NEW ORLEANS — We know more about the mechanisms of aging than ever before, and we know how to stay alive longer. But how close are we, really, to a world where we don’t grow old like we used to and where our life expectancy reaches well beyond 130 years?

This idea of extended, healthy longevity isn’t far-fetched at all, if you consider advancements made in science and the role innovation could play in eradicating some of the world’s epidemics, according to a trio of health care experts speaking...
Tuesday at the Collision Conference in New Orleans.

“Many people in the room today have the opportunity to live that long, if you just take control over your own biology and you make it do what you want — and that’s the definition of biohacking,” said Dave Asprey, founder of Bulletproof 360 Inc., addressing a crowded room. The self-proclaimed biohacker wore orange-tinted TrueDark Twilight glasses, aimed at lowering consumption of "junk light" and helping people with Irlen Syndrome, a perceptual processing disorder, and on his feet were “barefoot shoes” meant to promote better balance and leg strength.

“For the first time in human history, we are finally starting to understand what’s happening inside our human body,” said Naveen Jain, a serial entrepreneur and CEO at Viome. “And for the first time, we’re able to apply [artificial intelligence] and machine learning to help answer the question what causes aging. What makes us old? Aging is a chronic disease, and there’s no doubt in my mind we will be the generation that will be known for ending chronic disease.”

Cancer, heart disease and diabetes could soon be a long-lost memory, according to Jain. In the next 10-15 years, humans will find ways to extend life expectancy by 30-50 years, he predicted. And every year after that, we’ll discover not only how to keep prolonging that lifespan but how to remain healthy and vibrant in our later years.

“We’ll be able to live as long as we want, and absolutely stay healthy as if we’re still in our 20s,” Jain said, because scientists will be able to figure out how to rejuvenate our stem cells and repair our bodies and 3D print our organs.

This new method is significantly different to our previous approaches to health care, said Dr. Mona Siddiqui, chief data officer at the Health and Human Services Department. For a long time, health care was about fixing things once they went wrong; now, it’s more about being proactive and preventing disease before it crops up, she said.

But this new customization of health care is only as good as the impact it has on the most vulnerable populations, Siddiqui added. For those economically disadvantaged or those without access to good information, how is precision medicine impacting their lives? How can we create a level playing field for those folks? There needs to be a conversation about that reality, she added.
Precision medicine and AI go hand in hand because this approach relies heavily on personalized data-focused treatment. AI plays a key role in helping uncover bad data, or helping interpret data in new ways.

“What we’re going to find out using machine learning and AI is that these huge things we were doing were completely ass-backwards — that we always thought were right — and the data will show that we were totally wrong — and that’s the classic case of disruption,” Asprey said.

For the first time, we have a choice: illness can be optional, Jain said. His company was founded in 2016 with the premise to better understand what was going on in the human body when something goes wrong. The company’s AI-powered gut microbiome testing service provides personalized nutritional recommendations that balance the gut microbiome for enhanced health.

“We can, in fact, tell you, should you be eating spinach or kale, or should you be eating actually the bread and the wheat and the whole grains — or what is good and bad?” Jain said. (He says he lost weight and his blood glucose went down after he took the test and realized he wasn't supposed to eat spinach but instead add more carbohydrates to his diet.)

Modern technology has rediscovered what Hippocrates first noted 2,400 years ago: “Let food be thy medicine and medicine be thy food.” Or, suffer the consequences.

“If you’re not going to be the CEO of your own health, you’re going to be victimized, and our current health care system is a perfect example of how they’re going to continue victimizing you,” Jain said.

(This story has been updated to clarify that TrueDark Twilight glasses lowers consumption of junk light.)

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