The New York Cimes https://www.nytimes.com/2021/10/16/business/dealbook/the-business-of-longevity.html

DEALBOOK DIALOGUE

What's next for the business of longevity?

DealBook spoke with the Harvard researcher and biotech founder David Sinclair about the opportunities and challenges of hacking the human lifespan.

By Lauren Hirsch

Oct. 16, 2021

Investors including Larry Ellison, Jeff Bezos and Peter Thiel have spent billions on the business of living longer. The appeal is clear: more time to spend with loved ones, achieve goals and enjoy new experiences.

But the prospect of extending life also brings up a host of thorny societal, economic and philosophical issues. And though there's general acceptance of certain fundamentals, like the importance of exercise and not smoking, there is still debate over how much life spans can be extended and exactly how to go about extending them.

David Sinclair, a Harvard biologist, has been studying aging and how to slow it for more than a decade. He is also a founder of at least 12 biotech start-ups and sits on the boards of several others.

DealBook spoke with Dr. Sinclair in an event last week about the business and science of extending life, with help from insightful questions offered by our readers. These are some of the key takeaways from the talk. You can listen to the full debate in the audio player above.

Longevity research would work differently if aging were classified as a disease by the Food and Drug Administration. Since aging is not considered a disease — as it is natural and affects all humans — the F.D.A. does not have a regulatory process to approve a drug for it. It also means there is less regulation around various supplements and treatments that claim to combat aging. "I would like the F.D.A. to declare it a disease, and let's start treating it, and when we do that, we will have much greater gains on health span," Dr. Sinclair said.

> The DealBook Newsletter Our columnist Andrew Ross Sorkin and his Times colleagues help you make sense of major business and policy headlines — and the power-brokers who shape them. Get it sent to your inbox.

In the absence of a clear regulatory pathway, drug developers have focused efforts on treating diseases linked to aging, like glaucoma. For example, Unity Biotechnology, a publicly traded biotech company focused on such diseases, last week reported positive data from a safety study on a new drug for treating advanced vascular eye disease. The same company faced a major setback last year when its drug for osteoarthritis of the knee failed in a trial to show improvements over a placebo.

Living longer could have broad economic benefits, but there may be other costs. Dr. Sinclair was the co-author of a report earlier this year arguing that increasing the average life span in the United States by a decade could create about \$360 trillion in economic value, accounting for both money saved in categories such as sick-care and additional spending by people who are living healthier longer. (The average life span last year was about 77 years, a nearly two-decade low mainly because of Covid 19-related deaths.)

Living longer and healthier could arguably put money into the economy. But there are other costs. "If there were more humans on the planet, there's always going to be more stress you place on the environment," Dr. Sinclair said, though he believes that a decline in fertility could offset some life-span increase. He pointed to innovations in areas like clean energy as possible countermeasures to the climate burden of a higher population.

And what about the personal costs to longevity — with so many Americans already having difficulty saving for retirement? Retirement wealth has accumulated almost exclusively among higher-income households, while middle- and lower-income households have held steady or lost ground. Dr. Sinclair argued the money "that's currently wasted on medical care" can be put toward "a whole bunch of things," citing vocational retraining, Social Security, among other programs.

But living longer would still probably mean working longer. "The one thing that I don't think is going to happen is that we will be able to retire at the same age," Dr. Sinclair said.

Business & Economy: Latest Updates >

Updated 1 hour ago

· A regional Fed analysis suggests Biden's stimulus is temporarily stoking inflation.

1 of 2 10/18/2021, 2:08 PM

- Axel Springer removes a top editor after a Times report on workplace behavior.
- Microsoft leaders warned Bill Gates over 'inappropriate' emails.

We are on the "first flight stage" of the research into longevity, according to Dr. Sinclair. Critics of longevity research argue that the billions investors have put toward longevity are focused on enriching only the wealthy, and that the money would be better spent on more immediate issues. Dr. Sinclair, though, compared research into longevity to initial work in industries like air travel, which was originally funded by and offered primarily to the wealthy. "The people who invest in that are the rich — they have to be," Dr. Sinclair said of longevity research. "This is the way capitalism works and it's worked well."

His goal, he says, is to "democratize" longevity drugs, education and knowledge. As for an academic's role in the business of longevity, he said, "it is now at Harvard Medical School unusual for a scientist not to be involved in industry somehow and there are plenty of entrepreneurs around me."

Dr. Sinclair's personal regimen is a "combination of eating right, living right, exercising," as well as some supplements and the drug metformin. Metformin is a diabetes drug that some people without the disease have begun to take in hopes of staying healthier longer. Some studies, though, have suggested it may also blunt the health benefits of exercise.

He is also a fan of intermittent fasting, which he said has helped improve the life span of mice. "I've been skipping breakfast my whole life and lately, over the last two years, I've been skipping lunch," he said.

Limiting food intake to certain hours of the day has gained popularity over the past few years. Advocates of the dietary regimen argue that it forces the body to break down fat for energy, once glucose has been depleted. When that happens, the body can go into a state of ketosis that can be similarly achieved by low-carbohydrate diets, whose proponents say have benefits ranging from burning more calories to managing diabetes. (Ketosis also has risks, like liver damage.) Research into intermittent fasting is still evolving. A rigorous three-month study published in September found that people experimenting with the diet lost little weight, and much of that may have been from muscle.

What do you think? Let us know: dealbook@nytimes.com.

Lauren Hirsch joined the New York Times from CNBC in 2020, covering business, policy and mergers and acquisitions. Ms. Hirsch studied comparative literature at Cornell University and has an M.B.A. from the Tuck School of Business at Dartmouth. @laurenshirsch

2 of 2 10/18/2021, 2:08 PM