

Telomeres linked to death risk in data from largest U.S. “biobank”

SAN FRANCISCO, CALIFORNIA—Researchers who have assembled a trove of genetic and medical data on 100,000 northern Californians unveiled their initial findings here this week at the annual meeting of the American Society of Human Genetics (ASHG). The effort, which may be the largest such “biobank” in the United States, has already yielded an intriguing connection between mortality and telomeres, the protective DNA sequences that cap chromosome ends, and found new links between genetic variants and disease traits. And that’s just the beginning, say the biobank’s curators at Kaiser Permanente (KP), the giant health care organization.

On the telomere front, the KP team has verified that these DNA caps tend to be shorter in older people and in those who smoke and drink alcohol, but didn’t confirm other previously reported links. For example, they didn’t observe that telomeres were longer in people who exercised more. They did find an association between having short telomeres and an individual’s risk of dying—another finding reported earlier in smaller studies. But the KP team hasn’t yet determined if short telomeres somehow cause death directly or reflect other factors that contribute to mortality, which is a controversial question. (Some companies, including one co-founded by UCSF researcher and Nobel laureate Elizabeth Blackburn, whose lab measured telomeres for the KP study, are offering telomere tests [even though critics say the value of such measurements isn’t yet clear](#).)

View the original article here: [Largest U.S. Genetic Biobank Reveals Early Findings](#)