigious National Institute on Aging grant

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MADISON, Wis., – La Follette School of Public Affairs Assistant Professor [Lauren Schmitz](#) and her team of researchers were recently awarded a prestigious National Institute on Aging R01 grant for their work on the Malawi Longitudinal Study of Families and Health.

The project, “[Adversity, Aging and ADRD Risk among the Global Poor: A Biosocial Lifecourse Approach.](#)” is co-directed by Schmitz and Hans-Peter Kohler of the University of Pennsylvania and also includes researchers from the University of Malawi College of Medicine, the Invest In Knowledge Initiative, Princeton University, University of British Columbia, and Columbia University.

The Malawi Longitudinal Study of Families and Health will mark a big leap forward in global aging research by using cutting-edge epigenetic and genetic data alongside detailed social, contextual, and health data for a fuller picture of the aging process. Currently, biosocial research that includes epigenetic and genetic data severely underrepresents non-white populations and is almost exclusively in high-income countries, even though low- and middle-income countries comprise most of the global population.

“These data will allow us to investigate critical factors that are contributing to accelerated biological aging in low-income populations,” Schmitz said. “Importantly, this study will yield generalizable evidence that can inform policy intervention for millions of older adults who live in similar contexts with mostly subsistence-

agricultural economies and inadequate health systems.”

The Malawi Longitudinal Study of Families and Health is one of just a few established longitudinal cohort studies in sub-Saharan Africa that is available publicly. It provides a rare record of more than a decade of demographic, socioeconomic and health conditions in one of the world’s poorest countries. With data regularly collected from more than 6,000 participants since 1998, it permits researchers to investigate 25 years of demographic, socioeconomic and health conditions in one of the world’s poorest countries.

While the existing data from the study is robust, this grant will enable researchers to supplement two and a half decades of existing lifecourse social, contextual, and health data in the study with epigenetic aging biomarkers and additional longitudinal measures of cognitive decline and dementia risk.

Using social, genomic, and epigenomic data, Schmitz studies how behaviors and environments may change how our genes work or even how rapidly our cells age. These advanced epigenetic clocks appear to be better predictors of mortality than chronological age and traditional risk factors like smoking, cholesterol, or diabetes.

In a landmark 2022 study, [Schmitz used epigenomic data](#) to demonstrate that the Great Depression accelerated epigenetic age in study participants who were in-utero during the social upheaval.

In 2017, she received a K99/R00 Pathway to Independence Award from the National Institute on Aging to examine social determinants of epigenetic processes related to aging and neurodegenerative disease. Her research has also been supported by the National Science Foundation, the Social Security Administration, the Russell Sage Foundation, and the March of Dimes.