NEW SCIENTIST ONLINE 15 JUNE 2024

Views Culture

Who wants to live forever?

A new exhibition explores the possibilities and pitfalls of living healthily for centuries – or at least much longer than today, says **Alexandra Thompson**

Exhibition

The End of Aging Michael Schindhelm

Kulturstiftung Basel H. Geiger, Switzerland, to 21 July

"All diseases run into one, old age," wrote the 19th-century essayist Ralph Waldo Emerson. While ageing isn't considered a condition in its own right, our risk of developing everything from cancer and dementia to heart disease and arthritis grows greater with every passing decade.

Ageing is also generally

Ageing is also generally associated with a decline in quality of life, as a fall in energy levels coincides with new aches and pains. Little wonder that the concept of anti-ageing has inspired legends and literature for centuries, from the mythical "fountain of youth" to Oscar Wilde's The Picture of Dorian Gray

In one of the latest artistic endeavours, Michael Schindhelm explores the concept of defying old age. His immersive installation The End of Aging in Basel, Switzerland, is the first of two exhibitions on ageing in the Kulturstiftung Basel H. Geiger centre. He became interested in longevity during the 1990s, when the arrival of electronic prosthetics started to merge human and machine.

Decades later, the rapid development of the covid-19 vaccines – covered in his documentary A Vaccine at the Speed of Light – left him wondering about our biomedical future.

Longevity is certainly having a moment, partly thanks to the high profile of people like billionaire Bryan Johnson, who is attempting to defy the years by taking copious supplements, undergoing plasma infusions and seemingly

measuring his body's biomarkers. But Schindhelm's take on a longer life makes you wonder if it is worth the bother. His five-room exhibition opens by simulating a disused hospital ward, complete with the stale, musty odour of abandonment. You may be thinking, if it were standard for humans to live a century or more, surely hospitals would be heaving?

But the quest isn't merely to reach the ripe old age of, say, 150, it is to do so in good health, without the need for medical care. As a scientist character booms from a screen along the wall: "We should all die young after a long life."

A decrepit corridor takes you

A decrepit corridor takes you to an old laboratory, a control room and an operating theatre, complete with figurines of radioactive rats, adding to the feeling of dystopia. The operating theatre features a screen where a fictional and seemingly young woman talks of suicide, desperate to escape her prolonged life.

But what are the actual chances of vastly extending our lives? In reality, few drugs have goodquality evidence to support a longevity-boosting effect. Perhaps A woman laments her artificially long life in part of an installation by film-maker Michael Schindhelm (below)

the best exception is rapamycin, originally developed as an immune-suppressing drug for people undergoing organ transplants. One study found it extends the lives of mice by up to 60 per cent by dampening acell size all lives of the college.

a cell signalling pathway.
Running trials in people is more challenging, not least because they would require decades-long follow-up. Rapamycin is also offpatent, leaving pharmaceutical companies with little incentive



to test its life-extending effects.

Developing new treatments runs into the same roadblock. "As long as ageing isn't considered a disease, no authority will approve such a drug, so why invest billions into a trial," says Schindhelm. Case in point, a study that seeks to test whether the diabetes medication metformin delays age-related conditions has so far only received funding from philanthropists.

funding from philanthropists.
The hypothetical world depicted in the installation largely focuses on the negatives of a society full of centenarians. Through a series of dramatic video clips, various characters ask what this would mean for our planet's health, with overpopulation contributing to the consumption of resources that drives climate change.

And with fewer people of working age, how would all the pensioners be supported? Would we reach our full potential—or even enjoy life—knowing we almost certainly have many decades ahead? On the flip side, more time on Earth means more opportunities to travel, more books to read, more wine to drink—indeed, more art to see.

The installation closes with a recovery room, where 10 (real) scientists offer what Schindhelm calls a "reality check" on how they expect the anti-ageing field to evolve, recounted in a 65-minute film that you watch while reclining on a hospital bed. Schindhelm never seems to

Schindhelm never seems to settle on whether he is exploring the idea of living forever or merely decades beyond our current life expectancy, about 75 to 80 years in high-income countries.

If he intends the former,

If he intends the former, Markus Rüegg at the University of Basel is unequivocal in rejecting that possibility. In the documentary, he says: "Nature is not built for eternity. I think we can't fight biology in the end."

At the age of 63, Schindhelm has no desire to be immortal, but says he wants to see people having "a graceful last period of their life", without discomfort. The scientists are fairly unanimous about how to achieve it, with recommendations that are also age-old: eat well, exercise regularly, don't smoke, drink alcohol in moderation and stay socially connected. "You can do more for your longevity than a pharmacy," says Schindhelm. The advice seems sensible, if unoriginal, but becoming a

The advice seems sensible, if unoriginal, but becoming a centenarian may not be entirely in our hands. "If you want to reach the age of 80, you have to have a healthy lifestyle," says Christoph Handschin, also at the University

"Would we reach our full potential – or even enjoy life – knowing we almost certainly have many decades ahead?"

of Basel, in the documentary.
"You want to become 100, you

also need the right genes."
Future generations may laugh at this kind of statement, or perhaps lament the impact of today's longevity movement. As to whether the installation's doomy perspective materialises, a lack of research on humans means we can't be sure which drugs or interventions will add decades to our lives, let alone what this could mean for our environment and society. When it comes to boosting our lifespan, "there's a lot of science, alot of hype and a lot of socience, alot of hype and a lot of socience, alot of hype and a lot of socience, alot of hype."

Need a listening ear? UK Samaritans: 116123 (<u>samaritans.org</u>); US 988 Suicide & Crisis Lifeline: 988 (<u>988lifeline.org</u>), Visit <u>bit.lv/</u> SuicideHelplines for other countries

New Scientist | 15 June 2024