

Why We Should Look Forward to Living to 120 and Beyond

Advances in medical technology, one expert says, give us fewer reasons to fear living past 100

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In the near future, advances in biomedical technology will enable citizens of developed countries to live dramatically longer lives. The revolution in biomedicine stands poised to eclipse even the social and economic effects of information technology.

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Right now, it's hard to believe that a radically extended life is possible, especially after many failed promises in the past.



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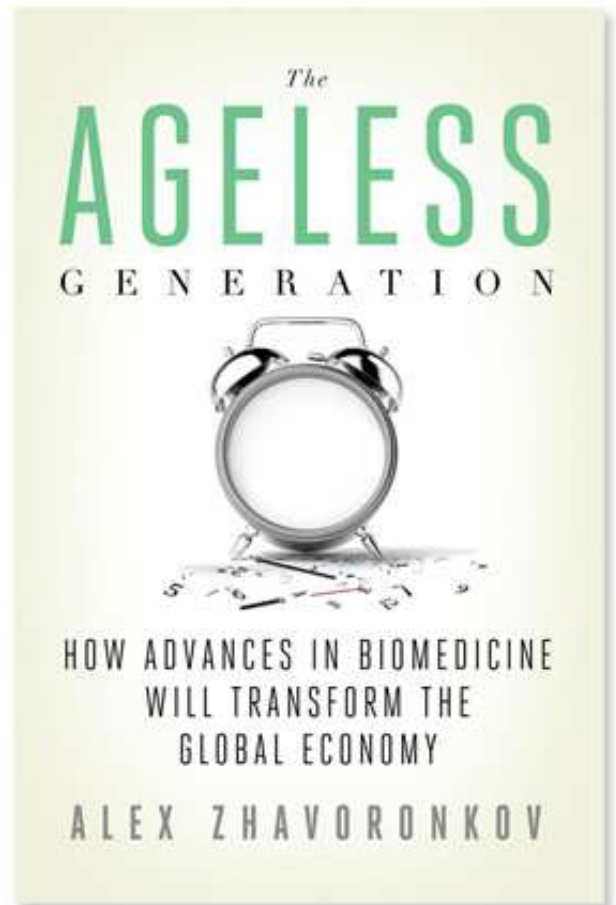
But for the first time, it has become possible to speculate, with some degree of certainty, that this dream could be achieved within our lifetimes. I outline some of these trends in my book, [The Ageless Generation: How Advances in Biomedicine Will Transform the Global Economy](#).

Of course, there is disbelief and skepticism, even among some of the world's top experts.

Biomedical innovations typically reach the mass market much more slowly than those produced by information technology. Consumer demand cannot significantly accelerate the process. Nevertheless, many advances made over the past three decades are already propagating into mainstream clinical practice and converging with other technologies to extend our life spans.

Consider these facts:

1. More than \$1 trillion has been spent on biomedical research over the past 20 years. These investments should soon start yielding longevity dividends.
2. The number of scientists working on extending the life span worldwide has increased exponentially as computer and communications technologies have entered the mainstream and China and India have joined the race.
3. The life spans of some laboratory animals have already been extended more than tenfold.
4. Innovations have already started: vital organs have been grown from patients' own cells and several stem-cell therapies are being proven.
5. Cancer survival rates have increased steadily over the past few years. A diagnosis is no longer a certain death sentence.
6. Advances in laboratory diagnostics and biometrics are already providing valuable insight into disease prevention.
7. Fast-food outlets have started offering healthier dishes and displaying caloric content and smoking rates in developed countries have declined.



Many people would not interpret these seven facts as a single trend leading to dramatic increases in life expectancy because the long-term effects are so unpredictable. But just two decades ago, nobody could imagine the possibility of the technology we use daily now.

The possibility of a radically longer life is very real.

(**MORE:** [3 Adventures in the World of Anti-Aging](#))

Surprisingly, though, most people do not want to have their life spans extended. According to a [recent survey by the Pew Research Center](#), 56 percent of adult respondents in the U.S. would not want to undergo medical treatments to slow the aging process and enable them to live to 120 or longer.

In my opinion, this pessimistic view stems from several factors. First, when forming a conscious and subconscious opinion about life expectancy, most people use as benchmarks their parents' and grandparents' life spans, and the national average. The line of thought is usually: *I am 40, my grandmother lived to 92, my dad is 70, and I heard that the average is about 78, so I should live to somewhere between 80 and 95. But I am not sure if I want to live that long, because my grandmother was very frail in her later years.*

These perceptions are fostered by researchers who look at historic trends and project only marginal increases, or even decreases, in future life expectancy. These researchers predict that recent behavioral changes, like high-calorie diets and sedentary lifestyles, as well as pollution and other environmental factors, will outweigh life-extending advances in biomedical sciences. But the past 20 years have demonstrated that those relying on historical trends to make predictions about science and technology are often proven wrong.

(**MORE:** [Why We Fear Aging More Than We Should](#))

People may also believe an extended life span will extend frailty and boredom in old age. But biomedical advances are not all the same. The current paradigm in biomedical research, clinical regulation and healthcare has created a spur of costly procedures that provide only marginal increases late in life. The vast percentage of lifetime healthcare costs today are spent in the last few years of patients' lives, increasing the burden on the economy and society and further contributing to the negative image of life extension.

In the near future, however, the focus of biomedicine will shift to extending healthy, productive lives and keeping people young and occupied for as long as possible. In fact, this is probably one of the very few altruistic strategies for avoiding the possible global economic collapse triggered by the unbearable costs of supporting our retired populations. When faced with a simultaneous decline in birth rates and an increase in the number of retirees, governments of developed countries will realize that investing in regenerative medicine and encouraging life-long learning and career planning are better strategies than implementing massive austerity measures and boosting immigration.

The preventive approaches available today, including improved diet and exercise and more advanced early diagnostics, may have the potential to add 10 to 20 years to our life spans. But future generations will more likely rely on biomedical interventions to prevent the loss of functionality with age and to maintain or even improve their performance on all levels. The lowest-hanging fruit is regenerative medicine, which will likely allow most of the organs in the body to be replaced or rejuvenated.

(**MORE:** [How We Can Make Older Bodies Young Again](#))

The Benefits of Becoming "Ageless"

There is a big difference between thinking "I am 50, but I feel like 30 and expect to live to 80" and "I am 50, but I expect to be healthy until 150." As our life spans extend, we will need to change our approach to getting older.

What does it mean to age without getting "old"? The brilliant psychologist Laura Carstensen, founding director of the [Stanford Center on Longevity](#), was one of the first to propose and develop a lifespan theory of motivation called Socioemotional Selectivity Theory. (Read Dr. Carstensen's *Next Avenue* column, [Why We Live Longer – and Can Still Live Better](#).) According to Dr. Carstensen, our lifespan time horizons affect our motivation, behavior, risk taking and cognitive processing. For example, individuals with shorter perceived life expectancies will divert resources from investments intended for the future to pursue short-term goals and pleasures.

There are clear benefits, then, in proactively stretching your expected life horizon to a number much greater than you can currently imagine. It will probably not only make you look and feel younger, but also induce the behavioral patterns of someone more youthful, enabling you to interact with younger and older people without barriers and remain productive longer than your peers.

Another benefit of setting the bar toward 120, 150 or beyond is minimizing financial risk. This will most certainly lead more of us to postpone retirement and set a course for continuous improvement, lifelong learning and active career planning.

There is definitely no harm in stretching your "ageometer" to 150. Most likely technology will catch up and exceed your expectations. The worst that can happen is you will die earlier feeling much younger than you ever thought you would.

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