

## Family Longevity Study Wins \$80M in NIH Funding, Will Sequence up to 7.8K Participants With PacBio

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NEW YORK – Pacific Biosciences' stock soared 10 percent on Wednesday following news that the Long Life Family Study (LLFS), which recently won \$80 million in new funding from the National Institutes of Health, plans to use the firm's sequencing technology to generate genomic and epigenomic data for up to 7,800 participants.

LLFS, a multicenter longitudinal study that focuses on longevity in families and healthy aging, commenced in 2019 with \$68 million in funding over five years from the NIH's National Institute on Aging. In August, the project was extended until 2030 with another \$80 million over five years.

The study has so far enrolled more than 5,400 individuals across about 540 three-generational families in the US and Denmark and has conducted three rounds of in-home phenotyping over almost 20 years.

Starting in Q4, the McDonnell Genome Institute at WashU Medicine will employ PacBio's Revio platform and HiFi long-read sequencing to detect structural variants, repeat expansions, indels, and methylation signatures in 5,500 samples initially and 7,800 samples eventually. These results will be integrated with phenotypic and clinical data and linked to longevity and disease resistance.

In addition, the study plans to enroll families of African ancestry and to characterize participants' microbiomes, somatic mutations, and proteomics, according to the grant abstract.

"Long-read HiFi sequencing gives us the accuracy and resolution to see variants and methylation patterns missed by other technologies," said Michael Province, the principal investigator of the study and a professor at Washington University School of Medicine, in a statement.

"LLFS is one of the most ambitious aging studies ever undertaken, and one of the first to apply longread and epigenome sequencing at scale," David Miller, VP of global marketing at PacBio, said in a statement.

In afternoon trading on the Nasdaq, PacBio's stock was up 10 percent at \$1.54.



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