

NIH taps Tulane neuroscientist to lead effort to standardize research in genetic aging

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Tulane University neuroscientist Dr. Stacy Drury will launch the Telomere Research Network to establish best practices for measuring telomere length and how it can be used as a sentinel of aging-related disease risk. Photo by Jennifer Zdon.

The National Institutes of Health awarded a [\\$2.9 million grant](#) to Tulane University neuroscientist [Dr. Stacy Drury](#) to lead a research network that will set methodological standards for studying a part of the chromosome that scientists increasingly recognize as an important biological marker of aging and age-related diseases.

Drury will launch the Telomere Research Network to establish best practices for measuring telomere length in population-based studies. Telomeres are the caps at the end of chromosomes that keep them from shrinking when cells replicate. Shorter telomeres are linked to higher risks for heart disease, obesity, cognitive decline, diabetes, mental illness and poor health outcomes in adulthood.

“The network will define the extent to which telomere length can be effectively applied as a sentinel of aging-related disease risk and an indicator of environmental and psychosocial stress exposure across the life span,” said Drury, the Remigio Gonzalez, MD, Professor of Child Psychiatry at Tulane University School of Medicine. “We are charged with bringing together all of the international experts in the field and becoming a central focus for this research across the globe.”

There has been an explosion in telomere research within the last decade. But scientists have used different measurement criteria, leading to problems replicating research results in some studies.

“As it becomes clearer that it is a very powerful marker, the rigor of the science has to get better,” Drury said. “Because so many people are studying it in so many different ways, we don't want to dilute the impact by having lots of people using methodology that isn't the best.”

The network will define the extent that telomeres can be used as a marker of environmental exposures, psychosocial stress and disease susceptibility. It will also provide a forum for researchers to share samples, research data, study protocols and discussions on best practices for the field.

The network will convene for its first meeting Dec. 5-6 in Washington, D.C. The event will be streamed online at <https://tulane.zoom.us/j/258026269>.

Weatherhead Professor of Pharmacology John McLachlan is a co-investigator on the grant. Drury will be working with collaborators at the University of Groningen, University of California at San Francisco, Georgetown University, Pennsylvania State University and Rutgers University.

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