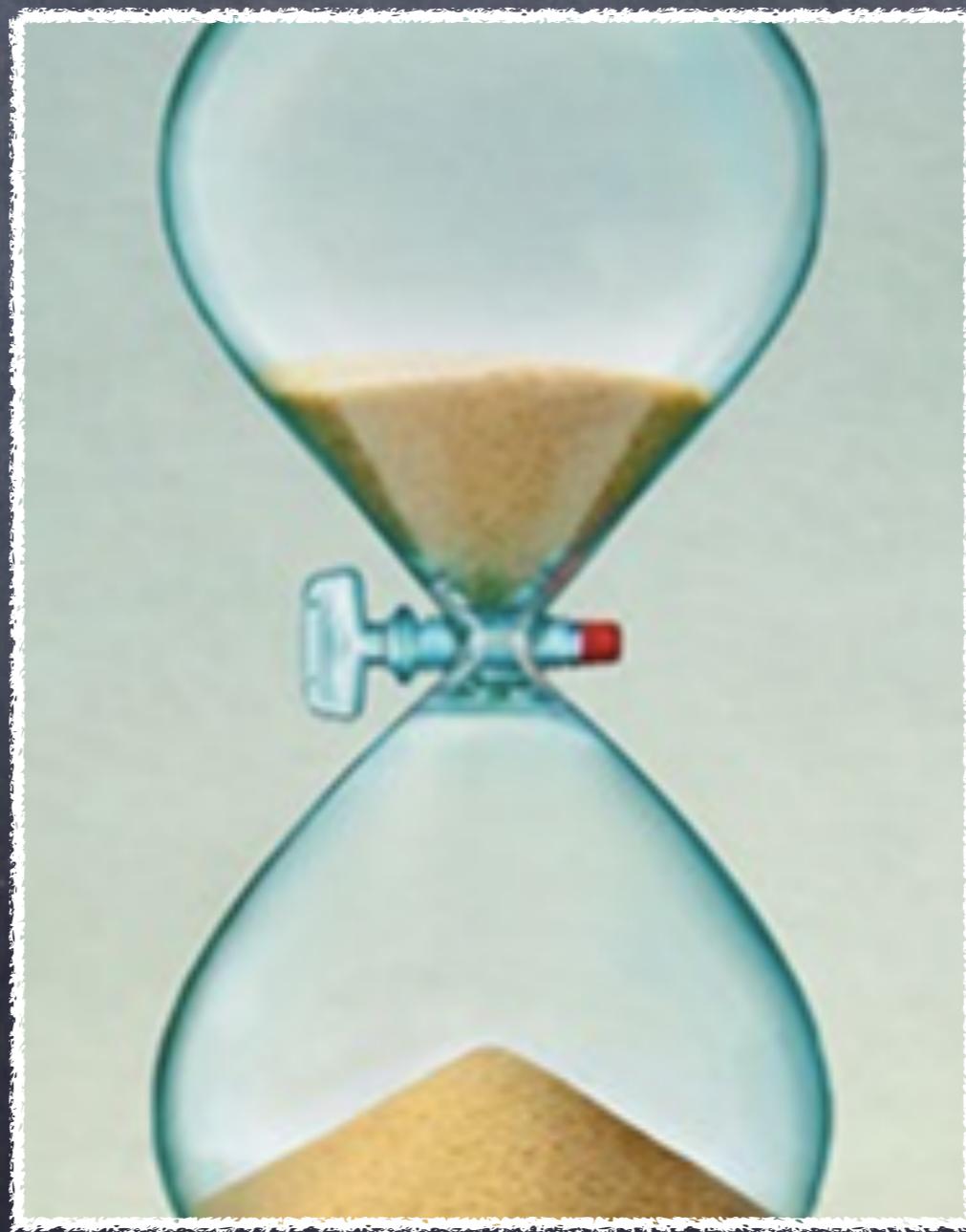


Why Die -
if we can live forever?

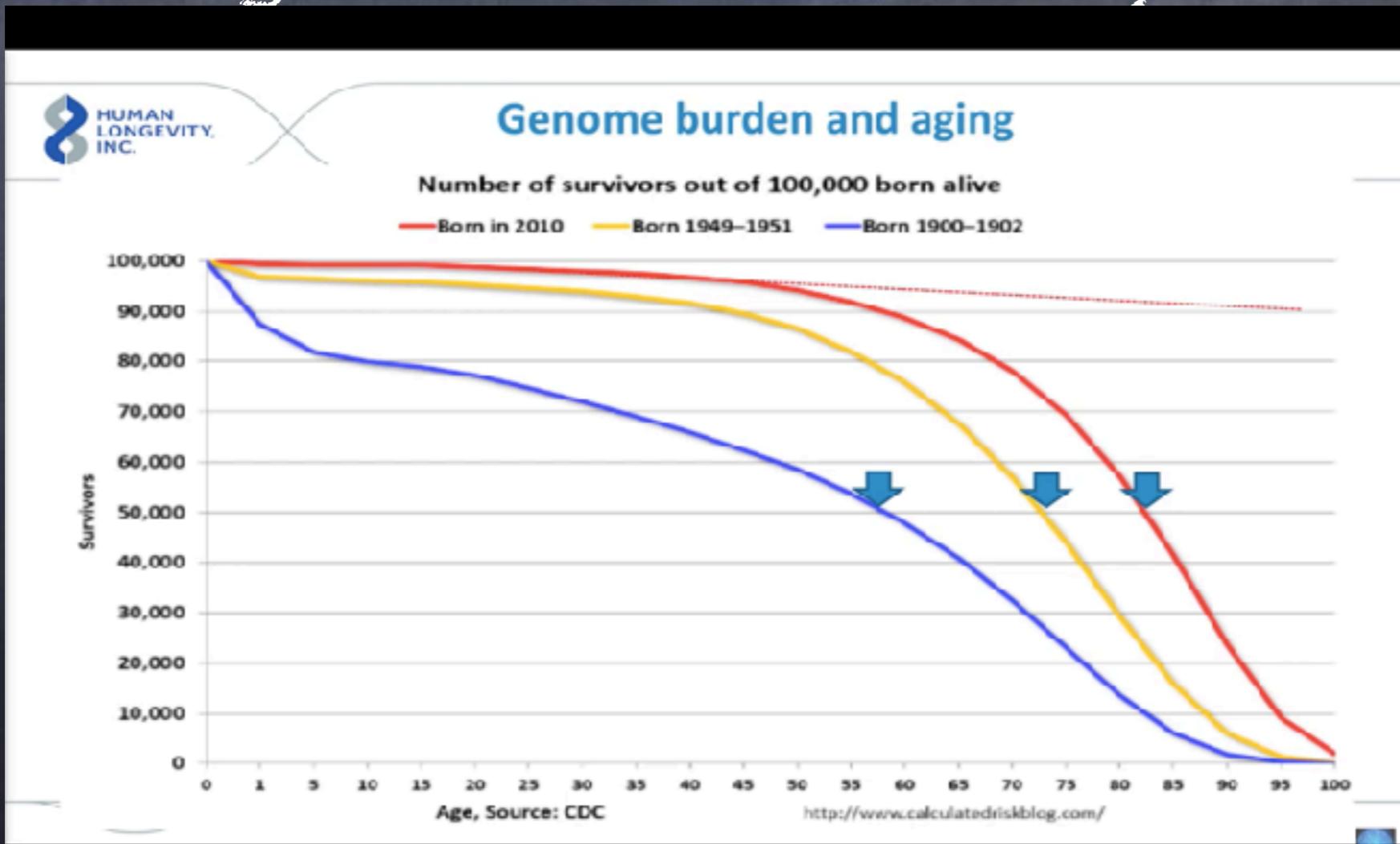


Why Die -
if we can live forever?

- forever?
- if we can?
- Why die?

Why Die – if we can live forever?

- what is forever?
- Life span . . . 35-55-75/80 years –
Heading towards 110-120 years?



Why Die - if we can live forever?

- what is forever?
- Life span . . . 35-50-75/80 years -
Heading towards 110-120 years?
- forever: 150-200-500 years
- forever
- Chronological vs. Biological Age

Why Die -
if we can live forever?

- forever?
- if we can?



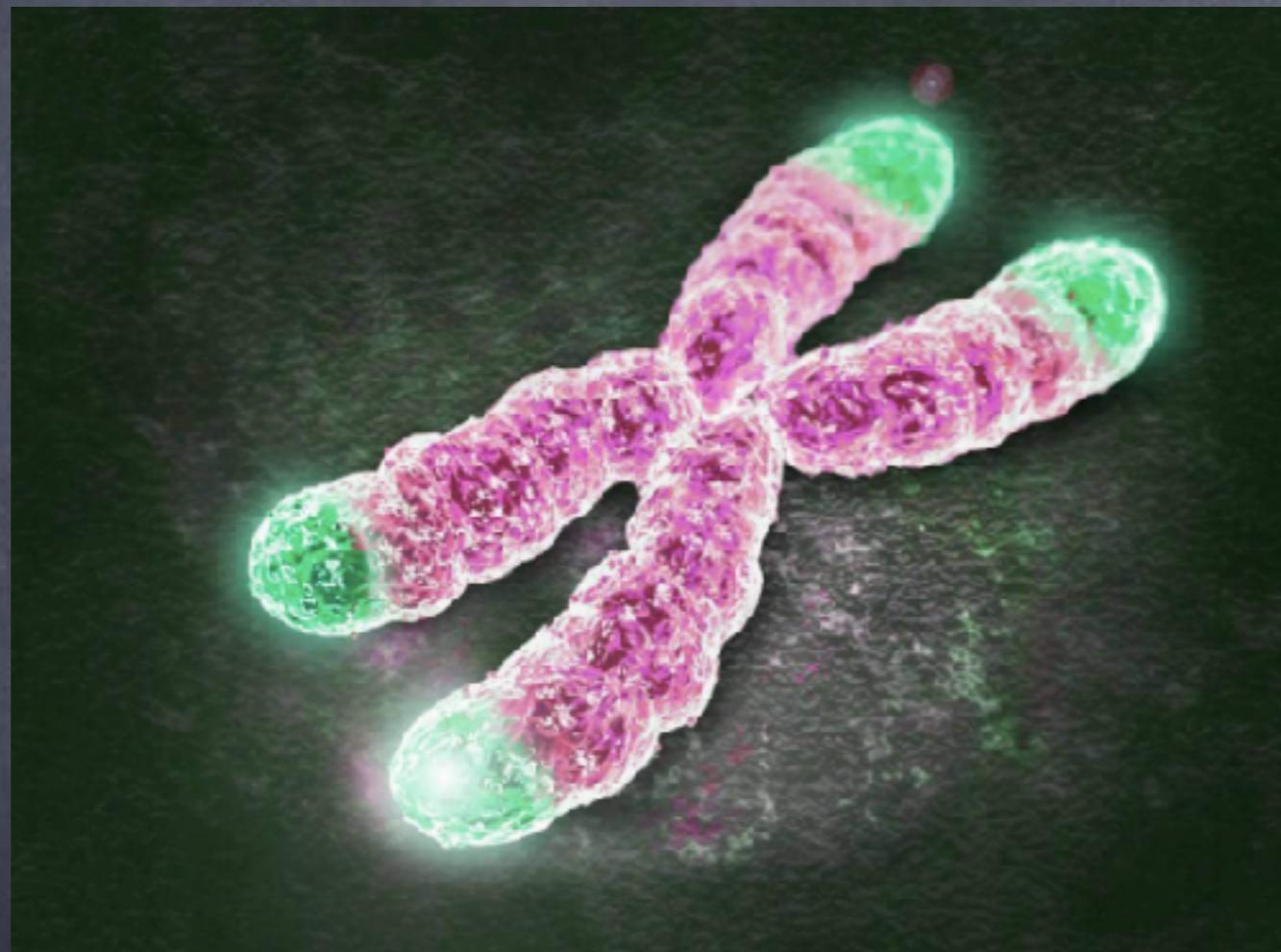
Worth 1000.com

The biology/genetics of aging

- Telomeres
- Gene editing

Telomeres

Nobel Prize Award 2009*



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Telomerases

*Elizabeth H. Blackburn, Carol W. Greider and Jack W. Szostak

Telomeres

Nobel Prize Award 2009

- ④ https://www.youtube.com/watch?v=LBugws_cWho
 - ④ 2:00 - 5:45 min; 6:00 - 12:00 min
 - ④ mechanism stress

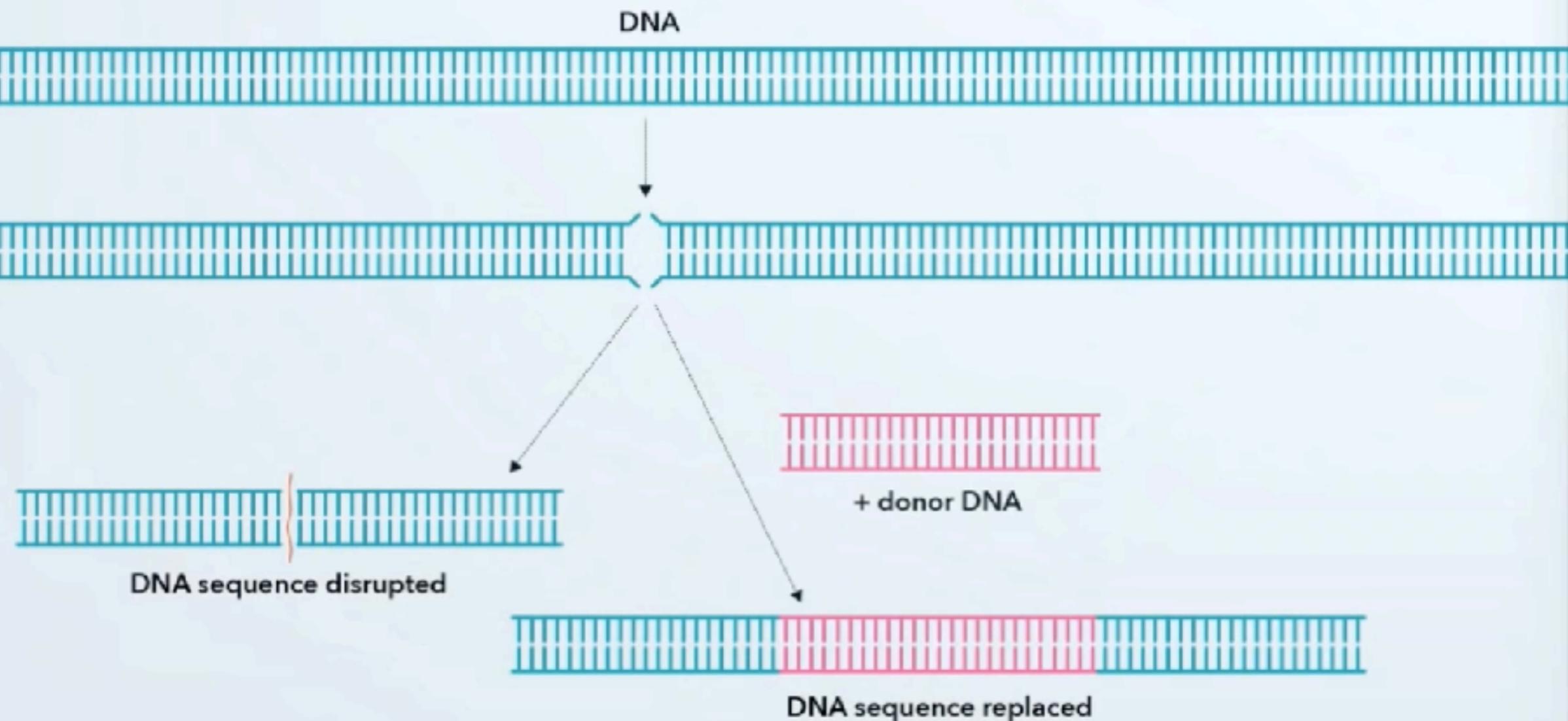
OMG!!! I'm loosing my telomeres!!



The biology/genetics of aging

- Telomeres
- Gene editing

Gene editing

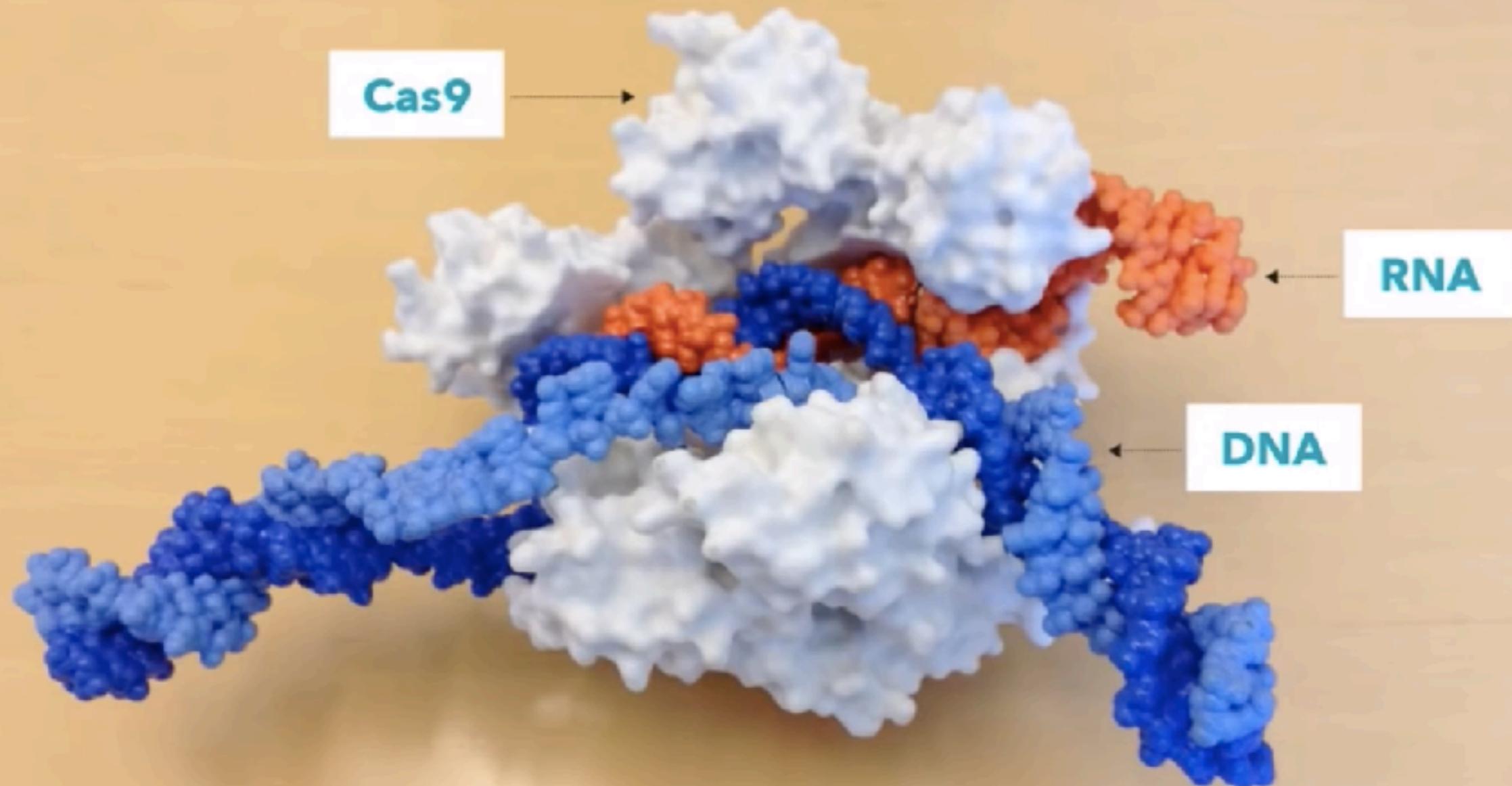


DNA with precision cut

DNA repaired with
new genetic information

Gene editing

CRISPR-Cas9



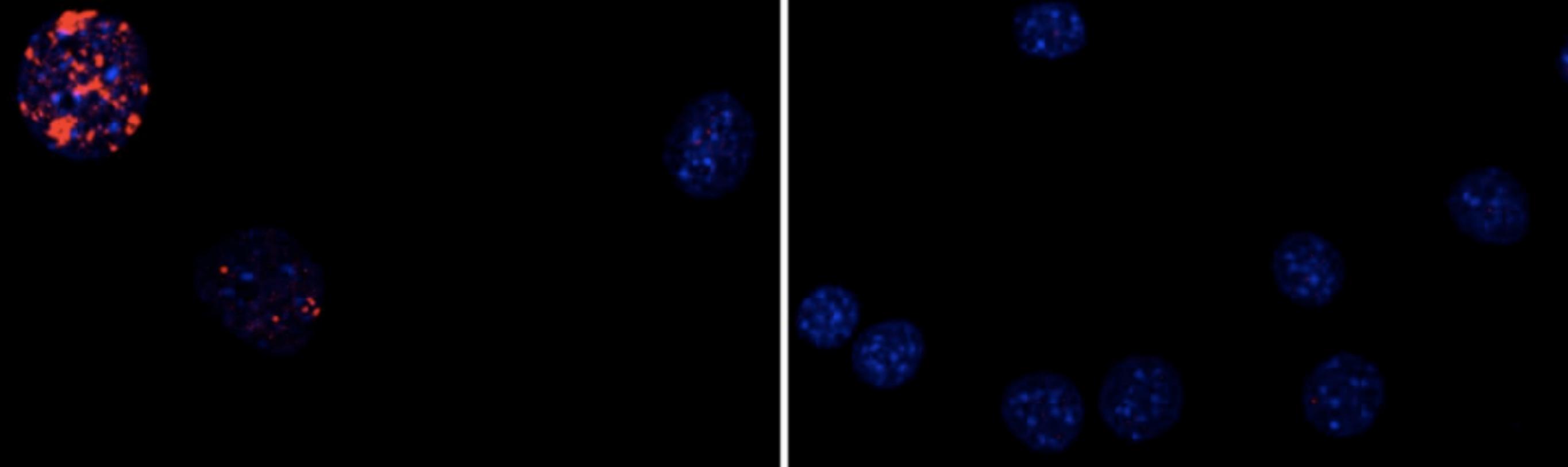
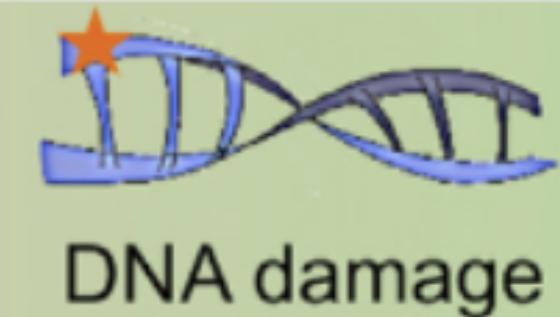
Clustered regularly interspaced short palindromic repeats

Gene editing

Yamanaka Factors



Oct4 Sox2
Klf4 c-Myc



Why Die -
if we can live forever?

• forever?

• if we can? ... Yes, we can!

The Big Question re. Living "forever"

Good Idea?

Bad Idea?