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Neurofeedback Foundation

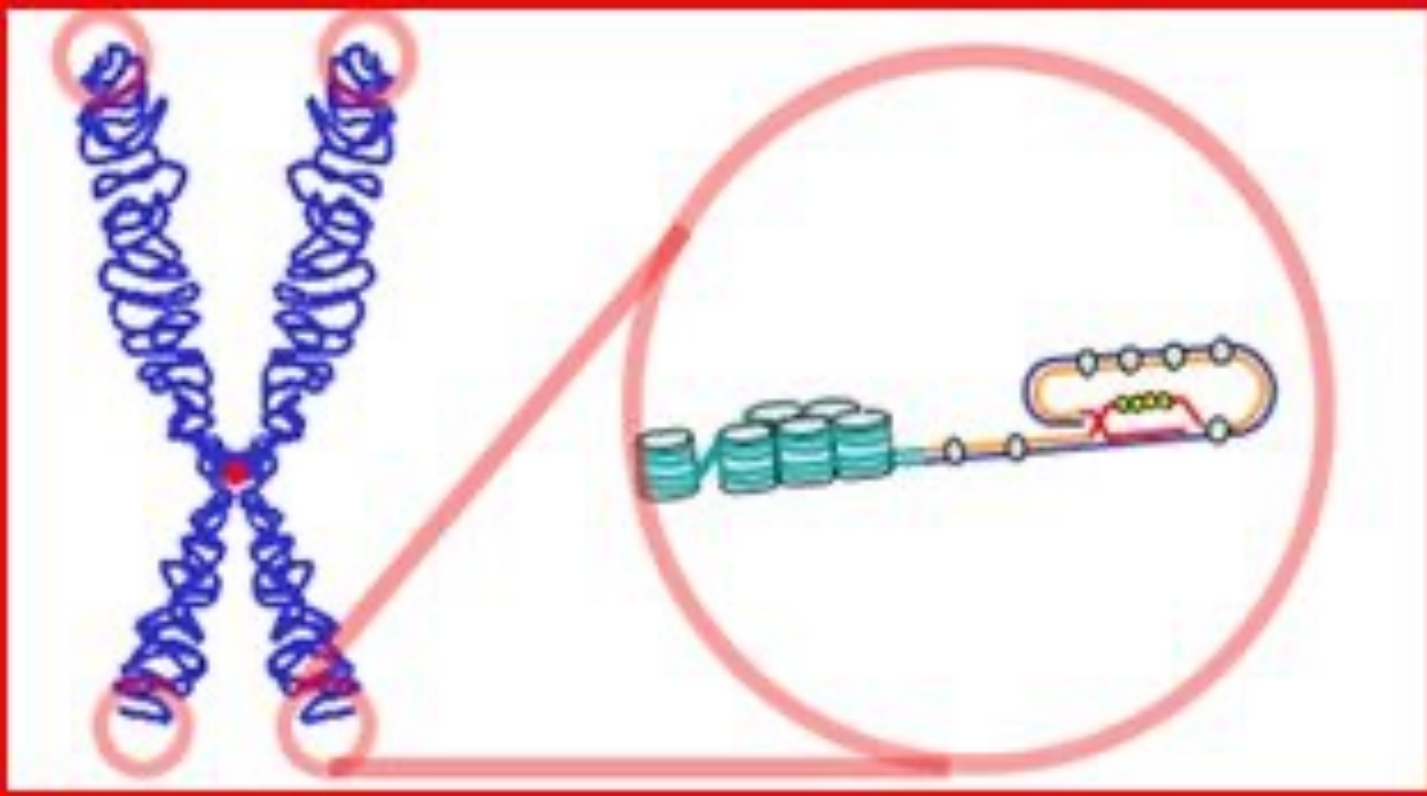
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Telomeres cap each DNA strand



Each DNA replication sheds a bit of telomere

Extrinsic constraints determine how much;

Telomere shortening has become a measure of biological aging;

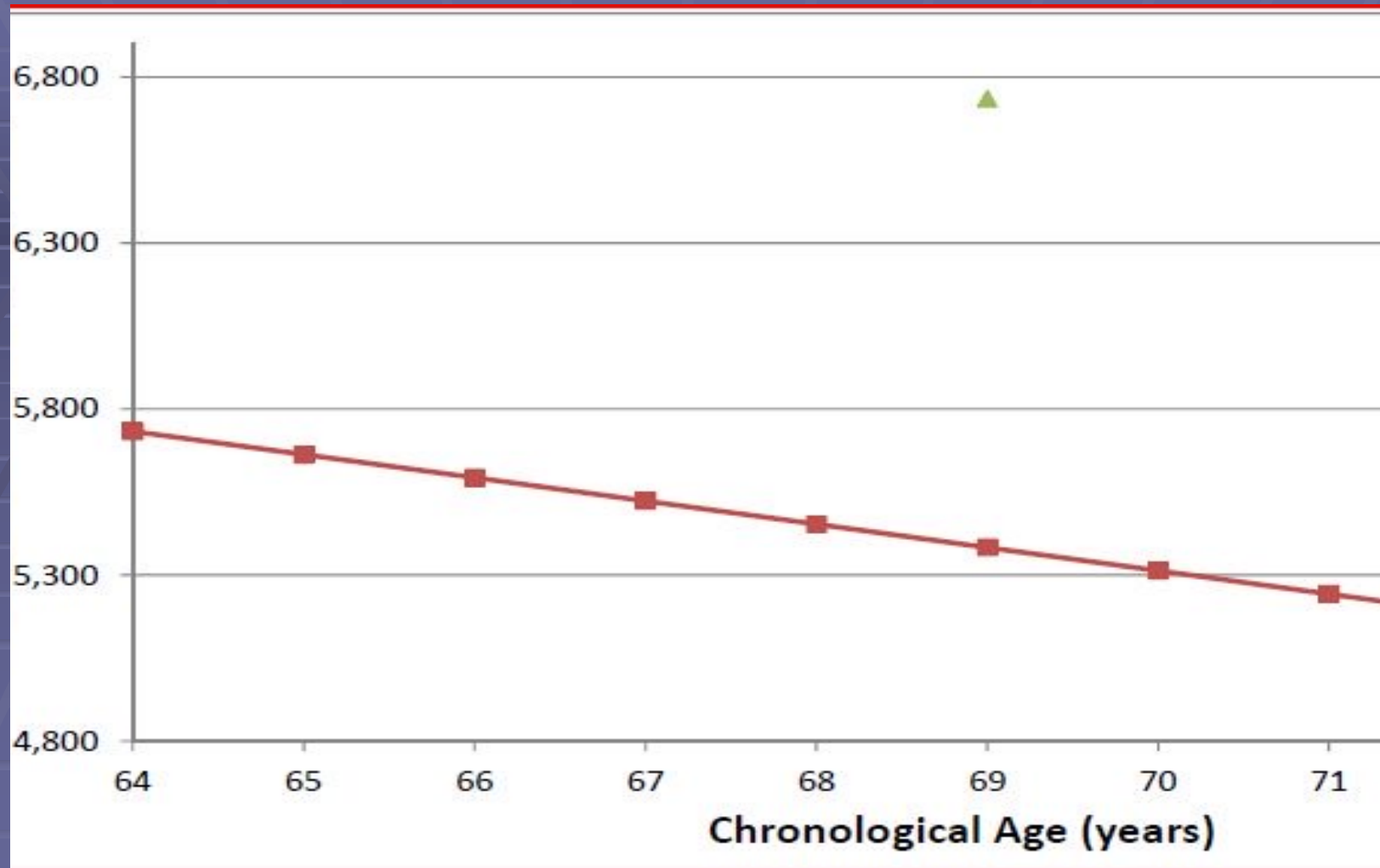
Shorter telomeres = greater biological age, propensity for DNA damage;

DNA testing now brings numbers for this.

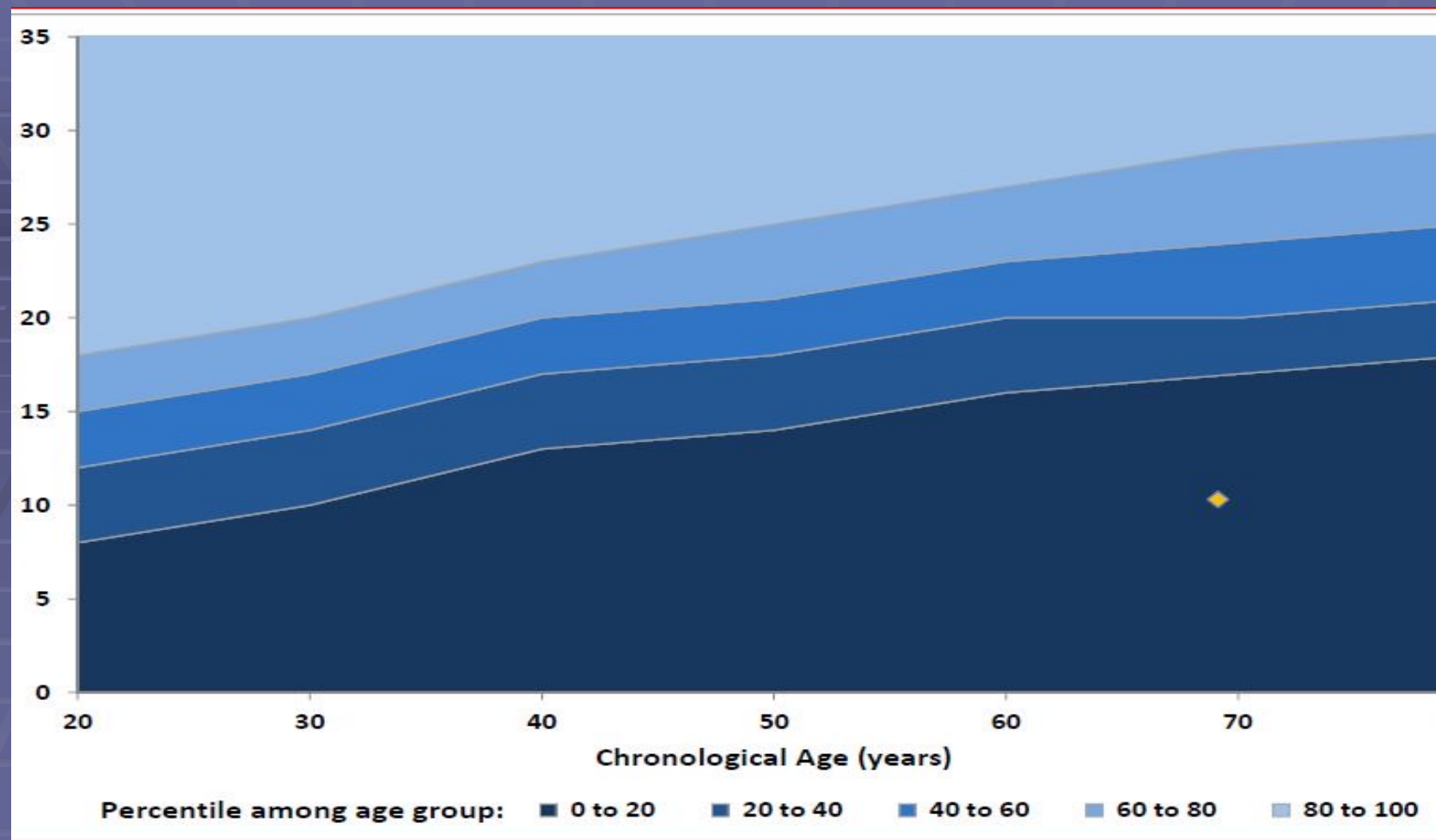
Results posted as:

Average length of telomeres compared to normative age group;

Percentage of telomeres shortened as index of not such good things afoot;



...average telomere length of a person approximately 49 years old.



Percentile rank of shortened telomeres is
in the 0-20 year-old range

www.titanovo.com



One telomere testing kit

\$125-\$175

Telomere length testing is used to give users information about an important health metric, which is strongly related to overall health and longevity. Users can track their telomere length over time and determine if their lifestyle choices are positively influencing their cellular health by telomere length.

You will be able to register your kit and access your results at our [client panel](#).

DEMO OUR CLIENT PANEL at client.titanovo.com with the

You can order our additional longevity genotyping panel that will inform you of your single nucleotide polymorphisms in 3 key genes – APOC3, APOE, ACE and provide you with the statistical odds of someone with your genotype (based solely on these genes) living to the age of 100.

Within Zengar Community

1. Collect your own data;
2. Estimate number of sessions;
3. Send to abachers@gmail.com
4. I will delete identifying data, periodically or by number of submissions publish results.

Question:

How does number of NO
sessions correlate with
telomere length?

General research approach

To any research design, add a cell of NO subjects. Use measures already in the study design, with which the researcher is already familiar and with which they have expertise.

The future of research – N=1

Citizen Science – the ultimate selfie

Massive individually collected data sets

Residing in the cloud

Available to consult by the individual, their agent, or curious researcher.

Our question:

To what extent altered by NO sessions

Where to start

Genome magazine –genomemag.com

Tests to explore:

Titanovo

23andMe

American Gut

uBiome

testmybrain.org

Data aggregators and repositories

www.openhumans.org

Human Genome Project - www.genome.gov

Personal Genome Project -
www.personalgenomes.org/

Huge industry:

Decoding the decoded genome

What does it mean, what's actionable

What does this mean for NeurOptimal users?

Preston Estep (Telome.com) and George Church have just launched
veritasgenetics.com

For \$1000 provides an entire Genome Wide analysis – 10,000x larger than 23andMe providing data to mine for a lifetime. Estep welcomes (as he did at Telome) testing the effects of maybe 24 NO sessions on repeated Genome Wide analyses.

Stepping into the next dimension that includes NO

\$1M Illumina Sequencer creates all this data.

App developer conferences: “How would you interrogate the genome?” NLD parts of the genomic conversation – still being defined.

Changes in the rate of change of intersecting sites in the genome. Phase changes create retrotransposons – quantum changes at a distance. Sound familiar?

Everyone can do it research proposals

Something noteworthy to the client happens in first session or before the second session

1. Categories – physical, emotional, dreams
2. 1-5 scale of importance to the client;

Personal Bests

1. No matter how trivial seeming;
2. Categories;
3. 1-5 scale of importance



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