

February 4, 2016

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Intelligence Squared U.S.

Lifespans are long enough

For the Motion: Ian Ground and Paul Root Wolpe

Against the Motion: Aubrey de Grey and Brian Kennedy

Moderator: John Donovan

AUDIENCE RESULTS	
Before the debate:	After the debate:
32% FOR	40% FOR
36% AGAINST	49% AGAINST
32% UNDECIDED	11% UNDECIDED

For the Motion: Ian Ground, Paul Root Wolpe

Against the Motion: Brian Kennedy, Aubrey de Grey

Moderator: John Donovan

Start Time: (18:45:15)

John Donovan:

By this time I think tonight is debate number 117 or number 118 that we have put on. And we begin each debate by asking Bob Rosenkranz to come to the stage -- in which -- for a couple of minutes conversation in which he outlines for us sort of what our thinking was in putting on this debate and what he himself is a member of the audience's thinking in terms of wanting to -- what kinds of questions he wants to have answered tonight, what he's going to be listening for from these debaters.

So please welcome to the stage with not spontaneous, but authentic and genuine -- I'm sorry, not engineered spontaneous applause, but spontaneous applause. Mr. Bob Rosenkranz.

[applause]

Bob, thanks for coming out again.

Bob Rosenkranz:

Well, thank you.

John Donovan:

So, let's talk briefly about, you know, we do a lot of debates that are about things that are right in front of us right now, policy decisions, Obamacare, military, military decisions.

18:46:19

This one is a little bit more, but not entirely, speculative for us. So, talk about your thoughts on this issue of extending lifespan.

Bob Rosenkranz:

Well, in a sense it's not so speculative in terms of my own experience. I've been spending a lot of time in Japan lately, and that is a very old country. It's aging quite rapidly. There are almost -- for every hundred people working there are only there are 42 retirees compared to about 22 in the United States. And it's not working well. Japan has had the slowest growth rate of any large developed economy. It has the worst public finances of any public economy, the biggest debt. It is struggling with the problems of a rapidly aging population.

18:47:14

John Donovan:

So, as you listen to tonight's debate, what is it you want to hear answers to?

Bob Rosenkranz:

Well, I think the thing that I'd be most curious about is whether the progress of science in this field is slowing down the aging process or is it slowing down the dying process? Are we making the best years of our lives extended or are we making the worst years of our lives extended? And I'd really like to hear, personally, the scientific evidence on that dichotomy.

John Donovan:

And, you know, we all wish each other long life constantly. We think we want it for ourselves. What about you? If you had a shot at having a hundred years?

Bob Rosenkranz:

Well, if it was a hundred years feeling the way I feel now fine, but if it's a hundred years of slow decline as opposed to 15 years of slow decline, I think I could pass.

John Donovan:

All right. Well, Bob, thank you very much for joining us and making all this happen.

18:48:14

[applause]

Bob Rosenkranz:

Well, thank you, John, but before I get off the stage I want to congratulate you on the incredible reception that your book has garnered. John has written a book about autism, which has gotten phenomenal reviews.

[applause]

John Donovan:

Thank you. Thank you very much, and I'm not one of those authors who has to name his book. If I were I would say it's called "In a Different Key."

Bob Rosenkranz:

It's called "In a Different Key."

John Donovan:

But I'm not going to go there.

[laughter]

John Donovan:

Thank you very much, Bob. Thanks, Bob. Let's welcome our debaters to the stage.

[applause]

Thank you.

18:49:17

Your contribution to the atmosphere is already working superbly and we're now going to begin the actual taping for the podcast and for the radio broadcast version of the debate. So one more time I'll ask you to applaud to get us launched.

[applause]

So here's how long the American lifespan is today. It is 78.7 years. Here's what it was in 1900, 47.3 years. Not quite a double sense then, but it's close, and don't we all like that? And if science could now produce yet another double in our lifetimes, would we like that, too? Well, some smart people think it's actually doable. Discoveries are being made in laboratories today that hold real promise for curing the thing that kills most of us in the end, which is aging. And is that a dream come true? Or is it a nightmare? Does society benefit when say smart, creative people get another century of life?

18:50:17

Or is there something deeply unsettling about the idea of a couple at the age of 120 deciding they're in the prime of life and it's time to start a family.

[laughter]

Well, there is much to talk about, much to think through, and much to debate. So let's do it. Yes or no to this statement: "Lifespans Are Long Enough?" That is our debate. We're at the Kauffman Music Center with four superbly qualified debaters who will argue two against two, for and against this motion, "Lifespans Are Long Enough. As always, our Intelligence Squared U.S. Debate will go in three rounds. And then the audience votes to choose the winner and only one side wins. Let's go to our voting. Let's go to the keypads at your seat. Take a look at the motion, "Lifespans are long enough." If you think that they are long enough, press number one. If you disagree with that, push number two. And if you are undecided, push number three. Hold that keypad down until you see the number that you've chosen light up in the screen.

18:51:17

That means your vote has locked in. You can ignore the other keys. They're not live. I'll just give it a few more minutes because I see a number of heads still down waiting for that light to come on. I'm -- excuse me. We have some new technology and I'm told that I was incorrect in saying you'll see a number. We just changed it. So if you see a light come on -- I'm pretty sure everybody figured that out before me.

[laughter]

All right, are we good? I'm getting the signal that our vote is locked in. So let's move on. Our motion is this, "Lifespans Are Long Enough." We have four debaters, two against two, who will argue for and against. Let's welcome the team arguing for the motion. Please, ladies and gentlemen, first welcome Ian Ground.

[applause]

Ian Ground, you have just arrived in from England for this debate. Thank you for that.

18:52:14

You are a philosopher and a teaching fellow at the School of Arts and Culture at Newcastle University where your primary area of research is the 20th century philosopher Ludwig Wittgenstein. And we want to know, is there anything that Wittgenstein can teach us now on the subject of life and death?

Ian Ground:

Ah, yes, John. I think that -- I think he said that the way that we human beings can think and feel and choose is determined by some very general facts of nature. And one of those facts, I think, is that our lives are finite.

John Donovan:

Important and deep thought. I'm going to hear more about that. And please tell us, Ian, who your partner is.

Ian Ground:

Yeah, my partner is someone who knows how to think clearly about matters of life and death, both on Earth and above it, the chief bioethicist NASA, please welcome Paul Root Wolpe.

John Donovan:

Ladies and gentlemen, Paul Root Wolpe.

[applause]

And, Paul, as Ian said, you are also arguing for the motion that lifespans are long enough. You are a professor of bioethics and the director of the Center for Ethics at Emory.

18:53:20

As he said, you're also a bioethicist at NASA. As a kid, you were a huge science fiction fan, we know. So isn't a small part of you intrigued by this idea of living forever?

Paul Root Wolpe:

Yeah. I think a small part of everybody is intrigued by that idea. I'm intrigued by a lot of other ideas and I have a lot of other desires, too. That doesn't necessarily mean that it's a good idea for me or a good idea for society.

John Donovan:

Okay, a look ahead again at your argument. And, ladies and gentlemen, Paul Root Wolpe and the team arguing for the motion.

[applause]

And reminding you that motion is -- it's four words --, "Lifespans Are Long Enough." We have two debaters arguing against it. First, please welcome Aubrey de Grey.

[applause]

Aubrey, you are a biomedical gerontologist, a leader in this debate globally. You are the chief science officer of SENS Research Foundation, a charity that is dedicated to combatting the aging process.

18:54:20

You have said that if we could limit disease and repair the damage of aging, that there would be no natural limit to how long we could potentially live. So with that in mind, is there a number that you're personally shooting for?

[laughter]

Aubrey de Grey:

No, there is not, neither for myself nor for society in general. I really feel it's rather idiotic to have a longevity goal in terms of how old you are when you die because it's like saying that people who have been born a long time ago somehow don't matter so much. You know, there is this term, "ageism," which is -- which means discrimination against the elderly. And most people claim to think that it's a bad idea. But, actually, you know, thinking that there's some natural best length of life is about as ageist as you can get, in my view.

John Donovan:

All right, and tell us who your partner is, please.

18:55:13

Aubrey de Grey:

And my partner is the illustrious Brian Kennedy who is the head of the Buck Institute in California, just a few tens of miles north of where we're based, and who is a very well-known bio gerontologist. And I'm delighted to have him by my side.

John Donovan:

And this is Brian Kennedy, and I have nothing to say, because you just said the introduction for me.

[applause]

But Brian, let me put this question to you, since you've been working on this since you were a doctoral student at MIT. For those of us who do not -- are not familiar with your work, who do want to live long -- should we be hopeful that the science will be there in our lifetimes?

Brian Kennedy:

You know, I think we've been very helpful. I've been working on this for over two decades. And I think that the field has learned a lot from the research. And we're really ready to start to try interventions in humans to keep people healthy longer.

John Donovan:

All right. Terrific. Thank you. The team arguing against the motion.

[applause]

And please remember how you just voted. I want to explain this, that the way our debates work, we have you vote then.

18:56:17

Now you will hear the arguments. At the end of the arguments, we have a second vote. We want to see who's been persuaded to change their positions. And the way we do this -- the team whose numbers have moved upward the most in percentage point terms will be declared our winners. So, remember how you voted. Listen closely to the arguments. Keep an open mind. You ultimately will be the judges of who is more persuasive here. Our motion is this: Lifespans Are Long Enough. Let's open with Round 1. Round 1 are opening statements by each debater in turn. They will be seven minutes each. Speaking first for the motion, and making his way now to the lectern on the right, Paul Root Wolpe, the Asa Griggs Candler professor of bioethics and director of the Center for Ethics at Emory University. Ladies and gentlemen, Paul Root Wolpe.

[applause]

Paul Root Wolpe:

So, thanks very much. A philosopher and a social scientist are about to debate two scientists.

18:57:14

And I invite you to look and think about the different ways that we approach this than the way they will. I'm going to take a sociological and psychological perspective. And my esteemed colleague, Ian, will take a philosophical perspective. It's hard in seven minutes to cover this kind of question and say why it is that I think the pursuit of immortality is a wrongheaded idea, or as Ian has coined it, "Indefinitely long life." And I invite you to think about that acronym. I'm all for healthy aging. And I'm all for what we call biogerontology. To make ourselves more healthy and to make our lives more productive. First, before we continue, there's one important clarification. And this gets conflated a lot. And if we conflate it, we'll get nowhere. Life expectancy has increased, almost doubled. Lifespan has not. All right? People lived into their 90s and even into their hundreds for centuries.

18:58:18

Nobody has lived to 130, as far as we know. But lots of people have lived to 100, 105, 110. And that's our lifespan. It seems to be programmed into us that we can't live any longer than that. So, let's not conflate life expectancy -- which has increased -- and lifespan, which has not. We all want to live longer. Maybe even forever. But I think the quest for immortality is a kind of narcissistic fantasy. It's about us. It's about me. It's not about what's good for society. It's not about what's good for everybody. It's what I want for myself. And there's a certain adolescent nature to it. Who thinks they're going to live forever? Who thinks of themselves as immortal? It's when we're young. And as we get older, we get a certain kind of wisdom, I think, that mitigates against that. The goal of anti-aging is not to lengthen days, but to actually conquer death.

18:59:15

It's part of a larger scientific, technological utopianism -- very post-humanist in its presentation -- that has this kind of idealized view of how technology is going to change the basic nature of the human condition. It's a modern utopian fantasy. And it's not about whether it's possible. It's about whether it's desirable. And if we just put enough time and energy into our technology, we can have a kind of perfect world on Earth. It has no connection to the live reality, in my view, of being a human being. And in fact, I think of it as rather dystopian. Why? For millennia, we've tried to solve the problems of poverty, of war, famine, nationalism. We still have all of these problems. We haven't conquered them. Technology hasn't conquered them. We always think the solutions are right around the corner. But suddenly, if we get to live to be 200 or 300, somehow, things will be better. Things won't be better. I don't believe. Not for us. Not for society, and where should we put our energy?

19:00:19

So I am not up here to argue that lifespans are long enough. And I think the question is phrased wrong. What I want to argue is the pursuit of indefinitely long life, to make that a goal in and of itself is wrong headed. Will life extension make the world a better place, a kinder place? Has extended -- has life expectancy increase made it better? I don't think so. I've never heard a single argument from the other side about how this would benefit society ever because I don't think there is a plausible one. It would benefit me to live for a very long time. It has all kinds of problems when you think of it as a social expectation. It's a deep desire of individuals. But, as John said, the life expectancy has doubled. Does that mean that now we respect our elders and we have so many more older people that we turn to them for wisdom?

19:01:21

No. Almost exactly tracking life expectancy increase has been a fetishization of youth in the West, a youth culture. And we haven't become more attentive to the wisdom of all these old people we have produced, and there's no reason to think if they were 200 or 500 that we would be any more attentive to them either, not to mention the fact that it has been shown over and over again that as people get older they get more conservative and that youth come in with new ideas and new innovations. And there is a wisdom to the evolutionary process of letting the older generation disappear. If the World War I generation and World War II generation and perhaps, you know, the Civil War generation were still alive, do you really think that we would have civil rights in this country, gay marriage?

19:02:16

That's a generational shift that happens over time. We would be obliterating generational shift and inculcating a deep kind of conservatism. I think we underestimate the cost, as Bob was saying. Look at Japan. Overpopulation is one possibility, over-resource utilization, disruption of work. You know, we work for 50, 60, 70 years and then we're tired. We're still going to be tired if we live to be 200. So the idea that if we live to be 200 we'll work for 150 years and then retire just makes no sense to me. You want to be a longshoreman for 150 years?

[laughter]

I don't think so. It's more strain on social services. There's this idea that we're going to be perfectly healthy and live to 200 or 300 and, I don't know, get hit by a bus or something. But I'm just not sure that the lived experience of being human maps with the kind of utopian vision that we hear about this. There are already generational tensions. They're just going to get worse.

19:03:15

Prolonged life will also help the older people accrue greater wealth. It will actually contribute to, I think, inequality. So I want to end by suggesting that this is a fantasy we all have. It's something we all want to some degree. But when you actually go deep to the social desirability of it, what its impact is going to be for us as societies, it's not going to be something we want. We already have older people who are retired who spend their days nonproductively. I was just talking to someone beforehand about his mother and my mother, who live really waiting for the time that it's over. Their spouses are dead. Their attachment to life has diminished. That's why Ezekiel Emanuel wrote in the *New York Times* that he is not going to want to live past age 75 and he will stop all medication at that time.

John Donvan:

Paul Wolpe, I'm sorry, your time is up. Thank you very much.

19:04:17

[applause]

And our motion is "Lifespans Are Long Enough." And here to debate against the motion, Aubrey de Grey. He is the chief science officer of SENS Research Foundation. He's also editor in chief of the journal, *Rejuvenation Research*. Ladies and gentlemen, Aubrey de Grey.

[applause]

Aubrey de Grey:

Thank you. Thank you. I'm glad to see such a large audience for this debate. I know that it's been a passion for me since a long -- for a long time now. I think really, you know, it's the most important question facing humanity. I believe that the defeat of aging is the most important challenge facing humanity. And I'm pleased to see that the people of New York seem to agree. So I have of course prepared some remarks, but of course I also want to respond to some of the things that Paul just said. I'm going to talk about the question whether there is really a dichotomy between the individual benefit and the societal benefit of the extension of life.

19:05:23

I'm also going to talk a little bit about the question of why longevity has increased when measured in terms of life expectancy, but not in terms of maximum longevity, which Paul called lifespan. And I think I'll also talk about the difference between health span and lifespan and why that difference is often raised as a kind of straw man with regards to this whole question. So I'm going to start with this question about the alleged conflict -- tension -- between the individual desire and societal good. Hands up anyone who wants to get Alzheimer's disease. All right. Hands up anyone who wants anyone else to get Alzheimer's disease. Right. Think about that, right? It's a societal good because we don't like each other to get sick any more than we want to get sick.

19:06:15

And I say Alzheimer's disease just because it's an easy thing to point out, but I'm not trying to pull the wool over your eyes here either, because from a biology perspective it is incorrect, though very popular, to think that aging itself is something completely distinct from the diseases of old age like Alzheimer's or most cancers and so on. Most people kind of have this vision of aging as this mysterious nebulous, nonspecific phenomenon of the things that we don't call diseases. You know, things like loss of muscle mass and declining function of the immune system. And they don't think of those as somehow connected to the diseases of old age. And that gives over-optimistic

impressions of what medical research is like, of the kind that is mostly done today is likely to achieve. Most people seem to think that there is some chance of curing Alzheimer's disease in the same way that we might cure the common cold, and not have any effect on aging itself, whatever the hell that is.

19:07:17

This is a mistake. Once you realize it's a mistake, one thing that arises very easily is the understanding that there is no danger whatsoever of extending longevity to any significant extent other than by extending healthy life. In other words, postponing rather than stretching the period at the end of life when we are not well and when we are going downhill. It's absolutely vital to bear that in mind at all times. But coming to the societal questions, there is another feature of this debate which Paul indeed touched on that I want to address. It's extraordinarily seductive, so -- in my experience, for people to look at the question of some big change that might happen as a result of some technological progress and to presume that nothing else changes. So to look, for example, the world of it might be a hundred years from now when we had aging under complete medical control for, let's say 70 years for the sake of argument, and to presume that everyone would still have jobs and so there would be some kind of problem of, you know, what would people do and how would we make sure that the chronologically eldest people didn't have a disproportionate amount of income and disproportionate amount of capital.

19:08:34

And people just kind of forget that hello, we've got artificial intelligence, which is going to be the focus of another debate that's coming up in a few weeks from now and the increase of automation, which is going to completely transform what it means to have a career at all. These things have to be taken into account when you consider the societal impact of some other major technological advance, such as the medical control of aging. And this very rarely happens, which annoys the hell out of me. So, I mean, here's the thing. If we are talking about increasing the amount of time that people stay healthy and not increasing the amount of time that people are sick at the end of life.

19:09:21

And if we are talking about this happening in a gradual way, which of course it will because people only get older one year per year, you know, if that's what we're talking about, then we're talking about a situation which society has the opportunity to look at these questions, to adjust its priorities, which is at the level of just like prioritizing more education or taxing people differently or whatever. If it changes priorities so as to avoid any of the problems that might occur, you know, that might be created as a result of solving the problem we have today, the problem of age-related ill health. So, I mean, we have to ask ourselves, why are we scared of this? A simple way to put it is to say

well, look, even in the worst case scenario where some -- for some reason we can't figure out how to, you know, distribute what the -- access to these therapies equally or how to stop dictators from living forever or whatever it might be.

19:10:24

Supposing this happened, how bad a problem would that be and how bad a problem do we have today? And, again, I am posing this question both at the individual level and at the societal level. And I believe that there is absolutely no way to make the case that there is the faintest possibility of problems being created that are anywhere near as cataclysmically horrifying at the problem we have today. Let me tell you exactly how bad the problem that we have today actually is. Worldwide roughly 150, 160,000 people die each day, all right? And more than two thirds of those people die of aging. They die of aspect of ill health that predominantly affect people who were born a long time ago. So, in other words, they die of aging, more than two thirds. In fact, that proportion has gone up a lot. When I first tried to do these statistics, it was about two thirds, and that was 10 years ago. It's now more than 70 percent and still rising rapidly. It's crazy.

19:11:24

In the industrialized world, of course we're talking more like 90 percent of all death. Let's actually do something about it. So, in conclusion, I would say I oppose the motion and I invite you to oppose it, too, because it is in your interest both individually and collectively. Thank you.

John Donovan:

Thank you, Aubrey de Grey.

[applause]

And a reminder of where we are, we are halfway through the opening round of this Intelligence Squared U.S. debate. I'm John Donovan. We have four debaters, two teams of two, arguing it out over this motion, "Lifespans Are Long Enough." You've heard the first two opening statements and now onto the third, arguing in support of the motion, "Lifespans Are Long Enough," Ian Ground, a philosopher and teaching fellow in fine art at Newcastle University and Secretary of the British Wittgenstein Society. Ladies and gentlemen, Ian Ground.

[applause]

Ian Ground:

The interesting question here and the real question is, "Are lifespans ever long enough?"

19:12:26

I'm here to try and persuade you that if we answer that question as human beings, and that question is about human beings, the answer must be yes. What is an indefinitely long life? Well, it's a life which, from the point of view of its owner, can be led with no thought as to its ending or decline. Our opponents think, one, we would all rationally choose such a life. Two, we all have the right to have this choice fulfilled. Three, as you've just heard, this right trumps everything else including the issues that affect our societies and our species, humanity. This reasoning is, first, based on an error, second, depends upon an impoverished conception of morality and what matters and, third, ultimately amounts to our rejection of the human.

19:13:27

Why the error? Look, we all want to live. We always want to live. They think it was from that that we want to live always. This is invalid. There are some goods which we might -- we might say we want more of, but they are in fact intrinsically finite. I might say, "I don't want this movie I'm enjoying to end and I'm really sad when the credits roll." But that doesn't mean I want to see movies that never have endings --

[laughter]

-- and therefore no middles or beginnings for then they wouldn't be movies. What we actually want when we say we always want to live is more of this life, at least more of the good things about this life in our world in which this kind of life still has meaning and value.

19:14:24

And how does our life get meaning and value because this human life is one shaped from the inside start to end, top to bottom, by the facts of growth and development, our experiences and choices, and our relationships with others and their life stories and our place amongst the generations and the human story. We should not assume that a life unstructured by those facts is just more of our current life, a recognizably human life. It is not. Think of a decision like, "Maybe it's time I settled down and made a commitment to this career or this person or this place." What makes that a choice in the economy of human motivation and evaluation and decision are the opportunity costs.

19:15:19

Well, these opportunity costs are priced in the currency of our most precious resource -- time. You might think, "Ah, wouldn't it be wonderful if I had an indefinite amount of

that precious resource?" But spending that precious currency is, in reality, the price of being a particular person. Being this kind of person rather than that. We become particular people by making those choices. So, to say we address the most profound problem of life by abolishing death is like saying, we'll solve world poverty by abolishing money. By contrast, actual human lives, in all their glorious particularity, the indefinitely long life is the life indefinite. To embrace it, we'd have to rethink why we value what we do.

19:16:14

For example, since few occupations are indefinitely satisfying, we'll need to live life with our finger on the soft reset button. Burned out as a teacher? Ah, retrain as a neurosurgeon. Got bored with that? Great. We need more people in sales. You can start in the mailroom. How many of us really want to start all over again from the bottom like that? And do we really think that, if only we live long enough, we could all be neurosurgeons. To say otherwise is not to deny human potentiality. It's to recognize that with natural capacities come natural limitations. Fueling a fantasy here is the idea that what we really are are just things called disembodied minds, that we can kind of liberate from our biology and from the past. Our opponents are keen to point out that the human condition is biology all the way down. Hey, it's also biology all the way up. For it's not just our bodies that age.

19:17:18

It is we who age. It is we who acquire memories and experiences, characters, and capacities. Natural gifts and natural limits. So maybe I have to get reset altogether. I get set back to kind of factory defaults. I get whole -- lose my experiences, my capacities, my memories, have new ones. But hang on a minute. Wasn't it supposed to be me with the indefinitely long life? What's the difference between this factory reset guy being me and it being just someone? So, the opposition seems to require two things -- that enough occupations are indefinitely satisfying. So, they all want to flip burgers for 300 years? No. Or that human beings are indefinitely malleable, that they are something other than particular people. So I think this indefinitely long life is unrecognizable as a human life, as a particular life, as my life.

19:18:24

And our opponents, having argued invalidly from the thought that we always want to live, so we want to live always, compound this error by saying that choice overrides absolutely. So, believing we have a right to an indefinitely long life amounts to believing we have the right to be other than human. That's why they embrace post-humanism, or trans-humanism. Now sure, you can embrace that. You can think that, you know, being human sucks, especially the dying bit.

[laughter]

And we better to be a cyborg, or a computer program, or an elf. But the thing is, you can't rationally want to be any of those things. You can want there to be elves, or cyborgs, or computer programs, but none of those can be you. So if you vote this evening, vote as humans, vote for humans, vote for the motion. Thank you.

John Donovan:

Thank you. Ian Ground.

19:19:19

[applause]

And that motion is again, Lifespans Are Long Enough. And here to make his opening statement against the motion, Brian Kennedy. He is the CEO and president of the Buck Institute for Research on Aging. Ladies and gentlemen, Brian Kennedy.

[applause]

Brian Kennedy:

So, thank you for having me. It's a wonderful debate. And I'm going to try to use my time to get back to a little bit more pragmatism. We've heard a lot of speculation from the three speakers already about what's life going to be like when we live to 150. How society is going to change. Maybe we'll get bored. I don't know what those answers are. I don't think any of us do. I do think technology is going to change dramatically over that time period. But I think there's a more immediate problem to deal with. And that's the one I want to tell you about. And when you ask me the question, "Should people live longer?" my answer is, "It depends." You know, if I'm 80 years old and I'm having trouble getting out of bed and I'm taking 20 pills a day and I'm in pain all the time and I can't get out of the house, then maybe I don't want to live longer.

19:20:27

Maybe I don't want to go through that period of decline. If I'm 80 years old and I'm healthy and I can go to the golf course, if I can go to work, if I can raise my grandkids and be with them, then I think my answer's going to be, "I want to be healthy a lot longer. I want to be alive a lot longer." And so I think that the question of lifespan is really not the question. The question is health span. So let's think a little bit more about what "health span" means. So I would define that as the period of time when you're disease-free, mostly at least, and when you're still highly functional. And you can compare the statistics on what's happening to lifespan versus what's happening to health span. Lifespan's going up. It's been going up pretty steadily over the last two centuries. Over the last 20 years -- it kind of depends on what gender you are and where you're from --

but essentially lifespan is going up about one year in every four. So you're getting about a 25 percent return on investment.

19:21:19

For every four years you live, you can live one year longer. But we have a problem. And the problem is healthy life expectancy is not going up at anywhere near the same rate. So the current approach we're taking is to keep you alive longer but to keep you sick longer. And that's what's failing. And if you look at the health care system, we're spending 19 percent of our GDP on health care. And most of that is spent in the last six months of a person's life. And what are we doing? We're focusing on treatment and not prevention. We're trying to wait till you get sick and then spend a fortune treating you and trying to make you better. And if you look at the chronic diseases of aging, we're being very ineffective at that. The two places where we're having effects are diabetes and cardiovascular disease. And one of the major reasons why is we've defined risk factors for these diseases. Cholesterol is a 3.5-fold increased risk of cardiovascular disease. High glucose is a risk of diabetes.

19:22:16

And so when we define those risks and identify them to that person, we start treating it before they have the full-blown disease. We give them drugs. They have reduced cholesterol, reduced glucose. That's called, "early stage prevention of disease," and it's very effective. Well, I've got news. Aging is the biggest risk factor for all of these diseases. It's the biggest risk factor for cardiovascular disease, it's far higher than cholesterol, for diabetes, for most forms of cancer, for all the neurodegenerative syndromes you're scared of, like Alzheimer's, macular degeneration, cataracts -- I can go on. And so what I'm saying is, let's look at this common risk factor and target that. And if we do that, we're going to be effective at preventing multiple chronic diseases simultaneously and keeping you healthy. I don't see that as very different than targeting one disease at a time. All we're doing is taking the thing that's in common with all of these diseases and trying to target that as a means to effectively prevent all of them or as many as possible.

19:23:18

The good news is we can already do this in animals. We can give a drug to a mouse and it lives 30 percent longer. And not only does it live longer, it's healthy longer, it's functional longer, it's protected from cancer, it's protected from neurodegeneration and a range of other diseases. It doesn't delay -- it delays disease, it doesn't prevent it. The animal still gets sick, but it compresses their morbidity. They're sick for a less period of time before they die, already achievable in animals. Let's go back a minute and also talk about the demographics. And I'm going to try to make this case for how slowing aging would benefit society because we need to look at what's going on now in the first half of

the 21st century. We're going to look back at this and we're going to call it the "Age Age," because that's what happening -- that's what's happening. We have more older people on the planet now than ever before, and the numbers are staggering. 25 percent of people in 2050 are going to be over the age of 60. You've already heard about Japan, 40 percent of the people are over the age of 65.

19:24:16

And they have a crisis because there's not enough workers, so worker shortages, health care costs going through the roofs. This is a problem, and people have defined it. They've called it the "silver tsunami."

[laughter]

So, you know, it's not a question of "What are we going to do if we keep you healthy and you retire and you have nothing to do?" You're going to be working longer. And I think it's important that we think about ways to keep you healthy. If we do that, if we can make health span go up as fast as lifespan, people will continue to be productive. They'll continue to be active. They'll be -- have much less health care costs. We'll improve quality of life, and in this first half of the 21st century we're going to dramatically improve the economic structure of society. So I think immortality's interesting. I think it's a great debate to talk about. I have my thoughts on it. I can share them later. But I think that gets away from the main challenge we have right now, which is what to do about this aging population and how do we treat or prevent all of these chronic diseases that are having a staggering impact on society.

19:25:20

You all know somebody that has Alzheimer's disease. It's terrifying. And I think that we can actually prevent this. I think that it's a little bit like -- aging research is essentially prevention. It's like a car. It's doing the maintenance on the car to keep it working so that it breaks down later and that's what extending health span is. I think it's entirely possible if we put the effort into it. So, you know, we've heard about what's going to happen when we're 150. Maybe we're going to be bored. Well, you know, if you ask me do I want to have cancer at 75? Do I want to have Alzheimer's disease at 85? Or do I want to be bored at 110? I know which one I'm going to take.

[laughter]

So, I'm happy to have this debate. Thank you for coming.

[applause]

John Donovan:

Thank you, Brian Kennedy, and that concludes round one of this Intelligence Squared U.S. debate where our motion is Lifespans Are Long Enough. Please keep in mind how you voted at the beginning of the evening.

19:26:16

I want to remind you again, after you've heard the arguments we're going to have you vote a second time and I want to remind you that victory will be declared for the team whose numbers have changed the most from the first and second vote upwards in percentage point terms. Now we move on to round two and in round two the debaters address one another directly and they take questions from me and from you, our live audience here in New York. Our motion is this: Lifespans Are Long Enough. We have two debaters arguing for the motion, Ian Ground and Paul Wolpe. We have had them say okay, they are not arguing that there is some magic number of lifespan and that they are supporting it. What they are arguing against, really, is the value and the moral rectitude of attempts to expand lifespan significantly by focusing on stopping aging. They say it's not a worthy goal, that it is essentially an adolescent fantasy. It's narcissistic. They point out that it disrupts, essentially, the story of what it is to be a human being and that aging demonstrates nature's wisdom in the evolutionary process of letting older people disappear and a new generation take up the torch.

19:27:26

The team arguing against the motion, Brian Kennedy and Aubrey de Grey. They define the expansion of lifespan as health span. They make a very careful distinction that they are not talking about letting sick people live on and on. They are talking about research and efforts to increase health for many, many years to come and they call this defeat of aging the most important challenge facing humanity. They say that society will benefit in many ways by having people living healthier and longer, and they also point out in a very interesting argument that there is not much moral difference between deciding to take on aging as a disease you want to fight if you're already fighting Alzheimer's and cancers, you already have crossed that bridge. So I want to take a question to the team that's arguing for the motion, which means you're arguing that lifespans are long enough.

19:28:19

You're essentially arguing against your opponent's vision of putting in an awful lot of effort into fighting aging and they -- this moral argument that they make -- that we're already in a world where we have decided that it's a good thing to try to cure the diseases that come with old age, cancer and Alzheimer's, heart disease. We all more or less agreed to that. So we've already decided by proxy that we want to fight aging, so there's not much different. Do you want to take that on? Paul.

Paul Root Wolpe:

I think what our esteemed opponents have done is turned an argument about whether extending life is a worthy value in and of itself to an argument about whether or not we want to be healthy. I spent my entire life teaching and working in medical schools and with scientists. I'm biotechnological geek. I love that stuff. I love medicine. I love health. I am all for all the research to cure those things.

19:29:19

I am not against working on aging. And if a by-product of that is extending life because we make people healthier, great. My argument is against the idea that our goal is to live longer lives, not that our goal is to live as healthily as we can until we happen to die. That was not the proposition of this debate. The proposition of this debate was about lifespan itself.

John Donovan:

And so, Paul, just take one more line. What is the difference between those two scenarios that you outlined? Between -- morally -- what's their difference?

Paul Root Wolpe:

It's an intention thing. An intention is very, very important morally. Is my goal to live as long as possible for the purpose of living as long as possible or is my goal to live a healthy productive life and die whenever it is that I happen to die? I'm not actually sure we're as far apart as, you know, it might seem. But the proposition we were supposed to address was the nature of life extension itself and whether that, in and of itself, is a worthy goal -- and that's where I draw the line.

19:30:23

John Donovan:

Okay.

Paul Root Wolpe:

Live a long, healthy life.

John Donovan:

And you, Aubrey de Grey, you do have a position that takes it much further than that. And your opponents have suggested that you want to abolish death. I want to ask you, Is that an accurate perception of your goal?

Aubrey de Grey:

No, it isn't. Plenty of things that people have said about what I say are not accurate.

But

--

[laughter]

John Donovan:

Could you just keep it close to the mic, please?

Aubrey de Grey:

Sure. Absolutely. But, no, I think that we need to be careful in looking closely at what Paul just said about what we're actually debating because it's not quite as simple as Paul is making it. It's not simply a question of, "Are we debating whether people should be trying to live longer for the sake of living longer or are we debating whether we should get people to live healthier?" The reason it's not that simple is because there is just from a biological pragmatic perspective, there is a linkage.

19:31:17

We are going to live longer if we extend healthy lifespan and there will be societal consequences. And, certainly, I think both of the proponents of the motion have drawn attention to various aspects of societal change that might end up being challenging and that maybe we should be trying to forestall and, you know, prevent. The impression that the proponents for the motion are giving is that these problems are so cataclysmically large that we should actually avoid them by simply not going there and not solving the problem we have today, and that is what I tried to challenge in my remarks.

John Donovan:

Ian Ground.

Ian Ground:

Yeah, I think that I understand that, Aubrey, but it's a little bit disingenuous here. The reason people find your views, in particular, so interesting is not because it's going to help their granddads not have dementia or something. They find it because you seem to be offering to them, as you said, 1,000 years of life, okay?

19:32:25

That's the thing they find fascinating and wonderful and turns them on. It's disingenuous to say, "That's just a matter of health." And your argument is that people have a fundamental moral right to live indefinitely. It's a very peculiar notion of rights, okay, very peculiar. Rights come in sets. They conflict.

John Donovan:

Aubrey --

Ian Ground:

We notice already for example -- let me finish. You'll notice, already, about for example health. Okay, we have a right to health treatment. It's a pretty controversial issue here, right, that one?

Aubrey de Grey:

I have to correct you very briefly.

Ian Ground:

Very controversial that one, okay?

John Donovan:

Aubrey, do you want to yield to your opponent -- partner to answer this one?

Aubrey de Grey:

I just want to get 10 seconds --

John Donovan:

Sure.

Aubrey de Grey:

-- to correct what you said because I am not saying that people have the right to live indefinitely. What I'm saying is that people have a right to live for a while longer, however long ago they were born. Now, that in practice amounts to the same thing, but it sounds very different from a moral perspective.

19:33:20

John Donovan:

But, to be frank, kind of --

Ian Ground:

Hang on. Just a second. You're saying we have a right to live indefinitely?

Aubrey de Grey:

Sorry?

Ian Ground:

Your view is that we have a right to live indefinitely, a right, mind you?

Aubrey de Grey:

I say we have a right to live, however long ago we were born.

Ian Ground:

Of course.

Brian Kennedy:

Well, I think the majority of people don't --

John Donovan:

Brian Kennedy.

Brian Kennedy:

-- aren't fascinated by the idea of living forever. I don't hear that when I talk to people. What I hear is, "I'm scared of getting sick." And I really think that it's a little disingenuous to say we're going to keep people healthy and have them just die on a certain day.

[laughter]

If we do that, they're going to live longer. I actually want to live longer. I'll admit it. I'm not sure about infinity, but I want to live longer and I think most of the people out there right now are worried about disease. They're worried about getting sick when they get old. And, really, I think aging research is just a way of trying to target multiple diseases simultaneously.

John Donovan:

Paul Wolpe.

Paul Root Wolpe:

Well, I -- you know, so we keep talking cross purposes because the proposition that I am arguing against is living longer for its own sake, not health, not living well into old age, but living longer for its own sake.

19:34:27

And that's what I think is deeply problematic. All of us want to live healthy lives. But I want to -- I do want to correct one thing. When they take polls of people, older, healthy people are majority against wanting to live to 150 or 200. It's not that people turn 80 and they look in front of them and see illness and that's why they don't want to live these long lives. If you propose healthy living for another 70 years, the majority of elderly people say they wouldn't want it. It's this utopian fantasy about aging and it misunderstands the nature of the dynamics of human life which happens in stages, which has a course that makes a kind of natural arc of human life. And to say that at the end there, that we're going to stretch it way out or that we're going to start new phases of life, is not a lived experience of being human in life.

19:35:25

John Donovan:

Well, let me bring that question to Aubrey. And I understand that the two sides are disagreeing a little bit about what the motion is. But Aubrey, you, I would say, are the engine of this debate's existence, as in the philosophy and the ideas that you have been putting forward. And so, I would like to take to you some of the points that they have made in terms of life going on indefinitely. They say that it -- in a sense -- it offends the need we have in our lives for the sense of an ending, that death organizes our lives. It tells us when we're in our prime. It tells us when to have kids, as well as biology. It tells us when to retire. It tells us when to start letting go -- and that you're toying with that in a dangerous way. It's a very compelling argument. I would like to hear what your response is to it.

Aubrey de Grey:

Well, of course, I don't think it's a compelling argument at all. I think it's complete nonsense.

[laughter]

John Donovan:

Well, it's just my opinion.

Aubrey de Grey:

Yeah. Yeah. I mean, as far as I'm concerned, the -- what I see is that people deserve continued life and value.

19:36:25

The quality of life, the enjoyment of life arises not from how long ago they were born, but from their health status -- overwhelmingly. That is ultimately the predominant determinant of that. And therefore, I think that there's a reason why people -- why Robert Butler invented the word "ageism," the discrimination against the elderly, and called it a bad thing, and why general -- generally people say that he's right, that ageism is a bad thing. The reason is that ageism consists of having a different attitude to people who were born a long time ago than we have to people who were born more recently -- irrespective of other things, like their health status, or their likely continued health status, and so on. That just makes no sense to me. If we want to be egalitarian and not discriminate against people, then the most fundamental way in which we need to not discriminate against people is on the basis of how --

John Donovan:

Well --

Aubrey de Grey:

-- long ago they were born.

John Donovan:

I think you didn't -- just now didn't respond to the compelling part of the argument --

[laughter]

-- which was this organizing principle of a sense of an ending, that death --

Aubrey de Grey:

Yeah.

19:37:23

Well, I mean, I would just repeat what Brian said at the end of his remarks -- if I have the choice of having Alzheimer's at some age or having cancer at some age, or being bored, or not knowing when I was going to die, I'll -- I know which problem I'd like to have.

John Donovan:

Ian Ground.

Ian Ground:

Well, again, this -- it's about the end of life and the arc. But actually, our lives are conditioned in advance by these sorts of considerations. For example, do we make choices based on opportunity costs? Okay? How much time we have? You can't marry everybody. You've got to choose somebody, okay?

Aubrey de Grey:

Speak for yourself.

[laughter]

Ian Ground:

You can't live everywhere.

[laughter]

Ian Ground:

Underlying, I think, this kind of fantasy is really the thought -- a kind of weird thought -- that you want to be everybody. It's kind of a strange idea, I think. But you've talked -- let's push a bit more on this, if I may, about the kind of a reaching escape philosophy-- where the difference -- how much difference we can make in someone's lifespan -- or health span, if you want to use that term, healthy living.

19:38:24

We're happy with that. Okay? Lifespan grows as they get older. So as they gain 10 years, and then the science moves on. Well, that is to commit. That just is to commit to the idea of indefinitely long life. That's what you're saying in your answers.

John Donovan:

Brian --

Ian Ground:

I've got a question I want to ask you about that. Like, for example, does this work with the punishment business going on? How many years do you get for a major felony now? Do you stay in jail for 300 years now?

[laughter]

John Donovan:

Let me go to Brian Kennedy.

Brian Kennedy:

I think that we talk a lot about what old people are. And first of all, I think that doesn't embody the -- a lot of the old people I know. I know a lot of people that are very active, very creative. And I think they -- there are a lot of people that want to do new things -- train for new jobs. They learn languages, develop new careers. And I actually think -- we talk about them as old people who are conservative.

19:39:22

That's a good thing. So, they vote conservatively, sure. But let's look at why they're conservative. Are they conservative because some life experiences taught them that they shouldn't be liberal? Or are they conservative because the biology of aging is changing, and that's changing their behavior? People say old people are not as innovative as young people. Is that because they're older? Is that because the biology or is that because of they just ran out of ideas? I think that if you target aging and keep people younger, you're actually going to find people that are a lot -- even when they're old -- they're going to be a lot more innovative. They're probably not going to be as conservative. They're going to be taking more risk. And they're going to have the wisdom that comes with being older at the same time. And it might be beneficial.

John Donovan:

Paul Wolpe.

John Donovan:

So there's a social argument for the benefit of having people live longer? Not just for them, but for society?

Brian Kennedy:

I'll pass it to you in just one second. So I think that there is some truth to that. But underlying that comment is a biological determinism that underlies almost all of the arguments of your side.

19:40:27

There is a part of our lives that transcends biology in the sense of being symbolic and meaningful. We live life in a narrative arc. We have internal biographies, stories we tell ourselves about ourselves of who we are and what our lives are like and where we were born and who we married and our children. And those narrative arcs live somehow outside of biology. They're part of the symbolic meaning of being human. And the idea that we would -- could -- drastically change humanity and still have some kind of a meaningful narrative arc seems to me to be deeply problematic. And it's not about being bored at 110, it's about what it means to have a life where you have children -- I mean, unless we are going to push children into 60 or 70 or 80 years old -- you know, having children still perhaps between 25 and 40 and then living for another 150 years.

19:41:23

And it changes the whole nature of what it means to be human. And I just don't think that, that kind of change is a productive change or one that enriches the human experience.

John Donovan:

Aubrey de Grey.

Aubrey de Grey:

Well, so if it's really you just feel that because you don't think this would be a productive change, therefore, we shouldn't do it. This is actually I think possibly the biggest problem with the arguments in favor of the status quo with regard to longevity. It seems to me that we, today in society, are faced with a choice whether to have, let's call it for sake of argument a "war on aging," or not to. And if we have it, we can be pretty sure that we will have success in terms of postponing the ill health of old age or the slowing of death sooner than if we don't try very hard to develop this technology, right? Now, the question is, which of those two things should we do?

19:42:16

It seems very clear to me that we have an absolutely clear moral obligation to get this stuff sorted out as soon as possible in order to give our descendants, the future -- humanity of the future, the choice whether or not to use these technologies. If we go the other way and we say, "Oh, dear, overpopulation or, you know, won't it be boring?"

Let's not go there," then what we're doing is we're condemning an entire cohort of humanity to an unnecessarily painful and unnecessarily early death just because we thought that society might not like it very much.

[applause]

John Donovan:

I'm going to break pattern for a second because I want to let Brian Kennedy support his partner, and then you get a twofer on your side. Brian Kennedy.

Brian Kennedy:

I think there was a narrative arc in 1900, too. You know, lifespan was 47. You had to have more kids because a couple of them were going to die during childbirth, because if you didn't die yourself you had to try to avoid the bad water that was all over the place. You had to not get infectious disease and hope you could survive long enough to see your kids grow up if you're lucky.

19:43:16

That's not -- that was a narrative arc. I don't think we want to go back to that one.

[applause]

And --

John Donovan:

Okay, Ian Ground.

Ian Ground:

Can I just come back on the conservatism point very quickly.

John Donovan:

Sure.

Ian Ground:

I mean, the reason why people will get more conservative as they get perhaps older is not because they have -- you know, their innovation neurons die off.

Aubrey de Grey:

How do you know?

Ian Ground:

It's because they are --

Aubrey de Grey:
How do you know that?

Ian Ground:
-- people have become particularly -- because it's become -- they've become particular people, they've invested in certain values, who have narratives about themselves. It's a sense making business, okay? And the new stuff doesn't fit. It's not because their neurons -- you can't replace the neurons and suddenly they're in favor of everything the young kids are in favor of -- no. That's not how it works.

[talking simultaneously]

John Donovan:
Paul Wolpe

Brian Kennedy:--
That's because the plasticity of their neurons decline with age.

John Donovan:
Paul Wolpe has the floor.

Ian Ground:
That's just neuro-reductionism.

John Donovan:
Paul Wolpe has the floor. And after that I want to start going to questions.

Paul Root Wolpe:
When I hear the arguments you're making against, I keep thinking that the argument doesn't speak to the points that we're making at all. None of us are against aging -- are arguing against aging. Thank you.

19:44:17

[applause]

I'm all for research to try to stop Alzheimer's. I'm all for research to stop the ravages of aging. And as I said before, if that leads to a longer lifespan, I'm not going to say, you know, "Well, let's execute everybody at 120."

[laughter]

My point is what -- look, intention is an important ethical and moral issue. And you constantly are avoiding it. If your intention is to make people healthier, we are --

everyone in this room is for it. If the intention is to increase lifespan for the value of living to 150, I have to say that I think that agenda is misguided not only because for all the reasons I gave but we have poverty in this world. We have famine in this world. We have war in this world. And is the morally compelling purpose of our technology and our lives to make me live to 150 because I have a right to live as long as I want, or should it be put in service of some greater value than my narcissistic desire to live to 200?

19:45:27

[applause]

John Donovan:

Is it just narcissism we're talking about? Aubrey De Grey.

Aubrey de Grey:

Yeah. I mean, you know, we've already -- both Brian and I have commented on how actually this is good for society as well as for the individual. But I mean, let's drill down and finally square away this question of what this debate is actually about. Because I mean, I don't think that on the one hand you can say that you want to have people as healthy as possible for as long as possible, even if that has the side effect of them not dying, right? And you're not going to kill them at 120. You can't, on the one hand say that, and also, wring your hands of narrative arcs and stuff. If you're saying that is okay, then you're saying you're willing to take the risk of redesigning your narrative arc and so on. And so I think we need to be clear about that.

19:46:19

John Donovan:

Ian Ground, fair point.

Ian Ground:

I think it is quite extraordinary. You know, when we say hey, this may not be the only issue that matters to society at the moment and to humanity, that when we pose the problem we go that doesn't matter, right, that's irrelevant. Because we can solve that by artificial intelligence or going to Mars or something like that. So, we're multiplying the miracles here to deal with the problem? But look at the real issue. What do we really know? We know things like Moore's Law about technology. It doubles. It gets better and better. There's no doubt this will happen with the science. We also know about the Matthew effect. Inequalities tend to grow, okay. Let's combine those two. Who do you think is going to be the people living the longest? Is it going to be you? Or you? It's going to be the billionaires living longer.

[applause]

John Donovan:

Let me stop you. Let me stop you and put the question to Paul Wolpe, because I don't think you actually answered Aubrey's question.

19:47:18

Ian Ground:

I'm not sure I understood Aubrey's question.

[laughter]

John Donovan:

I think I did. I think the question is what's the difference between supporting technology's treatments that will help people live long enough, you won't kill them at 120. What's the difference between supporting all of that apparatus, all of those efforts on individual diseases, versus making a concerted effort to stop aging for its own sake?

Paul Root Wolpe:

I answered it twice, but I can't seem to get this word into people's minds. It's intention. My argument is against an intention.

John Donovan:

Okay.

Paul Root Wolpe:

The intention to live longer for the sake of living longer.

John Donovan:

Okay. Let me stop you. Is that your intention, Aubrey de Grey?

Aubrey de Grey:

Absolutely not.

John Donovan:

Well, what is your intention?

Aubrey de Grey:

My intention is to stay healthy as long as possible and to reap the benefits of that in terms of longevity.

John Donovan:

Okay.

Aubrey de Grey:
Longevity is the side effect.

John Donovan:
No I don't see the difference between those two things.

John Donovan:
I'm having difficulty making that distinction. I am not that smart. But you're saying there isn't one?

Aubrey de Grey:
There is not one. What Paul is saying he's saying is actually what we're saying.

19:48:19

[laughter]

Aubrey de Grey:
What Paul and Ian are actually saying though, is not what we're saying. What Paul and Ian are actually doing is raising concerns about problems in society, inequality of access, no narrative arcs, redesign, things like that. And --

John Donovan:
Why do you dismiss the narrative arc?

Aubrey de Grey:
I'm not dismissing them. I'm saying that these are reasonable things to raise but that if one raises them then the only honest approach is, as I said in my original remarks, to weigh the risk of those things happening and the severity of those potential problems against the severity of the problem we have today of not having brought the diseases and disabilities of aging under control.

John Donovan:
Okay. I want to let your opponents respond. Right after that I want to start going to questions. I just want to remind you how it works so that you'll be ready to go. Raise your hands. I'll call on you. A microphone will be brought to you. Hold it close to your - - about this far away from your mouth. Tell us your name. If you're with a news organization we'd appreciate it if you would tell us that. Ask your question in 30 seconds. Make it tight and terse and on point.

19:49:21

Response from this side. Ian Ground.

Ian Ground:

I'm pleased to hear the last part that Aubrey said, because it sounded to me like a public disavow of the immoralists and the transhumanists who follow him.

Aubrey de Grey:

I have actually -- that's right. I've actually said. I was actually the first recipient of something called the H.G. Wells award for outstanding contributions to transhumanism, which was awarded to me by someone --

John Donovan:

You got that.

Aubrey de Grey:

Yeah.

Aubrey de Grey:

That was like 2004 or '05, something like that. I was awarded it by someone who is going to be taking part in one of these debates a few weeks from now actually. And in my acceptance speech I had to admit that I was rather embarrassed because I didn't think of myself as a transhumanist, even back then. So, never believe what you see in the papers.

[laughter]

John Donovan:

All right.

Ian Ground:

I'd like to tell the rest of the people on the internet that.

John Donovan:

A mic is going to come down the aisle to this front row and if you could stand up as well. It'll be here in about four seconds. Three, two, one. And if you could stand, thanks, and tell us your name.

Male Speaker:

Okay. My name is Paul McIsaac [spelled phonetically] and it began over here.

19:50:19

If we believe in evolution and if we believe that we, the human race, are not the end of the evolutionary process, and if technology has evolved with us, can we not think that both sides of the argument here are somewhat moot that, in fact, what's going to be happening in the next period is we're going to see a different human race? It's going to

evolve in various ways with technology. And this argument becomes somewhat moot because it will be another human race.

John Donovan:

Okay, I like the question. Let's take it to Ian Ground.

Ian Ground:

That sounds a bit like, you know, the dinosaur saying, "Don't worry about the meteorite. It's all right. We're going to be birds."

[laughter]

Ian Ground:

You know.

[applause]

Maybe. Who knows what's going to happen in millennia or the hundreds of thousands of years. But what's crazy is to start aiming at that now as if we can bring it about, okay?

19:51:23

--Who knows what will come about --

John Donovan:

Let's let Brian -- let's let Brian Kennedy respond.

Ian Ground:

-- that's why it's called natural selection.

Brian Kennedy:

"Who knows what's going to happen?" is exactly the point I want to make, too. And making speculations about how it's going to be bad to live longer, I have -- I guess I have more faith in humanity than that. I think that I don't know what's going to happen with technology of that sort in the next 50 years. I just hope I'm healthy and alive in 50 years to figure it out when it happens.

John Donovan:

Down in front right here, third row, sorry. Blue sweater.

Ian Ground:

Fourth row.

John Donovan:
Fourth row, thank you. Told you I'm not that good.

[laughter]

Male Speaker:
I had a question for Mr. Wolpe, to go after the motion from a different perspective which is religious liberty. I notice on your CV that you have a chair in Jewish bioethics and in Genesis 6:3, God says, "The natural lifespan of a human shall be 120 years," which, given --

[applause]

Male Speaker:
Thank you.

[laughter]

Male Speaker:
-- given that the Bible is about 5,000 years old and the oldest person alive today was 122 years, God was remarkably prescient.

19:52:25

So the question is this. If you're Jewish or Christian and the technologies become available to stay older, do you not have a religious argument of, "I should be allowed these technologies because God says my natural lifespan is 120 years"?

John Donovan:
But what if the technology lets you live to 150 years?

Male Speaker:
Well, that'd be cheating.

John Donovan:
Then you're sinning.

Male Speaker:
That'd be cheating.

[laughter]

John Donovan:

Let's take the question.

Paul Root Wolpe:

Okay, the human lifespan is about 120 years. That's how old the oldest humans live. I'm all for us all living to 120 years healthfully or even beyond that. That's not the issue. The issue is if you look at -- if you look at species on this planet, there is virtually no species and certainly no mammalian species that lives any longer than that. It seems to be the natural lifespan of advanced species on this planet.

19:53:16

Now, that doesn't speak to its value or its rightness. It simply says that throughout the entire existence of this planet, evolution has for some reason put a certain limit on how long individuals of species live. And my argument is we have to take that seriously. It's not the defining issue.

John Donovan:

Okay.

Paul Root Wolpe:

But I think there's a wisdom to it that we completely ignore and say, "We should live as long as we want," to our peril.

John Donovan:

Brian Kennedy to respond.

Brian Kennedy:

Can I comment on programmed aging? First of all, I want to say that I think there are a lot of people that have all kinds of religious beliefs and other beliefs, and it's never my intention to go jam pills down people's throats. And we want to hope that -- we want to find ways to keep people healthy longer. But I think it is about individualism and choice. I don't -- this concept of programmed aging has come up a couple times. And I think most of the field does not believe in programmed aging. First of all, there are a lot of species that live longer than we do. Whales live a lot longer than we do. Clams live a lot longer. Plants live 2,000 years. I mean -- but let's leave that aside for the moment.

19:54:18

I think most of us feel like aging is what happens when natural selection stops. In other words, natural selection cares about fitness, which is basically reproduction. It means living long enough to have healthy children and pass on your genes to the next generation. For almost all of our evolutionary history, we weren't living long enough for it to matter whether we were healthy at 80 or 100 or not. So natural selection breaks down with age. And then the bad things that happen, the diseases that happen, occur

when natural selection is no longer working as well. That's the common view of aging in the field. And so this idea that there's some program that defines how long we can live I think is -- there's very little evidence to support that.

John Donovan:

So far we have heard a lot of men talking tonight. I count myself among them. It's time to hear from a woman. Right in the center, please. If you'll stand up, they'll find you. It's coming on your left side. It's from there, thanks.

Female Speaker:

Hi. My name is Eleanor and I am a consulting physical therapist at a geriatric facility for about 20 years now.

19:55:23

So, dealing with end of life, quality of life issues on a daily basis. So, my question is for this side -- especially for Brian. It's a very practical one, in terms of -- as this drug that you mentioned that you -- is having effects on prolonging the healthy life, it sounds like a wonderful fountain of youth drug. It could be worth a gazillion dollars, I imagine, at some point. But my question really is this. First of all, how long off is that really? And does it affect -- because the problems that people most complain about -- they lose their hearing. They lose their sight. The heart disease. The brain goes. I mean, it's multiple --

John Donovan:

Okay. I --

Female Speaker:

-- multiple -- so --

John Donovan:

Could -- yeah. Thanks.

Female Speaker:

Yeah.

John Donovan:

It -- but restate the question just really tightly. And --

Female Speaker:

So, okay. So, the question is, this drug, how long off is it? And will it improve every aspect of their lives --

John Donovan:

Okay.

Female Speaker:

-- not just specific?

John Donovan:

And I want to take the question, because we do need a -- sort of a little bit of a scientific reality check in this conversation.

19:56:24

So, take -- let's take that one on.

Brian Kennedy:

Yeah. I think that's an important question. And let me first state that I'm not just advocating drugs. There's lots of lifestyle choices that people can make that extend their healthspan and may extend their lifespan as well -- exercise, diet. And I think those things are important to think about. The comment about the drug -- actually, there are multiple drugs that extend lifespan in animals. And we're very close, I think, to doing a clinical trial, looking at health span in humans. This is something that Nir Barzilai is heading at Albert Einstein, and the drug in question there is Metformin. It's the same drug we've been taking -- lots of you are taking for diabetes, probably.

John Donovan:

Okay. I'm going to take a question down -- I'm not going to get a response on that side, because I don't think there's much contention on that question. Down front, sir. And the mic will come down from the left-hand side. Folks, if you're upstairs, I can't call on you because we don't -- I can't see you, for one thing.

[laughter]

That's the real reason. I was going to say we don't have microphone facilities up there, but it's really I can't see you. Sir?

19:57:23

Male Speaker:

I'm Noel Patton, and I'm involved in telomere biology, which is the aging clock. And I'm trying to extend telomeres to extend life. But there's been a lot of talk here about just living for the sake of getting older, just for the sake of it. The intention -- as you said. And then there's the issue of health. None of us want to get sick, so we want to say healthy. But I don't have -- I'm -- of course I want to stay healthy. But I don't have the intention of just living forever or another 50 years or hundred years, just for the fun of it.

John Donovan:
Can you --

Male Speaker:
I have missed --

John Donovan:
Can you come in on a question, --

Male Speaker:
The question is, what about people who haven't finished what they want to do in their life? You know, if they extend it to where they have a chance to do the things that they didn't get to do --

John Donovan:
Okay.

Male Speaker:
-- and to correct the mistakes they've made.

19:58:19

John Donovan:
I take that as a challenge to the side arguing for the motion. Let's take that to Ian Ground.

Ian Ground:
Yeah. It -- actually, I understand the question. Thank you for it. But when people are engaged in an activity which they think itself is kind of indefinite -- like, for example, pursuing science, okay? They think they can kind of hook themselves up to the indefinitely delivered values of that. Right? And so, they'll be fine, because they're doing -- they're engaged in a project which is essentially endless. And that's -- so you often hear this argument from people who are -- engaged in scientific inquiry. I understand it. But we're thinking about society much more generally, and not just scientists, okay? So, tell me how you think that some -- the ordinary Joe, okay -- the New York taxi driver, how is he going to respond to that? Okay?

Male Speaker:
I'm not sure. But the fact is --

John Donovan:
I'm sorry. I have to move on to another question.

Male Speaker:
Okay.

John Donovan:
Thank you very much. I want to remind you that we're in the question and answer section -- let me say this for our broadcast. I want to remind you that we are in the question and answer section of this Intelligence Squared U.S. debate.

19:59:22

I'm John Donovan, your moderator. And we have four debaters, two teams of two, arguing for and against the motion, "Lifespans Are Long Enough." Ma'am with the -- holding up the card up -- in the -- you need the mic to come to you. Thanks. Thank you. And if you could stand up, too.

Female Speaker:
Very quick question. What is the age, if it's not too personal, of these gentlemen on the stage?

[laughter]

John Donovan:
Okay. I'm going to pass on that question.

Aubrey de Grey:
158.

John Donovan:
158. 158. Okay. Ma'am in the back, against the column there? Thanks. And the mic will come down the aisle. It was a cute question, but --

[laughter]

Male Speaker:
So, I --

John Donovan:
You know, I'm sorry. I meant -- I apologize. I actually was pointing to the person in the white sweater. I'll try to come back to you if I can. I apologize.

[laughter]

Unless, ma'am, you want to yield.

Female Speaker:

Thank you for yielding. Adriane Berg, host of "Generation Bold: The Fountain of Truth," which is a national radio show on aging. And I have the same question for all four spun slightly differently.

20:00:23

John Donovan:

Actually I -- that's going to take too long.

Female Speaker:

Okay.

John Donovan:

One question that works for all of them.

Female Speaker:

Okay, so this way, is there an obligation if we break through this concept of a finite age that we have to make contribution, and, if so, who's going to be the judge of that? Does that pose problems or does that pose opportunity?

John Donovan:

Who will be the judge of who gets access to the --

Female Speaker:

Yes, who will be -- yes, who is worthy, whether it's -- if it's not a financial issue --

John Donovan:

Okay, let me --

Female Speaker:

-- we've seen that out the window, not financial.

John Donovan:

Great, let me bring it to Aubrey, who said to you -- even though -- you've done more dreaming perhaps about this.

Aubrey de Grey:

I've certainly done more thinking than nearly everybody.

John Donovan:

All right.

[laughter]

But I meant, "daydreaming," okay?

Aubrey de Grey:

But --

[applause]

-- yeah. This turns out to be a much easier question than people think because these therapies are going to pay for themselves so astronomically times over so quickly. Aging is fantastically expensive at the moment.

20:01:26

In other words, the absence of these therapies is expensive. 90 percent or thereabouts of the medical budget of the Western world, including medical research but also medical budget, is spent on the ill health of old age in one way or another, not to mention of course all of the indirect costs, the fact that people are not contributing wealth to society anymore because they're no longer able bodied, the fact that their kids are not so productive because they're having to look after their sick parents, all those things add up to the fact that it would be economically suicidal for any country, even a tax averse country like the U.S.A., not to make sure that these therapies are available to everybody who is old enough to need them. It's going to be like basic education. It's going to be free.

John Donovan:

Paul Wolpe.

Paul Root Wolpe:

I see that as another sort of scientific, technological utopian idea. We don't have anything that's free now, even things that have saved thousands of dollars.

20:02:18

[applause]

The idea that there's a finite amount of human need in terms of health and so if you solve one thing and free up money, it's now free, we can't cure basic diseases here. We now have Zika and Ebola and MRSA. We have people in Africa dying every day of cholera. I mean, this is a utopian fantasy that we're going to solve a problem, it'll free up all this money, and it'll be free for everybody. It has never happened in human history. And the idea that it's going to happen now seems to me to be deeply unrealistic.

John Donovan:
All right, just --

Aubrey de Grey:
Basic education.

John Donovan:
Brian, jump in.

Brian Kennedy:
It needs to happen now, by the way. Access to health care is one of the major problems whether or not we do anything about aging. The lifespan of the richest quartile in the world is 80, and the lifespan of the poorest quartile in the world is 54. So this is a problem that exists today and it's one we need to focus on solving today, not if we develop some drug down the road.

Paul Root Wolpe:
And it's not about aging. They don't live to 54 because of aging. They live to 54 because of infectious disease --

Brian Kennedy:
I agree.

Paul Root Wolpe:
-- which we can cure.

20:03:20

John Donovan:
The gentleman who got robbed--

[laughter]

-- and was very, very gracious about it.

Male Speaker:
Thank you. So my name is Shane. And I'm an especially peculiar transhumanist. I'm a Mormon transhumanist. I have a general question. There has been this concept of a narrative arc and also a concept of post-humanity and I was wondering if either side could explain the differences --

John Donovan:
Wow, we're really going public radio now on this.

[laughter]

I think that that would -- I think it's a great question. I want to pass because I think it will chew up more time than we want to take, and we'd like to get in a few more questions. So with respect I'm going to pass over it. But come up and chat with the debaters afterwards. I'm not dismissing the validity of the question, just its utility in this situation. Sir?

Male Speaker:

Hi, my name is Keith Comito.

20:04:23

I work for Lifespan.IO which actually crowdfunds research to help extend lifespan.

John Donovan:

Are you a plant?

[laughter]

Paul Root Wolpe:

No, I think he's an animal.

[laughter]

Male Speaker:

Oh, yeah.

John Donovan:

Go ahead, please.

Male Speaker:

But I kind of want to bring this to a little bit of the philosophy because it's sort of been glossed over I think in certain aspects. So if I understand it right, one of the cruxes against life extension is that in a true Wittgenstein kind of way, life or the form of it needs to be defined by its negative space, by death, like it needs to be there like some Hobbesian leviathans who give our choices meaning. And I want to say, "Is it fair" -- my question is: Is it fair to say, to assume, that this state of existence is necessarily more ideal than one in which we have learned to take the reins of our own development unforced by external conditions that can rob you of the goods of life?

20:05:29

You know, a ballerina who's 40 years old.

John Donovan:

Okay. Okay. Let's take a -- I thought you were going to be going down the -- that was good -- you landed that well. Ian Ground.

Ian Ground:

That's a good question and thank you for it. It's not so much what's defined by the negative spaces, as you put it, by death, but that we -- even from within life make choices that presuppose that time is finite. Okay. That's how it works. We have to put down -- say we put down roots, okay. You can't be a being that puts down roots if you're going to jump up in 50 years' time and go somewhere else, okay. It's a different way of conceiving of the human, okay. I'm saying well, fine, maybe you really don't like the human, okay, and you'd rather have something else. I've got no argument against that. I know what I prefer. That's all.

John Donovan:

Aubrey De Grey, would you like to respond?

20:06:23

And if you can come in --

[laughter]

Aubrey de Grey:

I'm a practical first things first kind of guy. I don't want to get sick. I don't want you to get sick, and I really don't think very much about philosophy. And I think I'm okay not doing that.

[laughter]

[applause]

Ian Ground:

But that's the problem, Aubrey. You'd do -- people do think you're making philosophical claims about the wonderful possibilities that are there before the human race, okay. That's why your views are so interesting to people, not because of the small practical interesting things you may actually be doing, and it seems to me disingenuous again, okay, to say that that's not part of the appeal of your views. It's the immortalists, the people who if they can't get the treatment that you're trying to produce are going to have themselves cryogenically frozen instead.

John Donovan:

I think he's got you there. The public reception -- take an answer.

Aubrey de Grey:

So it is abundantly true that the noisiest most vocal people when it comes to commenting on what I think are people who make their money by sensationalizing it, but that doesn't mean that I actually say what they say I say.

20:07:28

I know that as a serious academic understand that it's better to actually read Wittgenstein rather than read commentaries on Wittgenstein if you want to know what Wittgenstein thought, and I would submit that it's the same for me.

John Donovan:

Ma'am.

Ian Ground:

But you have said, Aubrey, that the person who will live to be a thousand years old is alive today.

Aubrey de Grey:

Probably, but that's the technology

Ian Ground:

But that's a claim that's a claim that makes people say, "Wow. Maybe it's me."

[laughter]

John Donovan:

Ma'am, why don't you stand up and start talking?

[laughter]

Female Speaker:

I can certainly do that. I'm Patricia Sabga. I'm an economics correspondent for Al-Jazeera, and while I think you absolutely conveniently glossed over the fact that yes, it makes perfect economic sense, you're right to give everybody access to this treatment, but history has shown, rightly so, that that is unlikely.

20:08:23

But what about the fact that we live on a planet of finite resources?

[applause]

John Donovan:

Okay. That's a great question. Let me let Brian Kennedy answer that.

Brian Kennedy:

We talk about this over-population problem if people live longer and I think it's just not true. First of all, the most developed, longest living countries in the world have the lowest birth rates in the world. Japan has 1.3 children per couple. We're not going to be talking about too many Japanese. We're going to be talking about zero Japanese in a thousand years. And that's true with almost all the developed countries. So I don't think lifespan, longer lifespan, goes hand-in-hand with higher population. Also, you have to realize that population growth is a geometric process. It's about how many babies you're having. Dying is a linear process and it has a much smaller impact on the global population. So I do think, let me clarify, I do think we need to be concerned about global population, I just don't think modest increases in life expectancy, which go along with development in health care are going to lead to over-population in these countries that are actually leading to under-population.

20:09:24

John Donovan:

We're going to conclude this round with what we call --

[applause]

We are going to conclude this round with what we call the volley round. It's a very fast-paced take on one question in which the debaters go back and forth. They each get 30 seconds. When their time runs out they know because a bell rings. They have to stop talking at that point and that's when the other guys start talking. And the question we're going to start it with this side is the charge that was made at the very beginning of the debate by your opponent. I'll come to you first, Aubrey, and then when we switch to the other side I'm going to come to Ian and then it's going to be Brian and then it's going to be Paul. The question is this, when your opponents say that the desire to extend life to make a serious effort at curing aging is essentially narcissistic, what is your response to that? Thirty seconds starts now.

Aubrey de Grey:

I think calling it narcissistic is kind of -- what can I call it? Not just a straw man. It's kind of a sexy blanket. It's kind of a way to help one not think about something that is scary. Yes, the unknown is scary.

20:10:25

Fear of the unknown is a natural emotion. But it shouldn't control our decisions. Our decisions should be controlled by objective analysis of the pros and cons of a prospective action. And, in this case, if the action is eliminating the suffering caused by aging, I'm in favor of doing so.

[applause]

Ian Ground:

I think there is underlying this whole kind of culture about anti -- abolishing death -- a kind of narcissism, it's a kind of consumerism as well, that we'd become as it were consumers of our own lives as we go look around a shopping mall and pick up a new character or new capacity or new vices and virtues. This seems to me an essentially consumerist model of what it is to live a life and we should fight it.

John Donovan:

Thank you. Brian Kennedy.

Brian Kennedy:

Well, I'm not the sensationalist, you know? I'm the small practical guy trying to keep you healthy longer.

20:11:17

And I just have to say that if you look at the demographics right now, there's nothing narcissistic about keeping people healthy when there's going to be 25 percent of the population over the age of 65. We can improve quality of life and provide economic benefit at the same time in this half of this century and we should be doing it.

[applause]

John Donovan:

Paul Wolpe.

Paul Root Wolpe:

My esteemed opponents have never once addressed the question of whether a desire to live longer is narcissistic. Every time they talk about it, they say the desire to be healthy isn't narcissistic. I agree with them. Pursuing the end of aging in order to improve our health is not narcissistic. A desire to live to 200 is.

John Donovan:

Thank you, Paul Wolpe.

[applause]

And that concludes our volley round and that concludes round two of this intelligence Squared U.S. debate where our motion is, "Lifespans Are Long Enough." Okay, please remember how you voted because we're going to ask you to vote again shortly after you've heard closing statements.

20:12:15

And, again, I just want to remind you victory goes to the side whose numbers have moved the most upward in percentage point terms from the first vote. Now we move on to round three. Round three are closing statements by each debater in turn. They will be uninterrupted. They will be two minutes each. Speaking first in support of the motion in the closing round, Ian Ground, the philosopher and teaching fellow in fine art at Newcastle University.

Ian Ground:

I want to bring you back to the idea of the indefinite life. I was at a philosophy conference once and someone asked the question, "Well, what are people of faith? What age do they think we are in heaven?" And someone said, "Ah, you know, you're in your prime," 38, 40, something like that. Someone said, "Yeah, but what age do they think you are in hell?" Someone went, "Huh." I know, 14 or 15. That was terrible. Your bodies are all weird. You hate everything. You have no idea who you are. You're always right but nobody believes you.

[laughter]

And this made me think actually that if you want a kind of picture of the psychological life of someone leading, the serious matter here, the life indefinite, okay, the 1,000-year old that we're offered here, okay, think of a teenager.

20:13:24

At least with some of them, their life has no shape, okay? Their identities are fluid and painful. They have no conception of shared finite resources. Their memories only reach back over a small period of the past and, yes, they really do think they will live forever. Look, not all teenagers are like that, but think about the worst times when you were a teenager, okay? That seems to me a kind of clue to thinking what it will be like to live this kind of indefinite life, okay? Now, my story has an ending. After the discussion at the conference, there came a lone voice from the back and someone said, "No, no, no. You're all wrong, okay? In hell, yeah, you are in your prime. Everybody else is 14."

[laughter]

To vote for this motion is not to vote against health, okay? It's not to express a death wish. It's not about health spans. It's the vision that's offered of indefinite life. Vote to

express the wisdom that there's more to life than just more of it. Vote for the motion. Thank you.

20:14:28

John Donovan:
Thank you, Ian Ground.

[applause]

And the motion is, "Lifespans Are Long Enough." And here making his closing statement against the motion, Aubrey de Grey, chief science officer of SENS research foundation.

Aubrey de Grey:

So we've heard a lot of discussion of the possible problems that might be created as the result of solving the problem that, we all four of us agree, that we have today, the problem of ill health and old age. These problems might arrive as a result of the side effect that people would live longer. Some people think that we might live a great deal longer as a result of technologies that could be developed in the near future. Some people think that our progress is going to be rather more modest. It remains to be seen. But the fact is that this debate is about the desirability of extending life, not about the feasibility and how we're going to do it. Therefore, I think that the role that Brian and I have tonight, overwhelmingly, is to explain to all of you what is actually biologically reasonable, in terms of the linkage between health span and lifespan, which I think we've done.

20:15:35

However, I think we have to demonstrate that we are not narcissistic any more than anyone else and that we are responsible scientists who are thinking clearly and carefully about the consequences of our work. We certainly both do think -- and as does everyone in the field -- about that. The question has to be asked then -- yes, there is certainly much more to life than more life. The question is, is it an either or? And I would put it to you that the implicit premise -- through certainly poor -- has been claiming that it's not the explicit premise of the -- of the other side is that, in fact, there is an either or, that life will actually be, in some profound senses, a lot worse if it's a lot longer.

20:16:25

I think that that is an extremely uncertain proposition, which has by no means been demonstrated by the other side. So I would invite you to vote against the motion.

John Donovan:

Thank you, Aubrey de Grey.

[applause]

And again, that motion is Lifespans Are Long Enough. Making his closing statement in support of the motion, Paul Root Wolpe, director of the Center for Ethics at Emory University.

Paul Root Wolpe:

In his last great speech before he was assassinated, Martin Luther King said, "Like anybody, I would like to live a long life. Longevity has its place, but I'm not concerned about that now. I just want to do God's will. And he's allowed me to go up to the mountain. And I've looked over. And I've seen the Promised Land. I may not get there with you, but I want you to know tonight that we as a people will get to the Promised Land." When life is forever, what's worth dying for?

20:17:20

When life is infinite, what's its value? Do I want to live forever? Sure. In my own -- some part of me, in that sort of reptilian, narcissistic, "I'm so important, center of the world" yes. I have that survival instinct that all organisms on this planet have. But I think we're greater than that as human beings -- greater than pursuing life for its own sake. Life's beauty and preciousness is partly due to its transience and the bittersweet knowledge that we will all die, and that through that transition, other lives will live and flourish. And I think the most noble part of who we are as human beings is exactly that -- is our willingness to give our lives, our willingness to discount the value of ourselves for the benefit of others.

20:18:19

And that's why I find so much of this conversation deeply problematic to me as an ethicist. What is the real value we're pursuing here? If we're pursuing health in the service of a well-lived life, great. If we're pursuing long life itself, it seems to me to be a deeply misguided value.

John Donovan:

Thank you, Paul Wolpe.

[applause]

The motion, again, Lifespans Are Long Enough. And here making his closing statement against the motion, Brian Kennedy, CEO and president of the Buck Institute for Research on Aging.

Brian Kennedy:

I'd just like to comment about one thing you just said. He said, "If life was infinite, what would be dying for?" I think that we need to look carefully at what people are choosing to die for right now. And maybe we'd be a much better off planet if it was a little bit harder to convince people to die for causes like ridiculous wars that are going on all over the place. Having said that, I'm going to be a narcissist and talk about myself and my grandparents. So, I will answer the question.

20:19:18

I'm 49 years old. And I'm going to be 50, so I'm starting to really think about aging in a new way. But I do understand aging, because I was an only child. And I grew up in a family where the women lived forever. One grandmother lived to 99. Another grandmother lived to 101. And they were inspirations to me. My grandmother Leda, who died recently at 101, she was very active. She quit driving at 91. She -- last time she flew out to visit me across country with no assistance was at 95. She bowled at 238 game at 92.

[laughter]

[applause]

She was a centenarian, and she was extremely healthy the last six months of her life. She was still living alone and then she got sick. Her heart valve gave out to macular degeneration. She went downhill and died rapidly, within six months. And she's not the only centenarian that's like this. If you look at the centenarian population, they're remarkably healthy. They have one third the healthcare cost -- that the rest of the population does, because they don't get these chronic diseases of aging. They stay remarkably cognizant, and then they decline rapidly.

20:20:26

That -- I don't want to die necessarily but that's the life I want to live. And actually, you know, maybe I am avoiding the question, but we asked the question, "Do people want to live longer?" And I think this health span approach is going to make you live longer, but it's going to do it the right way. It's going to do it by keeping you healthy. So we've talked -- I talked about "silver tsunami." I think this is a golden opportunity. I actually think there's a huge social benefit that comes from having healthy, functional, active, older people in the population, and I look forward to seeing what that's going to be.

John Donvan:

Thank you, Brian Kennedy.

[applause]

And that concludes closing statements and round three of this Intelligence Squared U.S. debate, where our motion is, "Lifespans Are Long Enough." And now it's time to see which side you feel has argued the most persuasively. We're going to ask you again to go to the keypads at your seat and now vote a second time, looking at the same motion, "Lifespans Are Long Enough." If you now agree with this motion, push number one. If you've been persuaded to disagree with this motion, push number two. If you became or remain undecided, push number three.

20:21:26

And as before, this'll be about a 30-second process. Does anybody need more time for this? Okay, we've locked it out. All right, so it'll be about 90 seconds before we get the results. In those 90 seconds, I want to say the following, we've been saying this more and more often because our debates are getting better and better, but this was certainly one of the best debates we've ever had in that the topic was -- we touched on science and philosophy. And these teams, through their respect for one another, the seriousness with which they debated and listened to one another and took each other on, made it entirely accessible, fascinating, respectful, and exactly what we aim for at Intelligence Squared U.S. So congratulations and thank you to all of you.

20:22:26

[applause]

I also want to thank everybody who got up and asked a question. And that's regardless of whether I took the question or not. Frankly, I think it takes a lot of guts to get up. And just because I passed on a question doesn't mean there was anything wrong with it. I'm just making a judgment about whether it fits at the moment. So to everybody who stood up and asked a question, used or not, thank you to you also.

[applause]

I want to do a special thanks tonight. Thanks to a gentleman named Thomas Campbell Jackson. He's longtime been an IQ2 U.S. supporter. But we have started a series of debates -- this is the first one -- in which we are looking at health care issues and from very, very interesting directions. And this was the first in that series. That series is funded by a very, very generous gift from Mr. Thomas Campbell Jackson.

20:23:17

And he's sitting here. I'm not going to make him stand, but please let him hear how much it is appreciated.

[applause]

We're going to have the second installment in that series comes in our fall season. And I do want to mention in this moment that Intelligence Squared U.S. is a nonprofit organization that I've been telling you about the podcasts that we put out, the livestream, the radio broadcast, the fact that we are used now in thousands of classrooms across the country. We give all of this away, free. It is a philanthropic -- it is a philanthropic operation, and we're delighted that you're all here and bought tickets, but the ticket prices don't come close to covering the costs of putting one of these debates on. So I am encouraging anybody who is motivated to by what they experienced here, by wanting to see this thing grow, to go to our website, iq2us.org, where you can make a contribution to that. And we're very grateful to the people who have been doing that all along.

20:24:16

Next month, Tuesday, March 1, we will be on the campus of Yale University. We will be debating this motion, "Free Speech Is Threatened on Campus." We'll be taking a look at the recent wave of college protests, and we'll be asking the question as we look at the things that have been happening across the country on college campuses in terms of free speech issues whether students are exercising free speech or whether they are suppressing it. On Wednesday, March 9, we'll be back here in New York. For that debate, however, we're going to be at the 92nd Street Y. We're taking part in their Seven Days of Genius Festival. The motion we'll be debating -- it was referred to tonight -- the motion will be, "Artificial Intelligence: The Risks Could Outweigh the Rewards." Among the debaters, we'll have computer scientist Jaron Lanier and Martine Rothblatt, who is one of the highest paid female CEOs in the country, who commissioned a robot clone of her wife. Tickets for all of our upcoming debates are available through our website, as I said, iq2us.org. And I just want to remind you we have a great IQ2US app that's available on the Apple Store and through Google Play as well. And, on that app, you can see every debate we've ever put on.

20:25:22

You can watch it. You can hear it. You can see transcripts. You can vote. It's a terrific and elegant app. And the last thing I want to mention is we've started working with a group called Newsy.com on a special series of two-minute debates and the Newsy debates actually are these debates, but they find remarkable way to break them down into two minutes. But if you're going to live forever, that really doesn't matter.

[laughter]

[applause]

You don't really need the time. But in the next week we're going to be releasing several two-minute short versions of debates, including on the lifespans debate that you just witnessed and voted on and picked the winner on. So let's move on to who won this debate. So, the results are all in now. Our motion is this Lifespans Are Long Enough. You our live audience -- well, of course you're live. Let me start that over again.

[laughter]

The results are in now. The motion is this: Lifespans Are Long Enough. Our audience here in New York has voted twice on the motion, once before hearing the debates and once again afterwards and it goes like this.

20:26:22

Before the debate, 32 percent agreed with the motion Lifespans Are Long Enough, 36 percent were against, and 32 percent were undecided. Those are the first results. Let's look at the second result. The team arguing for the motion their first vote 32 percent, their second vote was 40 percent. They pulled up 8 percentage points. So that is the number to beat. Let's look now at the team against the motion. Their first vote 40 percent, their second vote 49 percent. They pulled up 9 percentage points.

[applause]

I'm sorry. I've been given a form that's filled in incorrectly. So let me --

[laughter]

Can we redo this? Because the numbers are -- the math is all over the place on this.

[laughter]

Can we rerun the numbers on this? So you went up 8 percent and up 13 percent.

20:27:19

So, I mean, it seems as though it's a 13 percent win by the team arguing against the motion, right? Yeah. Well, let's all pretend that all of that didn't just happen.

[laughter]

Thank you. I'm going to do the whole thing over again so that we can edit it cleanly, but you all know where this is going.

[laughter]

Our motion, Lifespans Are Long Enough before the debate our live audience here in New York 32 percent agreed with the motion, 36 percent were against, 32 percent were undecided. Let's look at the second vote. In the second vote the first team, their first vote was 32 percent. Second vote was 40 percent. They picked up 8 percentage points, which is the number to beat. The team against the motion, their first vote was 40 percent -- I'm sorry, 36 percent --

[laughter]

Their first vote was 36 percent. Their second vote was 49 percent. They picked up 13 percentage points.

[applause]

That makes the team arguing against the motion Lifespans Are Long Enough our winner. Our congratulations to them.

[applause]

Thank you from me, John Donovan and Intelligence Squared U.S. We'll see you next time.

20:28:23

[end of transcript]