



Top-100 Longevity Leaders



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Top-100 Longevity Leaders

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Introduction

Aging Analytics Agency is known for its series of reports documenting the emergence of the global Longevity Industry, defined primarily as a convergence between biomedicine, AI and other data-driven technologies. Our most common type of report, the regional case study, normally contains lists of “influencers”: people from the region described by the report who have made the largest impact in their particular field, according to that field’s metric of success (e.g. number of dollars invested if the person is an investor, or a number of headlines generated if that person is public figure, or a number of citations if that person is a researcher, and so on).

The purpose of this report, however, is to formulate a list that will provide the reader with some idea of what type of individual is directing this multi-sector industry as a whole, by identifying the top 100 individuals influencing the direction of the entire multifaceted industry.

This is done by using a unique metric to measure the impact of each leader in their field and then normalizing between fields.

Progress in the Longevity Industry is driven by biomedical innovation, which is in turn accelerated by political coordination formed as a response to democratic demand for Longevity solutions, which in turn is motivated by large mainstream support from public opinion. **Therefore**, leadership in the Longevity Industry comes in the form of: **Investors and Donors, Researchers and Academics, Entrepreneurs, Politicians and Government Officials, and Media Influencers**.

And as the following report illustrates, the industry is driven by a disproportionately high number of people with direct involvement in more than one sector.

For example, it has for a long time proved necessary for technologists to seek public and philanthropic support via media activity and public relations. And in order for the industry to advance from its present state of maturation, it will for the foreseeable future be necessary for members from all sectors of the industry to seek political support from those with the power to combine the diverse threads of the industry to optimal effect.

This involvement of individuals in multiple sectors is reflected in lists and infographics.

Report Objective

In order to understand where the sources of influence lie, and how to build efficient interdisciplinary teams able to deliver meaningful milestones on the road to a fully developed global Longevity Industry, it is crucial to analyze the existing examples of accomplished leaders in this area, their backgrounds, technical skill-sets, strengths, competencies, roles in the organizations, and types of impact they have on the industry in general.

This present report summarizes the top 100 most influential leaders who have been contributing largely toward this emerging multi-faceted industry. It has the goal of providing an overall map of the global leadership scene in the areas of geroscience research and development, P3 medicine, AgeTech and novel financial systems, their financing, and their political implementation, to serve as a benchmark tool for creating successful strategic alliances.

Lists are provided of leaders in each of these distinct fields, and infographics are used to reveal their global geographical distribution as well as what portion of their time is spent in each of the five roles mentioned.

In addition, unlike our previous regional reports or our Top 100 Leaders in AI for Drug Discovery leaders report, this report shines a spotlight on leaders involved with multiple sectors and spheres of activity simultaneously. The Longevity industry has reached a state of such maturity and diversity that it is entering a phase in which individuals must demonstrate leadership in more than one area.

Therefore, lists are also provided of those individuals leading multiple sectors of the industry, and infographics are used to clarify how often the same roles coincide.

Longevity is an emerging industry at the intersection of various disciplines. The market is extremely dynamic and we should investigate the trends as quickly as possible. Finding the most significant leaders – including thought leaders – is the key to understanding and prediction of development of this innovative industry.

Report Methodology

Stage 1: Data aggregation

A long list was produced of 500 individuals who have played a well-documented role in the Longevity sphere for more than 5 years (prior to the emergence of Longevity as a mainstream industry).

Stage 2: Quantifying Leadership

Five forms of leadership were identified:

1. **Investors and Donors:** Investing or donating openly and explicitly in major named novel interventions in aging, including outside of biology.
2. **Entrepreneurs:** Either founder status or C-level leadership of impactful organisations.
3. **Media Influencers:** Thought leadership through books, articles, or major statements on influential platforms.
4. **Research and Academia:** Academic or scientific research, including theoretical research advancing a relevant sector of the industry.
5. **Politics and Government:** Any political activity, e.g. governance, lawmaking, or lobbying.

*Sources are parliamentary transcripts such as Hansard, Google, government and parliamentary websites.

Leadership per individual = the sum total of any of the following values:

In the case of leaders whose contribution is in the form of **capital** and/or **business** leadership or management, leadership = the amount invested or donated in the past decade multiplied by 1 for investing in the palliative and geriatric, by 2 for investing in innovative biomedical research and direct application to the biology of aging, and by 3 for investing in disruptive engineering solutions directly targeting proposed mechanisms of aging.

In the case of leaders whose contribution is in the form of **media and publicity**, leadership = the sum total number of all relevant search engine headline results they generate within the scope of their aging and Longevity-related public activities.

In the case of leaders whose contribution is in the form of **research**, leadership = number of citations * number of tangible scientific breakthroughs if any.

In the case of leaders whose contribution is through **politics**, leadership = number of speeches mentioning relevant industries + number of relevant laws signed off on, multiplied by rank (4 if government minister, 3 if lord or senator, 2 if MP or Congressman, and 1 if activist, campaigner, policy entrepreneur or advisor).

Top-100 Longevity Leaders



AGING
ANALYTICS
AGENCY

Investors and Donors

Research and Academia

Politics, Policy and Governance

Media and Publicity Influencers

Entrepreneurs

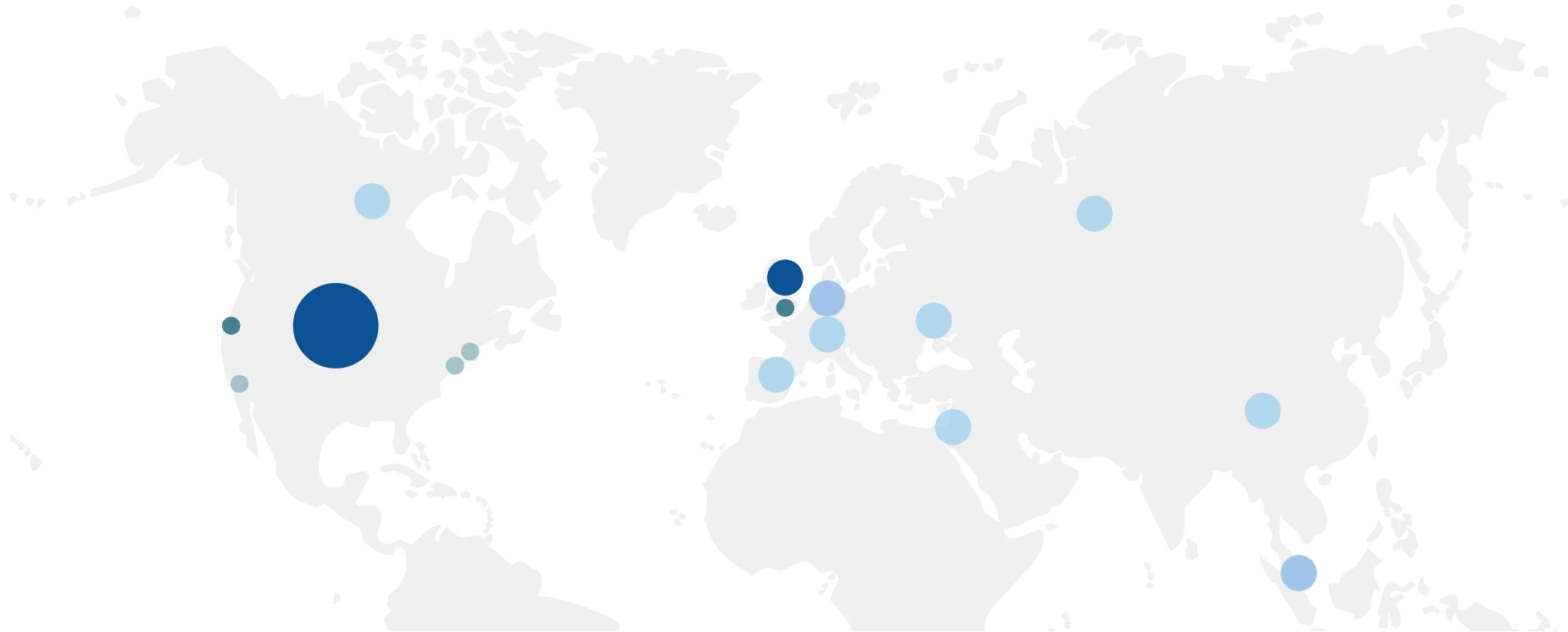
Longevity
Leaders



Top-100 Longevity Leaders

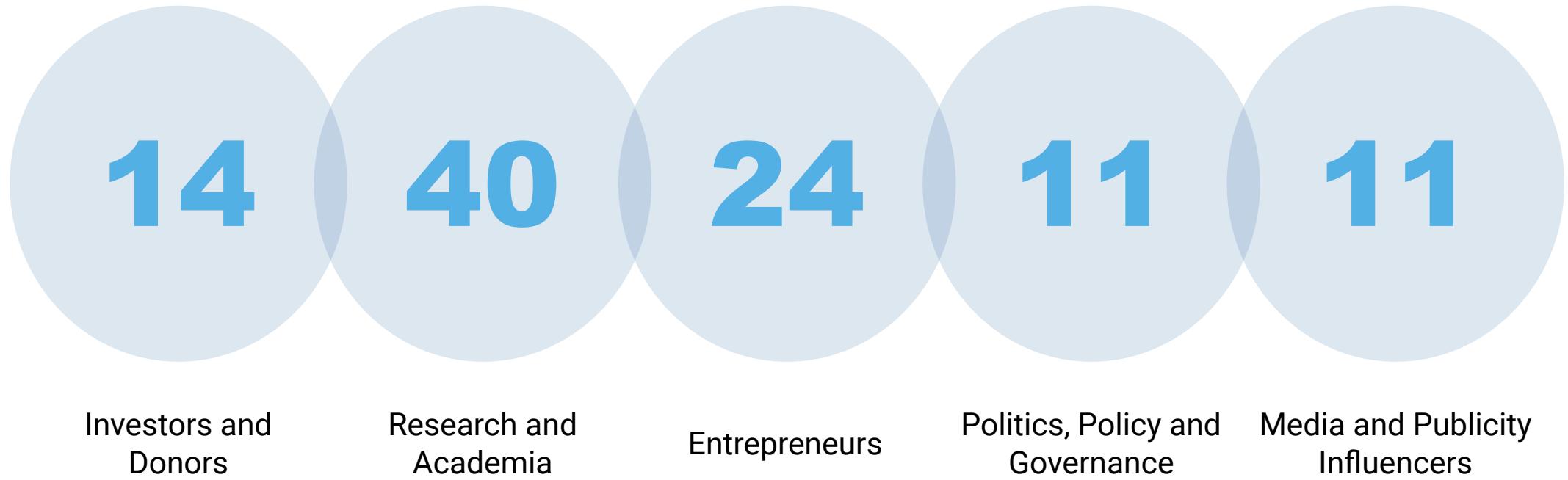
- | | | | |
|-----------------------|-----------------------------|----------------------|-------------------------------------|
| 1. Alan Russell | 26. Dmitry Kaminskiy | 51. Joshua McClure | 76. Prince Michael of Liechtenstein |
| 2. Alex Zhavoronkov | 27. Edwina Rogers | 52. Judith Campisi | 77. Rafael de Cabo |
| 3. Alexander Koliada | 28. Elizabeth Blackburn | 53. Julie Andersen | 78. Ray Kurzweil |
| 4. Alexey Moskalev | 29. Eric Kihlstrom | 54. Katy Fike | 79. Reason |
| 5. Ana Maria Cuervo | 30. Eric Topol | 55. Keith Comito | 80. Richard Barker |
| 6. Andrew Dillin | 31. Eric Verdin | 56. Keith Leonard | 81. Richard Faragher |
| 7. Andrew Scott | 32. Finian Tan | 57. Kevin Perrot | 82. Robert Hariri |
| 8. Anthony Atala | 33. Geoffrey Filkin | 58. Laura Deming | 83. Robert Young |
| 9. Antonei B. Csoka | 34. George Church | 59. Leonard Guarente | 84. Robin Farmanfarmaian |
| 10. Antonio Regalado | 35. George MacGinnis | 60. Lindsay Cook | 85. S. Jay Olshansky |
| 11. Art Levinson | 36. George Martin | 61. Lloyd Demetrius | 86. Sally Greengross |
| 12. Aubrey de Grey | 37. Gordon Lithgow | 62. Maria Blasco | 87. Sam Altman |
| 13. Bernadeane Brown | 38. Gregory Fahy | 63. Matt Hancock | 88. Sergey Young |
| 14. Bill Andrews | 39. Ilia Stambler | 64. Michael Fossel | 89. Stephen Bloch |
| 15. Bill Maris | 40. Irina Conboy | 65. Michael Greve | 90. Stephen Johnston |
| 16. Brian Kennedy | 41. James Peyer | 66. Michael Rae | 91. Steve Hill |
| 17. Bruce Ames | 42. James Strole | 67. Michael Rose | 92. Steven Horvath |
| 18. Bryan Johnson | 43. Jan van Deursen | 68. Michael West | 93. Suzanne Wait |
| 19. Camilla Cavendish | 44. Janet M. Lord | 69. Mike Kope | 94. Thomas Rando |
| 20. Caleb Finch | 45. Jeff Bezos | 70. Ned David | 95. Tina Woods |
| 21. Craig Venter | 46. Jerry Shay | 71. Nir Barzilai | 96. Tom Kirkwood |
| 22. Damian Green | 47. Jim Mellon | 72. Paul F Glenn | 97. Tony Robbins |
| 23. David Botstein | 48. João Pedro de Magalhães | 73. Paul Irving | 98. Vadim Gladyshev |
| 24. David Gobel | 49. John Godfrey | 74. Peter Diamandis | 99. Vitalik Buterin |
| 25. David Sinclair | 50. John D. Furber | 75. Peter Thiel | 100. Zoltan Istvan |

Top-100 Longevity Leaders Distribution by Region



This diagram illustrates the locations of the top Longevity leaders across the globe. The USA retains the highest concentration of top experts. Britain and Europe, however, has the potential to substantially alter these statistics in the coming years due to relevant sectors taking root there, as described in our regional reports. Most of the top global leaders in Longevity reside in American coastal cities and London.

100 Longevity Leaders Distribution by Category



The Longevity Industry has until recently been viewed simply as synonymous with the advancement of biotechnology. In recent years however the industry has reached a point where further advancement is only possible through a mixture of biomedical research, public persuasion, political initiative, and increased capital.

Top 100 Longevity Leaders

Distribution by Sector Influence (Public vs. Private)



Private Sector

89

Public Sector

11

Although still largely a private-sector pursuit,
the necessity of political initiative in moving the industry forward
is making itself apparent for the first time.

Top-100 Longevity Leaders

Distribution by Primary Activity



Entrepreneurship

38%



Research & Academia

40%



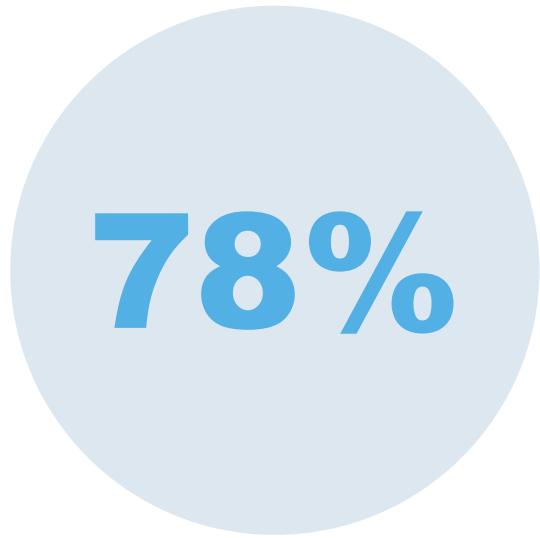
Politics and Media

22%



Top 100 Longevity Leaders

Distribution by the Impact on the Industry



Science and Tech Leadership
(Entrepreneurs,
Investors / Donors, and
Research / Academia)



Politics and
Government



Media and
Publicity

The above numbers describe the type of impact that top Longevity leaders are making on the industry. The majority of effort is spent on science and tech leadership, followed by acts of political and media persuasion.

Investors and Donors

The Longevity Industry, being an industry dealing in extremely innovative concepts, has, especially in its earliest years, relied on a number of foundations and funds in order to lead this technological revolution.

This, in turn, relies on the vision, confidence, and expertise of a tiny handful of donors and investors who have catalysed the industry.

Participants in this category have normally donated openly and explicitly in major novel interventions in aging, including sectors of the Longevity Industry falling outside the realm of biomedicine.

14 Investors and Donors



Bryan Johnson



Dmitry Kaminskiy



Finian Tan



James Peyer



Jeff Bezos



Jim Mellon



Joshua McClure



Laura Deming



Peter Diamandis



Peter Thiel



Sam Altman



Sergey Young



Stephen Bloch



Vitalik Buterin

100 Longevity Leaders Investors and Donors

NAME	COMPANY	POSITION	COUNTRY	CITY
Bryan Johnson	Kernel, OS Fund and Braintree	Founder	USA	Los Angeles, CA
Dmitry Kaminskiy	Deep Knowledge Ventures	Co-Founder and Managing Partner	UK	London
Finian Tan	Vickers Venture Partners	Founder and Chairman	Singapore	Singapore
James Peyer	Apollo Ventures	Managing Partner	Germany	Hamburg
Jeff Bezos	Amazon	Founder, Chairman, CEO and President	USA	Medina, WA
Jim Mellon	Burnbrae	Chairman	UK	London
Joshua McClure	Maxwell BioSciences	CEO	USA	Austin, TX

100 Longevity Leaders Investors and Donors

NAME	COMPANY	POSITION	COUNTRY	CITY
Laura Deming	The Longevity Fund	Partner	USA	San Francisco, CA
Peter Diamandis	Human Longevity, Inc.; X PRIZE; Planetary Resources, Inc.(PRI); Singularity University; Space Adventures	Chairman / CEO	USA	Los Angeles, CA
Peter Thiel	Founders Fund/Thiel Capital	Partner/Founder	USA	Los Angeles, CA
Sam Altman	Y Combinator; OpenAI	President; Co-Chairman	USA	San Francisco, CA
Sergey Young	Longevity Vision Fund	Founder	USA	Delaware, DE
Stephen Bloch	Innovation Warehouse	Investment, Innovation & Disruption	UK	London
Vitalik Buterin	Ethereum	Co-founder	Canada	Toronto

Entrepreneurs

The Longevity Industry is not a natural continuation of the technologies that it comprises. It is the result of a small number of visionaries who invested wisely.

Participants in this category typically have either founder status or C-level leadership roles in highly impactful companies within the Longevity Industry.

24 Entrepreneurs



Alex
Zhavoronkov



Art Levinson



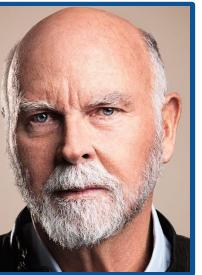
Bill Andrews



Bill Maris



Brian Kennedy



Craig Venter



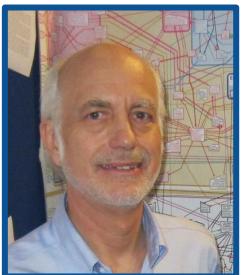
David Botstein



David Gobel



George Church



John D. Furber



Katy Fike



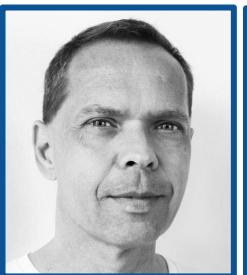
Keith Leonard



Kevin Perrott



Michael Fossel



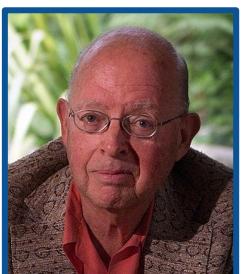
Michael Greve



Michael West



Mike Kope



Paul F Glenn



Ray Kurzweil



Reason



Robert Hariri



Stephen
Johnston



Suzanne Wait



Tina Woods

100 Longevity Leaders **Entrepreneurs**

NAME	COMPANY	POSITION	COUNTRY	CITY
Alex Zhavoronkov	Insilico Medicine	Founder and CEO	China	Hong Kong
Art Levinson	Calico	CEO	USA	San Francisco, CA
Bill Andrews	Sierra Sciences	President and CEO	USA	Reno, NV
Bill Maris	Calico	Founder	USA	San Francisco, CA
Brian Kennedy	Centre for Healthy Ageing at the National University Health System (NUHS)	Director	Singapore	Singapore
Craig Venter	J. Craig Venter Institute	President, Chairman	USA	La Jolla, CA
David Botstein	Calico Life Sciences	Chief Scientific Officer	USA	San Francisco, CA
David Gobel	Methuselah Foundation	Co-founder and CEO	USA	Springfield, VA
George Church	Harvard Medical School	Professor	USA	Boston, MA
John D. Furber	Legendary Pharmaceuticals	CEO	USA	Gainesville, FL
Katy Fike	Generator Ventures, Aging2.0	Partner, Generator Ventures. Co-Founder, Aging2.0. PhD Gerontologist	USA	San Francisco, CA
Keith Leonard	UNITY Biotechnology	Chief Executive Officer	USA	Los Angeles, CA

100 Longevity Leaders **Entrepreneurs**

NAME	COMPANY	POSITION	COUNTRY	CITY
Kevin Perrott	OpenOme	CEO	USA	San Francisco, CA
Michael Fossel	Telocyte	President	USA	Grand Rapids, MI
Michael Greve	Forever Healthy; Kizoo Technology Ventures	Founder & CEO	Germany	Berlin
Michael West	AgeX Therapeutics & BioTime (NYSE MKT:BTX)	CEO & Co-CEO	USA	San Francisco, CA
Mike Kope	SENS Research Foundation	CEO and Co-Founder	USA	Mountain View, CA
Paul F. Glenn	Paul F. Glenn Center for the Biology of Aging	Founder	USA	Boston, MA
Ray Kurzweil	Kurzweil Technologies	CEO, Owner	USA	Boston, MA
Reason	Repair Biotechnologies	Founder	USA	Lafayette, NY
Robert Hariri	Human Longevity	Co-founder & Vice Chairman	USA	Warren, MI
Stephen Johnston	Aging 2.0	Co-founder	USA	San Francisco, CA
Suzanne Wait	Health Policy Partnership	Managing Director	UK	London
Tina Woods	Collider Health	Founder & CEO	UK	London

Media and Publicity Influencers

The Longevity Industry often came to the attention of investors and young entrepreneurs via the media and internet, which have covered these emerging technologies and trends first with great sensationalism and later with increasing seriousness.

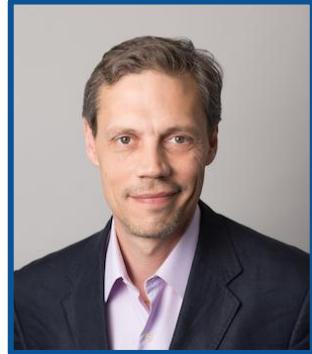
Media and publicity are ultimately necessary factors in creating democratic demand for government involvement in these technologies, which will prove necessary if the right synergies are to be formed.

Participants in this category have normally demonstrated significant thought leadership through books, articles, or major statements on influential platforms.

11 Media and Publicity Influencers



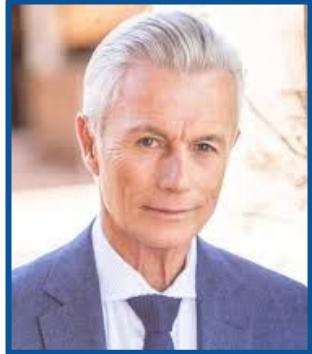
Andrew Scott



Antonio Regalado



Bernadeane Brown



James Strole



Keith Comito



Lindsay Cook



Michael Rae



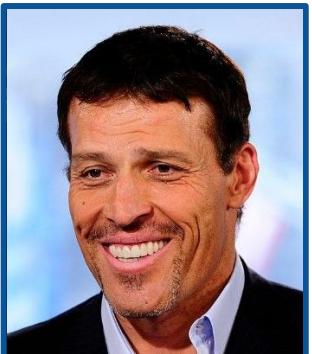
Paul Irving



Robin
Farmanfarmaian



Steve Hill



Tony Robbins

100 Longevity Leaders Media and Publicity Influencers

Name	Company	Position	Country	City
Andrew Scott	London Business School	Professor of Economics	UK	London
Antonio Regalado	MIT Technology Review	Senior Editor for Biomedicine	USA	Boston, MA
Bernadeane Brown	People Unlimited Inc.	Co-Owner and Co-Founder	USA	Scottsdale, AZ
James Strole	People Unlimited Inc.	Co-Director and Co-Founder	USA	Scottsdale, AZ
Keith Comito	Life Extension Advocacy Foundation	President	USA	New York, NY
Lindsay Cook	Financial times	Co-Founder	UK	Redhill
Michael Rae	SENS Research Foundation	Research assistant	USA	Mountain View, CA
Paul Irving	Milken Institute Center for the Future of Aging	Chairman	USA	Santa Monica, CA
Robin Farmanfarmaian	Actavalon	Vice President, Business Development	USA	Palo Alto, CA
Steve Hill	SENS Research Foundation/Life Extension Advocacy Foundation	Social Media Manager and Science Journalist	UK	Luton
Tony Robbins	Tony Robbins Holdings	Chairman	USA	San Diego, CA

Research and Academia

Academics and researchers do the central work of the Longevity Industry, the end product of which is scientific and technological knowledge.

However, in the pursuit of this knowledge, whole new categories of research have been defined, and research has gone in entirely new directions.

For example, within the lifetimes of all the researchers and academicians listed here, geroscience R&D, and the application of advanced biomedicine to aging, was not a mainstream concept. Now it is.

Participants in the Research and Academia category have conducted academic or scientific research, including theoretical research advancing a relevant sector of the industry.

They all have either a high number of citations to their name or at least one tangible scientific breakthrough.

40 Research and Academia



Alan Russell



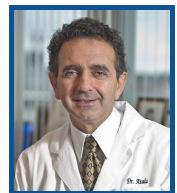
Alexey
Moskalev



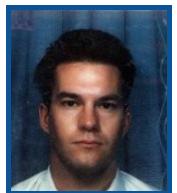
Ana Maria
Cuervo



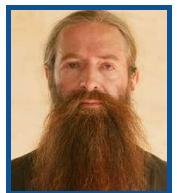
Andrew Dillin



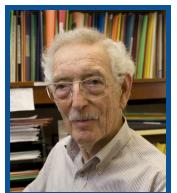
Anthony
Atala



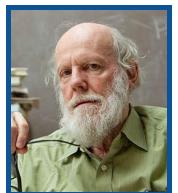
Antonei B.
Csoka



Aubrey de
Grey



Bruce Ames



Caleb Finch



David Sinclair



Elizabeth
Blackburn



Eric Topol



Eric Verdin



George
Martin



Gordon
Lithgow



Gregory Fahy



Ilia Stambler



Irina Conboy



Jan van
Deursen



Janet M Lord



Jerry Shay



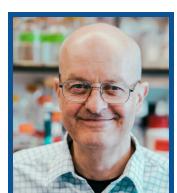
João Pedro de
Magalhães



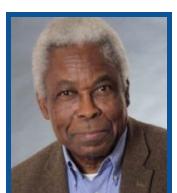
Judith
Campisi



Julie
Andersen



Leonard
Guarente



Lloyd
Demetrius



Maria Blasco



Michael Rose



Ned David



Nir Barzilai



Rafael de
Cabo



Richard
Barker



Richard
Faragher



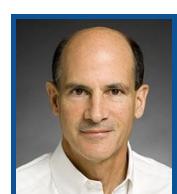
Robert Young



S. Jay
Olshansky



Steven
Horvath



Thomas
Rando



Tom
Kirkwood



Alexander
Koliada



Vadim
Gladyshev

100 Longevity Leaders Research and Academia

NAME	COMPANY	POSITION	H-INDEX	NUMBER OF PUBLICATIONS	COUNTRY	CITY
Alan Russell	Carnegie Mellon University	Highmark Distinguished Professor	49	165	USA	Pittsburgh, PA
Alexey Moskalev	Syktyvkar State University	Professor	22	124	Russia	Syktyvkar
Ana Maria Cuervo	Einstein Institute for Aging Research	Co-director	90	230	USA	Bronx, NY
Andrew Dillin	University of California, Berkeley	Professor of genetics, genomics, and development	49	97	USA	Oakland, CA
Anthony Atala	Wake Forest Institute	Director	99	901	USA	Winston-Salem, NC
Antonei B. Csoka	Howard University	Associate Professor	20	45	USA	Washington, DC
Aubrey de Grey	SENS Research Foundation	Chief Science Officer	25	242	USA	San Francisco, CA
Bruce Ames	Children's Hospital Oakland Research Institute	Senior Scientist	134	460	USA	Oakland, CA
Caleb Finch	University of Southern California's Leonard Davis School of Gerontology	Professor	83	428	USA	Los Angeles, CA
David Sinclair	Harvard University	Harvard professor	71	181	USA	Boston, MA

100 Longevity Leaders Research and Academia

Name	Company	Position	H-Index	Number of Publications	Country	City
Elizabeth Blackburn	University of California San Francisco (UCSF)	Professor of Biology and Physiology	92	315	USA	San Francisco, CA
Eric Topol	Scripps Research Translational Institute	Director & Founder	176	1353	USA	La Jolla, CA
Eric Verdin	Buck Institute for Research on Aging	President and CEO	95	230	USA	San Francisco, CA
George Martin	University of Washington	Professor Of Pathology Emeritus	65	353	USA	Seattle, WA
Gordon Lithgow	Buck Institute for Research on Aging	Professor	42	92	USA	San Francisco, CA
Gregory Fahy	Twenty-First Century Medicine, Intervene Biomedical	Vice President and Chief Scientific Officer; Owner	29	66	USA	Los Angeles, CA
Ilia Stambler	Vetek (Seniority) – the Movement for Longevity and Quality of Life	Chief Science Officer	6	20	Israel	Rishon LeZion
Irina Conboy	Berkeley Research, University of California	Professor	26	59	USA	Berkeley, CA
Jan van Deursen	Unity Biotechnology	Founder	70	199	USA	Brisbane, CA
Janet M Lord	Institute of Inflammation and Ageing	Director	49	223	UK	Birmingham

100 Longevity Leaders Research and Academia

Name	Company	Position	H-Index	Number of Publications	Country	City
Jerry Shay	Department of Cell Biology, University of Texas Southwestern Medical Center	Vice Chairman	118	550	USA	Dallas, TX
João Pedro de Magalhães	Institute of Ageing & Chronic Disease	Senior Lecturer	31	99	UK	Liverpool
Judith Campisi	Buck Institute for Age Research	Professor	94	272	USA	San Francisco, CA
Julie Andersen	Buck Institute for Age Research	Professor	43	97	USA	San Francisco, CA
Leonard Guarente	MIT	Novartis Professor	121	302	USA	Boston, MA
Lloyd Demetrius	Max Planck Institute for Molecular Genetics	Mathematician and Theoretical Biologist	1	2	Germany	Berlin
Maria Blasco	Spanish National Cancer Research Centre (CNIO)	Director	31	84	Spain	Madrid
Michael Rose	10X Genomics	Senior Project Manager	46	167	USA	San Francisco, CA
Ned David	UNITY Biotechnology	Co-Founder and President	4	4	USA	Los Angeles, CA
Nir Barzilai	Institute for Aging Research at the Albert Einstein College of Medicine	Director	68	244	USA	New York, NY

100 Longevity Leaders Research and Academia

Name	Company	Position	H-Index	Number of Publications	Country	City
Rafael de Cabo	Translational Gerontology Branch	Senior Investigator	74	288	USA	Baltimore, MD
Richard Barker	New Medicine Partners	Founding Director	9	46	UK	Oxford
Richard Faragher	University of Brighton	Professor of Biogerontology	25	79	UK	Brighton
Robert Young	Gerontology Research Group	Co-Director	7	24	USA	Los Angeles, CA
S. Jay Olshansky	Lapetus Solutions Inc	Co-Founder and Chief Scientist	30	110	USA	Buffalo Grove, IL
Steven Horvath	UCLA School of Public Health	Professor of Human Genetics & Biostatistics	40	429	USA	Los Angeles, CA
Thomas Rando	The Glenn Center for the Biology of Aging, Stanford University School of Medicine; Stanford Center on Longevity	Director / Deputy-Director	64	171	USA	San Francisco, CA
Tom Kirkwood	Newcastle University	Associate Dean for Ageing	65	320	UK	Newcastle
Alexander Koliada	Gerontology Institute of Ukraine	Director HDLab Project, Researcher	7	28	Ukraine	Kyiv
Vadim Gladyshev	Harvard Medical School, Brigham And Women's Hospital	Professor, Director of Redox Medicine	79	388	USA	Boston, MA

Politics, Policy and Governance

We have often stated in this report series that political engagement is a necessary step in creating the synergies that will eventually define the Longevity Industry.

Participants in this category have been involved with either governance, lawmaking, or lobbying.

This might include government ministers, lords, senators, MPs, Congressmen, activists, campaigners, policy entrepreneurs or advisors or members of All-Party Parliamentary Groups.

11 Politics, Policy and Governance



Edwina Rogers



Eric Kihlstrom



Geoffrey
Filkin



George MacGinnis



Camilla Cavendish



Damian Green



John Godfrey



Matt Hancock



Prince Michael of
Liechtenstein



Sally Greengross



Zoltan Istvan

100 Longevity Leaders: Politics, Policy and Governance

Name	Company	Position	Country	City
Camilla Cavendish	All-Party Parliamentary Group for Longevity	Member	UK	London
Damian Green	All-Party Parliamentary Group for Longevity	Chair	UK	London
Edwina Rogers	The Global Healthspan Policy Institute	Founder and CEO	USA	Washington, DC
Eric Kihlstrom	Healthy Aging Industrial Challenge Strategy Fund, Aging Analytics Agency	Interim Director Director	UK	Lewes, East Sussex
Geoffrey Filkin	All-Party Parliamentary Group for Longevity	Chair of Advisory Board	UK	London
George MacGinnis	UK Research and Innovation	Healthy Ageing Challenge Director	UK	Oxford
John Godfrey	Legal & General	Corporate Affairs Director	UK	London
Matt Hancock	UK Government	Secretary of State for Health and Social Care	UK	London
Prince Michael of Liechtenstein	House of Liechtenstein	Prince	Liechtenstein	Vaduz
Sally Greengross	All-Party Parliamentary Group for Longevity	Treasurer	UK	London
Zoltan Istvan	ZI Ventures	Owner / President; Transhumanist Speaker and Writer	USA	Mill Valley, CA

Cross Sector Industry Involvement

Entrepreneurs / Media and Publicity



Alex
Zhavoronkov



Art Levinson



Aubrey de Grey



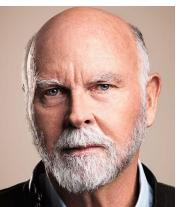
Bill Andrews



Bill Maris



Brian Kennedy



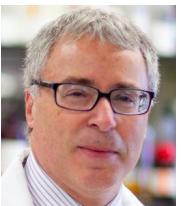
Craig Venter



George Church



Michael Rose



Nir Barzilai



Peter Diamandis



Ray Kurzweil

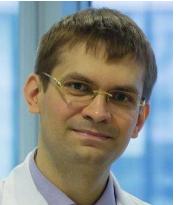


Reason



Tina Woods

Research and Academia / Media and Publicity



Alex
Zhavoronkov



Aubrey de Grey



Bill Andrews



George Church



Michael Rae



Michael Rose



Michael West



Nir Barzilai



S. Jay
Olshansky



Tom Kirkwood

Research and Academia / Politics, Policy and Governance



Ilia Stambler



Elizabeth
Blackburn



Richard Barker

This and the next slide show the Longevity Leaders who are active in other areas of industry activity besides their primary category of industry classification.

Cross Sector Industry Involvement

Investors and donors / Nonprofits and Think-Tanks



Dmitry Kaminskiy



Jeff Bezos



Jim Mellon



Peter Diamandis



Peter Thiel



Stephen Bloch

Entrepreneurs / Research and Academia



Alex Zhavoronkov



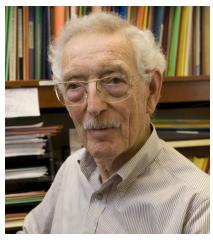
Aubrey de Grey



Bill Andrews



Brian Kennedy



Bruce Ames



David Botstein



George Church



Gregory Fahy



John D. Furber



Michael Fossel



Michael Rose

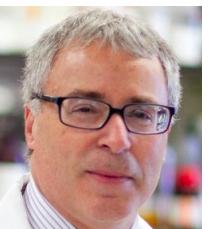


Michael West

Investors and Donors / Politics, Policy and Governance



Dmitry Kaminskiy



Nir Barzilai



Richard Barker

Key Report Observations

Where Do Longevity Leaders Work?

Perhaps unusually for an industry whose end product is biological health, a very large focus of activity within the Longevity Industry is publicity work. Publicity is the primary impact area of approximately 11 of the top 100 leaders according to our calculations. The impact of Longevity leaders in this category is usually calculated by:

- Number of influential books or articles.
- Number of major statements on influential platforms.

A large amount of publicity work is normal in an industry whose subject matter is easy to sensationalize, and indeed many of the people and concepts from the industry have become everyday terms and entered into our culture.

But following the culture is politics. Thus, the extensive media engagement occurring in the industry could equally well be a sign of an industry that has reached a state of maturity at which increased government involvement is now needed in order to move it forward, and this requires generating popular support. Indeed, this publicity has already begun to pay off, with **a number of notable British political figures represented within the top 100**. Among the 100, politics and media activity (22%) as a primary activity is beginning to catch up with research work (40%). It used to be said in this industry that 'the research was ahead of the funding'. Now, while the industry still remains underfunded, we can at least say that the politics is not far behind, a sure sign of funding to follow.

Careful readers will have noticed that approximately 1 in 3 of the leaders listed here belong to more than one occupational category\leadership type. This should not surprise us, as the entire industry is defined by synergies, and it is people switching field that drives innovation forward. For example, the birth of rejuvenation biotechnology in the early 2000s resulted from the application of engineering expertise to biotechnology and regenerative medicine, and this trend has continued ever since. But we can see now new developments such as a conspicuously large number of media-savvy academics and researchers, scientifically savvy investors, etc, etc, etc. A situation which was not always normal for the industry, or for any industry: a genuine preponderance of individuals with mixed involvement in one or more of politics, media, and academia, business or finance, all reaching out to each other.

Key Report Observations

Where Do Longevity Leaders Reside?

Leadership in this industry might appear at first to be relatively confined – to the American coastal regions, to the UK, and to central Europe, with 67 resident in the United States and, 21 are resident in the United Kingdom.

On the one hand, this should not surprise us, as these are where the established hubs of capital, talent and research facilities, which will make up the necessary raw material of this emerging industry, are normally to be found.

On the other hand, this distribution is much more diffuse than it would have been a decade or two ago, at a time when what is now the Longevity Industry would then have consisted of little more than Californian geroscience, with none of the synergies now emerging which are now drawing upon the human resources of Britain and Europe.

We expect this pattern of diffusion to continue apace as the industry globalizes, and as small Longevity-progressive countries take their place in the global industry. We can see, for example, that the industry is already creeping eastward, with instances of political leadership as far as Israel and even Kazakhstan. And as our previous reports indicate, Longevity-progressive countries will emerge at diverse spots around the globe.

What Kinds of Roles Do the Top 100 Have?

The top 100 Longevity leaders list includes experts who have made various types of contributions towards advancing longevity in politics, media and scientific research. 40% of all participants are primarily involved in research-related activities, while 38% are directly involved in entrepreneurship, while 22% are involved with political and media engagement.

Other points of note:

- 13 hold C-level leadership of a research institution
- 5 hold seats in the UK parliament
- 3 hold journalistic positions

Future Challenges and Opportunities Facing Longevity Leadership

The Longevity industry has come a long way in the past several years, and, as evidenced by high-caliber leadership in each of these categories, as it has been embraced by top media, by the scientific community, and by the business community.

Sometimes in the history of an industry, a point is reached where all further progress requires a paradigm shift, and a paradigm shift involves interdisciplinary cooperation, whether between the different sciences, between science and technology, or between totally different sectors such as science, media, politics, finance, and so on. In the Longevity industry, this interdisciplinary action must be directed toward achieving a paradigm shift away from single disease treatment and toward precision prevention.

We are, in our recent and upcoming regional reports, documenting the various ways this interdisciplinary activity is bearing fruit in the form of early strategic initiatives by the state, such as the UK's Healthy Aging Industrial Strategy Challenge fund, the similar language used by the US Academy of Sciences in its acknowledgement of healthy aging as a grand challenge, and BIRAX, the UK-Israel collaboration. We are also seeing additional political initiative in the form of groups such as the UK's All-Party Parliamentary Group on Longevity.

But these do not put a specific emphasis on necessary synergies between biotechnology AI and finance, nor do they define healthy Longevity as a valuable end product in itself worth striving for.

As we say, the industry appears to have reached a roadblock, which will be passed only if politics, science, and finance jointly recognise healthy Longevity as an incentive and pull together in the same direction. Longevity has already achieved mainstream recognition and growth in the areas of media, science, and industry. Government - and the development of tangible national development strategies that emphasize healthspan extension and the paradigm shift from treatment to prevention represents the next great frontier for the topic of Longevity. Biotechnology research is an established discipline. Progress in biotechnology already has the global talent, resources, and discipline it needs to continue as necessary. Therefore, all our remaining efforts and our care must go to ensuring that the diverse forms of leadership described in this document continue work in each other's favor, with healthy Longevity as a clearly defined end product.

Top-100 Longevity Leaders Profiles



Alan Russell

Highmark Distinguished Professor,
Carnegie Mellon University

Pittsburgh, PA, USA

Category: Research and Academia

H-index: 49

Number of publications: 165

Carnegie
Mellon
University

In 1987, Russell completed his Ph.D. in Biological Chemistry from the Imperial College of Science and Technology, University of London. Russell also served as a NATO Research Fellow in Chemistry at MIT (Massachusetts Institute of Technology) from 1987-1989. Professor Russell joined CMU as the Highmark Distinguished Career Professor in 2012 to launch and direct the Disruptive Health Technology Institute. He joined the Department of Chemical Engineering in 2017. Prior to coming to CMU Professor Russell was the Founding Director of the McGowan Institute for Regenerative Medicine and Chairman of the Department of Chemical Engineering at the University of Pittsburgh. Dr. Russell has founded three biotechnology companies and was also the Founding President of the Tissue Engineering and Regenerative Medicine International Society. Dr. Russell was the longest serving member of the Science Board to the Food and Drug Administration and Chaired the 10-year scientific review of the Center for Devices and Radiologic Health, publishing the key "Protecting the core of CDRH regulatory science in the face of financial and strategic threats" report. Dr. Russell has served many scientific roles for the Department of Defense, including working for the Defense Health Board and being the founding Co-Director of the Armed Forces Institute for Regenerative Medicine. For the last 25 years, the Russell laboratory has been discovering what can be achieved by exploiting the rich interface of chemistry, biology and materials. Dr. Russell's work has impacted fields as diverse as chemical and polymer synthesis to tissue engineering and homeland defense. Dr. Russell has pioneered how to make polymers from enzymes and how to incorporate enzymes into bulk polymers. In a series of discoveries Dr. Russell's laboratory has found how to meld the synthetic and biological worlds.



Alex Zhavoronkov

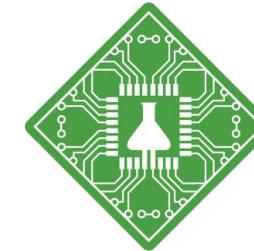
Founder & CEO, Insilico Medicine

Hong Kong, China

Category: Entrepreneurs

H-index: 31

Number of publications: 95



**Insilico
Medicine**
英科智能

Dr. Zhavoronkov is the CEO of Insilico Medicine, a Baltimore-based leader in the next-generation artificial intelligence and blockchain technologies for drug discovery, biomarker development, and aging research. At Insilico he pioneered the applications of generative adversarial networks and reinforcement learning techniques for generating the novel molecular structures with the desired properties. He set up the R&D centers in 6 countries including Korea, Russia, and Taiwan and launched multiple biomarker initiatives including Young.AI. Prior to founding Insilico Medicine, he worked in senior roles at ATI Technologies (acquired by AMD in 2006), NeuroG Neuroinformatics, the Biogerontology Research Foundation and YLabs.AI and established AgeNet.net competitions and diversity.AI initiative.

Since 2012 he published over 80 peer-reviewed research papers and books including "The Ageless Generation: How Biomedical Advances Will Transform the Global Economy". He is also the co-organizer of the Annual Aging Research for Drug Discovery Forum and the Artificial Intelligence and Blockchain for Healthcare Forum at EMBO/Basel Life, one of Europe's largest industry events in drug discovery.

Dr. Zhavoronkov holds two bachelor degrees from Queen's University, a master's in Biotechnology from Johns Hopkins University, and a PhD in Physics and Mathematics from Moscow State University.



Alexander Koliada

Director HDLab Project, researcher
in Gerontology Institute of Ukraine
Ukraine

Category: Research and Academia

H-index: 7

Number of publications: 28

Researcher of the laboratory of epigenetics of the Institute of Gerontology of the National Academy of Medical Sciences of Ukraine Alexander Kolyada - a graduate of the biological faculty of the Kiev National University T. Shevchenko. His laboratory was the first to establish the length of telomeres in the genes of Ukrainians, a universal marker of human biological age.



Alexey Moskalev

Professor, Syktyvkar State University



Syktyvkar, Russia

Category: Research and Academia

H-index: 22

Number of publications: 124

Alexey Moskalev (born 5 November 1976) is an Professor of Russian Academy of Sciences, Doctor of Biology, the Head of the Laboratory of Molecular Radiobiology and Gerontology in the Institute of Biology of Komi Scientific Centre of the Ural Branch of the Russian Academy of Sciences, the Head of the Department of Ecology of the Syktyvkar State University named after Pitirim Sorokin, the Head of the Laboratory of Genetics of Aging and Longevity in the Moscow Institute of Physics and Technology.

A. Moskalev graduated from the Syktyvkar State University. He studied at the Department of Human and Animal Physiology of the Chemical-Biological Faculty. In 1996, he started working in the Department of Radioecology, Institute of Biology of the Ural Branch of the Russian Academy of Sciences. At present, he is the Head of the Laboratory of Molecular Radiobiology and Gerontology in the Institute mentioned as well as laboratory of Genetics of aging and longevity at Moscow Institute of Physics and Technology.

His papers include: Pharmacological inhibition of NF- κ B prolongs lifespan of *Drosophila melanogaster*, Radiation-induced lifespan alteration of *Drosophila* lines with genotype differences, Gadd45 proteins: Relevance to aging, longevity, and age-related pathologies, Pharmacological Inhibition of Phosphoinositide 3 and TOR Kinases Improves Survival of *Drosophila melanogaster*, Chronic gamma-irradiation effect on *Drosophila melanogaster* lifespan in generations of wild-type isogenic and heterogenic strains, and The role of DNA damage and repair in aging through the prism of Koch-like criteria.



Ana Maria Cuervo

Co-director, Institute for Aging Research,
Albert Einstein College of Medicine

Bronx, NY, USA

Category: Research and Academia

H-index: 90

Number of publications: 230



Albert Einstein College of Medicine

Dr. Cuervo is co-director of the Einstein Institute for Aging Research, and a member of the Einstein Liver Research Center and Cancer Center. In 2001 she started her laboratory at Einstein, where she studies the role of protein-degradation in aging and age-related disorders, with emphasis in neurodegeneration and metabolic disorders.

Dr. Cuervo's group is interested in understanding how altered proteins can be eliminated from the cells and their components recycled. Her group has linked alterations in lysosomal protein degradation (autophagy) with different neurodegenerative diseases including Parkinson's, Alzheimer's and Huntington's disease. They have also proven that restoration of normal lysosomal function prevents accumulation of damaged proteins with age, demonstrating this way that removal of these toxic products is possible. Her lab has also pioneered studies demonstrating a tight link between autophagy and cellular metabolism. They described how autophagy coordinates glucose and lipid metabolism and how failure of different autophagic pathways with age contribute to important metabolic disorders such as diabetes or obesity.

Dr. Cuervo is considered a leader in the field of protein degradation in relation to biology of aging and has been invited to present her work in numerous national and international institutions, including name lectures as the Robert R. Konh Memorial Lecture, the NIH Director's, the Roy Walford, the Feodor Lynen, the Margaret Pittman, the IUBMB Award, the David H. Murdock, the Gerry Aurbach, the SEBBM L'Oreal-UNESCO for Women in Science, the C. Ronald Kahn Distinguished Lecture and the Harvey Society Lecture. She has organized and chaired international conferences on protein degradation and on aging, belongs to the editorial board of scientific journals in this topic, and is currently co-editor-in-chief of Aging Cell.



Andrew Dillin

Professor of genetics, genomics, and development, University of California, Berkeley

Oakland, CA, USA

Category: Research and Academia

H-index: 49

Number of publications: 97



Andrew George Dillin is a Howard Hughes Medical Investigator and the Thomas and Stacey Siebel Distinguished Chair in Stem Cell Research at the Department of Molecular and Cell Biology at Berkeley. His lab studies the loss of protein homeostasis in aging, particularly in *Caenorhabditis elegans*.

Dillin's work aims to shed light on the developmental processes of human neurodegenerative diseases, such as Alzheimer's, Huntington's, and Parkinson's diseases.

Dr. Dillin's laboratory works on the genetic and molecular mechanisms that regulate aging and aging-related disease. The Dillin lab is particularly interested in understanding why an organism begins to lose control over the quality and integrity of its proteins as it ages, and how the recognition of protein misfolding stress is communicated to distal tissues and organs. The lab utilizes emergent technologies to look at the manipulation of stress response pathways within a specific cell type or a single subcellular compartment within a specific cell type. In its research, the Dillin lab works with a variety of organisms, including mice and stem cells. However, the lab's historic roots are in working on the nematode *C. elegans*, a well-established model organism in aging studies.



Andrew Scott

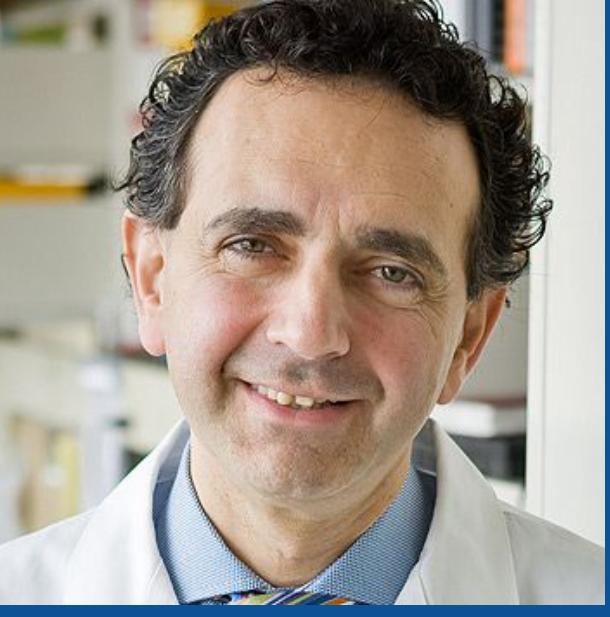
Professor of Economics, London Business School

London
Business
School

London, UK

Category: Media and Publicity Influencers

Andrew Scott was educated at Firs Farm Primary School and Haberdashers' Aske's, Elstree. He attended Trinity College, Oxford where he graduated with a First with Prizes in Politics, Philosophy and Economics in 1987. He received a M.Sc in Economics from the London School of Economics in 1990 and was elected to a Prize Fellowship to All Souls College, Oxford in 1990. He was elected in the same year as philosopher Robert Rowland Smith and historian Scott Mandelbrote. He received his D.Phil (Essays in Aggregate Consumption) from Oxford in 1994. He worked briefly as an economist for Credit Suisse First Boston before holding research positions at London Business School and the London School of Economics. He then took up a lectureship at Oxford University, a Visiting Assistant Professor at Harvard before joining London Business School where he is currently Professor of Economics having previously served as Deputy Dean. Alongside his academic career Scott has been a Non-Executive Director for the UK's Financial Services Authority and an advisor to the House of Commons, the Bank of England, and H.M.Treasury. He is currently on the advisory board of the UK's Office for Budget Responsibility and a member of the Cabinet Office Honours Committee (Science and Technology). Most of Scott's published academic work has focused on macroeconomic fluctuations – originally on business cycles (with a number of joint papers with Daron Acemoglu) then on monetary policy and most recently on fiscal policy and government debt management (with a number of joint papers with Albert Marcet). More recently his work has been on longevity and focusing on the positive economic, social and personal effects that arise from the fact that on average we are living longer and healthier for longer. This focus on the positive aspects of longevity is an offset to the focus on the negative aspects of an ageing society.



Anthony Atala

Director, Wake Forest Institute

Winston-Salem, NC, USA

Category: Research and Academia

H-index: 99

Number of publications: 901



Wake Forest®
School of Medicine
Institute for Regenerative Medicine

Anthony Atala, M.D., is the W.H. Boyce professor and director of the Wake Forest Institute for Regenerative Medicine, and chair of the Department of Urology at Wake Forest School of Medicine in North Carolina. Regenerative medicine is "a practice that aims to refurbish diseased or damaged tissue using the body's own healthy cells".

Dr. Atala is one of the most influential names in the field of regenerative medicine and biotechnology. His research focuses on growing human cells and tissues for use in transplants, and given the constant dire need for organ donors worldwide, his work is poised to improve—and save—the lives of millions. He and his team have already successfully engineered and transplanted bladders into living patients, and as he's told us himself, more types of tissue have been engineered and tested in models; hopefully, they will one day be usable in patients as well.

Dr. Atala's groundbreaking work has earned him countless awards, prizes, and nominations in well-known magazines, such as Scientific American, Time Magazine, the Huffington Post, and many others; he has also served on the boards and committees of several organizations, such as the National Institutes of Health, the National Cancer Institute, and SENS Research Foundation. In 2011, he was elected to the Institute of Medicine of the National Academy of Sciences. He was named by Scientific American as a Medical Treatments Leader of the Year for his contributions to the fields of cell, tissue, and organ regeneration. Dr. Atala's work was listed as one of Time Magazine's top ten medical breakthroughs of the year, and as Discover Magazine's top science story of the year in the field of medicine in 2007. He serves on the editorial board of the scientific journal Rejuvenation Research and on the national board of advisors for High Point University.



Antonei B. Csoka

Associate Professor, Howard University

Washington, DC., USA

Category: Research and Academia

H-index: 20

Number of publications: 45



Antonei Benjamin Csoka, Ph.D. is a biogerontologist at Howard University who works on the molecular biology of aging, regenerative medicine and epigenetics.

Dr. Csoka earned a bachelor's degrees at Newcastle University in Genetics. He has a master's in Molecular Pathology from University of Leicester and a PhD in Cellular and Molecular Biology from University of Debrecen.

He was a member of the consortium that identified the Lamin A gene as the cause of the accelerated aging disease Hutchinson–Gilford progeria syndrome and participated in the first National Institutes of Health - Progeria Research Foundation workshop. He also showed that Progeria is a true representation of aging with respect to cellular signaling pathways, and truly recapitulates the normal aging process at the cellular level. He currently researches the molecular etiology of aging at the level of signaling pathways.

Dr. Csoka is a prominent proponent of life extension, cryonics and transhumanism, identified as one of the top twenty-three socially connected professors on Twitter. He is a scientific advisor to the Alcor Life Extension Foundation, the UK Cryonics and Cryopreservation Research Network, and the Lifeboat Foundation, a fellow of the Global Healthspan Policy Institute, and was featured in the first Immortality Institute film, Exploring Life Extension (2005) produced by Bruce Klein.



Antonio Regalado

Senior Editor for Biomedicine, MIT Technology Review

Boston, MA, USA

Category: Media and Publicity Influencers

MIT
Technology
Review

Antonio is the senior editor for biomedicine for MIT Technology Review. He looks for stories about how technology is changing medicine and biomedical research.

Before joining MIT Technology Review in July 2011, he lived in São Paulo, Brazil, where he wrote about science, technology, and politics in Latin America for Science and other publications.

From 2000 to 2009, he was the science reporter at the Wall Street Journal and later a foreign correspondent.



Arthur Levinson

CEO, Calico (California Life Company)



San Francisco, CA, USA

Category: Entrepreneurs

Arthur Levinson served as chief executive officer of Genentech from July 1995 to April 2009. Levinson serves as the chairman of the board of Apple, and previously served as a director of Google from 2004 to 2009.

Levinson has authored or co-authored more than 80 scientific articles and has been named an inventor on 11 United States patents. He was inducted into the Biotech Hall of Fame at the 2003 Biotech Meeting of chief executive officers. BusinessWeek named Levinson one of the "Best Managers of the Year" in 2004 and 2005, and Institutional Investor named him "America's Best CEO" in the biotech category four years in a row (2004–2007). In 2006, Princeton University awarded Levinson the James Madison Medal for a distinguished career in scientific research and in biotechnology. In 2008, Levinson was elected as a Fellow to the American Academy of Arts & Sciences. In 2011 Levinson received the American Association for Cancer Research Margaret Foti Award for Leadership and Extraordinary Achievements in Cancer Research, and in 2012 he received the Cold Spring Harbor Laboratory Double Helix Medal. In 2014 he received the Alumnus Summa Laude Dignatus Award from the University of Washington, and was honored as a recipient of the National Medal of Technology and Innovation by President Obama.

Levinson received his Bachelor of Science degree from the University of Washington and earned a doctorate in biochemical sciences from Princeton University.



Aubrey de Grey

Chief Science Officer, SENS Research Foundation

San Francisco, CA, USA

Category: Research and Academia

H-index: 25

Number of publications: 242



Aubrey David Nicholas Jasper de Grey (born 20 April 1963) is an English author and biomedical gerontologist. He is the Chief Science Officer of the SENS Research Foundation and VP of New Technology Discovery at AgeX Therapeutics, Inc. He is editor-in-chief of the academic journal *Rejuvenation Research*, author of *The Mitochondrial Free Radical Theory of Aging* (1999) and co-author of *Ending Aging* (2007). He is known for his view that medical technology may enable human beings alive today not to die from age-related causes. He is also an amateur mathematician who has contributed to the study of the Hadwiger–Nelson problem.

His research focuses on whether regenerative medicine can prevent the aging process. He works on the development of what he calls "Strategies for Engineered Negligible Senescence" (SENS), a collection of proposed techniques to rejuvenate the human body and stop aging. To this end, he has identified seven types of molecular and cellular damage caused by essential metabolic processes. SENS is a proposed panel of therapies designed to repair this damage.

De Grey is an international adjunct professor of the Moscow Institute of Physics and Technology, a fellow of the Gerontological Society of America, the American Aging Association, and the Institute for Ethics and Emerging Technologies. He has been interviewed in recent years in a number of news sources, including CBS 60 Minutes, the BBC, The New York Times, Fortune Magazine, The Washington Post, TED, Popular Science, The Colbert Report, Time and the Skeptics' Guide to the Universe. He is also a member of Flooved advisory board.



Bernadeane Brown

Co-Owner & Co-Founder, People Unlimited Inc.

Scottsdale, AZ, USA

Category: Media and Publicity Influencers



Co-founder and Co-director of People Unlimited, Bernadeane has spoken and written on radical life extension and physical immortality for over four decades. Her speaking style is fiery and focused, challenging conventional limited thinking with visionary insight and common sense honesty.

Bernadeane is an expert in the habits and mindset of living an ageless lifestyle and draws on her own experience to motivate and enlighten others to break out of the box of ageism. A leading advocate for women and immortality, she has inspired thousands of women to take on greater authority and accountability in their lives, and to look beyond the limitations of traditional roles in death-oriented society in order to redefine themselves for an unlimited future. She's the co-author of Just Getting Started: Fifty Years of Living Forever, appearing on numerous TV shows both domestically and abroad, and has touched audiences in dozens of countries.



Bill Andrews

President and CEO, Sierra Sciences



Reno, NV, USA

Category: Entrepreneurs

H-index: 17

Number of publications: 22

Dr. Bill Andrews is the President and CEO of Sierra Sciences. As a scientist, athlete and executive, he continually pushes the envelope and challenges convention. He has been featured in Popular Science, The Today Show and numerous documentaries on the topic of life extension including, most recently, the movie The Immortalists in which he co-stars with Aubrey de Grey. In his 36 year biotech career, he has focused the last 24 years on finding ways to extend the human lifespan and healthspan through telomere maintenance.

As one of the principal discoverers of both the RNA and protein components of human telomerase, Dr. Andrews was awarded 2nd place as "National Inventor of the Year" in 1997. He earned his Ph.D. in Molecular and Population Genetics at the University of Georgia in 1981. He has served as Senior Scientist at Armos Corporation and Codon Corporation, Director of Molecular Biology at Berlex Biosciences and at Geron Corporation, and Director of Technology Development at EOS Biosciences.

He is also a named inventor on over 50 US issued patents on telomerase and author of numerous scientific research studies published in peer reviewed scientific journals.

Bill is also an avid ultra-marathon runner. At the age of 65, he regularly competes in 100k and 100+ mile runs often finishing at the top of his age group. These grueling races have taken him all over the world to race in some of the most extreme environments, from Death Valley to the Himalayas. His running is presently featured in the movie The High.



Bill Maris

Founder, Calico (California Life Company)

San Francisco, CA, USA

Category: Entrepreneurs



Bill Maris (born 1975, full name William J Maris) is an American entrepreneur and venture capitalist focused on technology and the life sciences. He is the founder and first CEO of Google Ventures (GV). He is the creator of Google's Calico project, a company focused on the genetic basis of aging. He is the founder of early web hosting pioneer Burlee.com, now part of Web.com, and the founder of Section 32, a California-based venture fund focused on frontier technology. In the mid 2000s, Maris partnered with entrepreneur David Green to transfer a novel hydrophobic acrylic lens to Aurolab to cure cataract blindness in the developing world, where it has been used in more than 30 million patients. Maris founded GV, formerly Google Ventures, in 2008 as the venture capital investment arm of Google Inc. He was responsible for the fund's strategy and management, and oversaw \$3.0 billion in investments in technology and the life sciences. Maris was one of the first to cite the troubles with Theranos, the troubled Silicon Valley blood testing company. Maris founded Calico, a multibillion-dollar company whose mission is to understand and influence the genetic basis of aging. Google funded the company after Maris pitched the board of directors. In a 2015 interview, Maris stated that health care breakthroughs can significantly improve the quality and duration of human lifespan across the globe, and that he is looking to invest in promising biotechnology companies. Maris was also the Vice President of Special Projects at Google, where he was heavily involved in Google X, Verily. Maris left Google Ventures on August 12, 2016, declaring "mission accomplished." In 2017 Maris founded Section 32, a California-based venture fund with approximately \$400 million under management.



Bryan Johnson

Founder, Kernel, OS Fund and Braintree



Los Angeles, CA, USA

Category: Investors and Donors

Bryan Johnson is founder of Kernel, OS Fund and Braintree. In 2016, he founded Kernel, investing \$100M to build advanced neural interfaces to treat disease and dysfunction, illuminate the mechanisms of intelligence, and extend cognition. Kernel is on a mission to dramatically increase our quality of life as healthy lifespans extend. He believes that the future of humanity will be defined by the combination of human and artificial intelligence (HI +AI).

In 2014, Bryan invested \$100M to start OS Fund which invests in entrepreneurs commercializing breakthrough discoveries in genomics, synthetic biology, artificial intelligence, precision automation, and new materials development.

In 2007, Bryan founded Braintree (acquired Venmo) which he sold to PayPal in 2013 for \$800M.

Bryan is an outdoor-adventure enthusiast, pilot, and author of a children's book, Code 7.



Brian Kennedy

Director, Centre for Healthy Ageing at the
National University Health System

Greenville, SC, USA

Category: Entrepreneurs

H-index: 61

Number of publications: 190



Brian K. Kennedy is the former President and CEO of the Buck Institute for Research on Aging in Novato, California. Having started in July, 2010, Kennedy was asked to resign in October 2016. Kennedy's resignation raised serious questions about Buck Leadership.

Kennedy has published over 80 manuscripts in prestigious journals including Cell, Nature, Science, Genes & Development, and PNAS. Potential public health benefits claimed in one study were questioned by the UK National Health Service in 2014.

Kennedy has served on the NIH Cellular Mechanisms of Aging and Development study section since 2006, acting as Committee Chair since 2010. He has also served on the grant review committee for American Federation for Aging Research Grants since 2006. He has acted as an Associate Editor for the Journal of Gerontology: Biological Science since 2006 and Cell Cycle since 2010. Currently, he is co-Editor-in Chief of Aging Cell. Kennedy has served as a consultant for Biotech and Pharmaceutical companies and is a co-Founder of the Nuvita Animal Health Corporation, a now defunct dog food company. He is also Chairman of Mount Tam Biotechnologies, which is traded as a penny stock. In August 2016, Mount Tam Biotechnologies merged with Tabacalera Ysidron, a defunct cigar company which had failed in its plan to distribute Nicaraguan cigars.



Bruce Ames

Senior scientist, Children's Hospital Oakland Research Institute

Oakland, CA, USA

Category: Research and Academia

H-index: 134

Number of publications: 460



Ames, raised in New York City, is a graduate of the Bronx High School of Science. His undergraduate studies were at Cornell University in Ithaca, New York, and his graduate studies were completed at the California Institute of Technology.

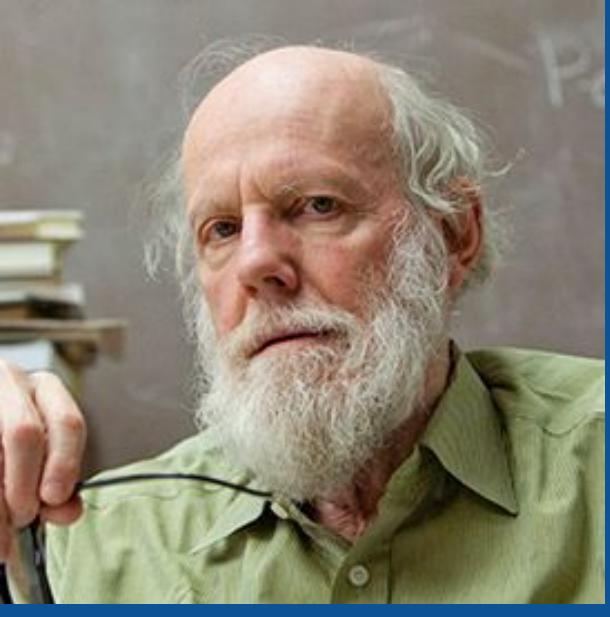
Ames was elected a Fellow of the American Academy of Arts and Sciences in 1970.

He is a recipient of the Bolton S. Corson Medal in 1980, Tyler Prize for Environmental Achievement in 1985, the Japan Prize in 1997, the National Medal of Science in 1998 and the Thomas Hunt Morgan Medal in 2004, among many others.

His research focuses on cancer and aging and he has authored over 550 scientific publications. He is among the few hundred most-cited scientists in all fields.

Ames' current research includes identifying agents that delay the mitochondrial decay of aging, understanding the role of mitochondrial decay in aging, particularly in the brain, optimizing micronutrient intakes in the population to prevent disease, malnutrition, and obesity. He is also interested in mutagens as they relate to cancer prevention and aging.

Dr. Ames received more than \$650,000 in support from the National Foundation for Cancer Research between 1998 and 2007.



Caleb Finch

Professor, University of Southern California's
Leonard Davis School of Gerontology

Los Angeles, CA, USA

Category: Research and Academia

H-index: 83

Number of publications: 428

USC Leonard Davis
School of Gerontology

Caleb Finch, PhD, researches the basic mechanisms in human aging with a focus on inflammation. He has received most of the major awards in biomedical gerontology, including the Robert W. Kleemeier Award of the Gerontological Society of America in 1985, the Sandoz Premier Prize by the International Geriatric Association in 1995, and the Irving Wright Award of AFAR and the Research Award of AGE in 1999. He was the founder of the NIA-funded Alzheimer Disease Research Center in 1984 and currently serves as co-Director. Finch became a University Distinguished Professor in 1989, an honor held by sixteen other professors at USC who contribute to multiple fields. He is a member of five editorial boards and has written four books and 475 articles. A new research area is the effect of air pollution on brain development and aging, which he is developing through a USC-wide network (AirPollBrain website).

His area of research includes:

Basic mechanisms in the human biology of aging, with focus on inflammation and nutritional influences;

Air pollution influences on aging;

Evolution of the human lifespan and diseases of aging, especially Alzheimer disease.



Camilla Cavendish

Member, All-Party Parliamentary Group for Longevity

London, UK

Category: Politics, Policy and Governance



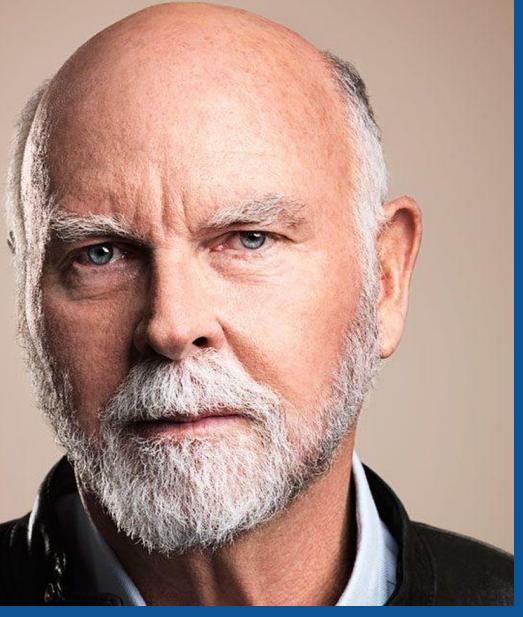
Hilary Camilla Cavendish, Baroness Cavendish of Little Venice (born 20 August 1968) is a British journalist and former Director of Policy for Prime Minister David Cameron. Cavendish became a Conservative Member of the House of Lords in Cameron's resignation honours, but resigned the party Whip in December 2016 to sit as a non-affiliated peer. From 2002 until 2012 she worked at The Times where she was Associate Editor, columnist and in 2010 Chief Leader Writer.

She then moved to The Sunday Times from 2012 to May 2015. She has worked as a McKinsey management consultant, an aid worker[citation needed], and as an aide to the CEO of Pearson plc.

She helped to found the lobby group London First, and was the first CEO of the not-for-profit trust South Bank Employers' Group, which masterminded the regeneration of the South Bank of the Thames in the late 1990s.

From May 2015 to July 2016, Cavendish was head of the prime minister's policy unit at No10 Downing Street in succession to Jo Johnson. Amongst initiatives, Cavendish is credited with persuading the Prime Minister and his Chancellor about the benefits of a sugar tax; she said that the "link between sugary drinks and obesity are clear and stark". The Soft Drinks Industry Levy came into force in April 2018.

HarperCollins published Cavendish's first book Extra Time in May 2019.



Craig Venter

President/Chairman, J. Craig Venter Institute

J. Craig Venter®

I N S T I T U T E

La Jolla, CA, USA

Category: Entrepreneurs

J. Craig Venter, PhD, is regarded as one of the leading scientists of the 21st century for his numerous invaluable contributions to genomic research. Dr. Venter is Founder, Chairman, and CEO of the J. Craig Venter Institute (JCVI), a not-for-profit, research organization with approximately 200 scientists and staff dedicated to human, microbial, plant, synthetic and environmental genomic research, and the exploration of social and ethical issues in genomics.

Dr. Venter also is a co-founder of Synthetic Genomics, Inc. (SGI) and Human Longevity, Inc. (HLI). SGI is a privately held company developing products and solutions including sustainable bio-fuels, vaccines, biotherapeutics and transplantable organs. HLI is a genomic-based, health intelligence company empowering proactive healthcare.

Dr. Venter is one of the most frequently cited scientists, and the author of more than 280 research articles. He is also the recipient of numerous honorary degrees, public honors, and scientific awards, including the 2008 United States National Medal of Science, the 2002 Gairdner Foundation International Award, the 2001 Paul Ehrlich and Ludwig Darmstaedter Prize and the King Faisal International Award for Science. Dr. Venter is a member of numerous prestigious scientific organizations including the National Academy of Sciences, the American Academy of Arts and Sciences, and the American Society for Microbiology.



Damian Green

Chair, All-Party Parliamentary Group for Longevity

London, UK

Category: Politics, Policy and Governance



Damian Howard Green (born 17 January 1956) is a British politician who has been the Conservative Member of Parliament for Ashford since 1997 and was the First Secretary of State and Minister for the Cabinet Office from 11 June 2017 to 20 December 2017. Green was born in Barry, Vale of Glamorgan, South Wales and studied PPE at Balliol College, Oxford. Before entering politics, Green worked as a journalist for the BBC, Channel 4 and The Times.

Green entered Parliament in the 1997 election by winning the seat of Ashford in Kent. He served in several shadow ministerial positions, including Transport Secretary and Immigration Minister. Green came to national prominence in November 2008 after being arrested and having his parliamentary office raided by police, although no case was brought.

He was the Minister of State for Police and Criminal Justice until 14 July 2014. He was appointed as Secretary of State for Work and Pensions by Prime Minister Theresa May in July 2016. Following the June 2017 general election, he was appointed First Secretary of State and Minister for the Cabinet Office.



David Botstein

Chief Scientific Officer, Calico Life Sciences

San Francisco, CA, USA

Category: Entrepreneurs

H-index: 141

Number of publications: 441



David came to Calico from Princeton University, where he was director of the Lewis-Sigler Institute from 2003-2013, and where he remains the Anthony B. Evnin Professor of Genomics. David was educated at Harvard (A.B.) and the University of Michigan (Ph.D.). He taught at MIT (1967-1987); became vice president at Genentech (1987-1990), and then chairman of genetics at Stanford (1990-2003). He was elected to the National Academy of Sciences in 1981 and the Institute of Medicine in 1993. Among his awards are the Eli Lilly Award (1978), the Genetics Society Medal (1988), the American Society for Human Genetics Allen Award (1989), the Rosenstiel Award, 1992, the Gruber Prize in Genetics (2003), the Albany Medical Center Prize (2010), the Dan David Prize (2012). Botstein contributed to the discovery of transposons in bacteria and an understanding of their physical and genetic properties. He devised genetic methods to study the eukaryotic cytoskeleton in yeast (*Saccharomyces cerevisiae*), notably general ways of detecting gene interactions. In 1980 he made theoretical contributions to human genetics by suggesting, with collaborators, a way to map human disease genes with DNA polymorphisms called restriction fragment length polymorphisms (RFLPs). This became a cornerstone of the new science of genomics. He later founded the *Saccharomyces* Genome Database (with J. Michael Cherry) and applied DNA microarray technology (with Patrick O. Brown) to study genome-wide gene expression, notably defining thereby clinically significant subtypes of human tumors. Most recently, he has been devising and using genome-scale methods for studying system-level regulation of gene expression and gene interactions. At Princeton, Botstein established a new introductory science curriculum that combines biology, physics, chemistry, and computer science.



David Gobel

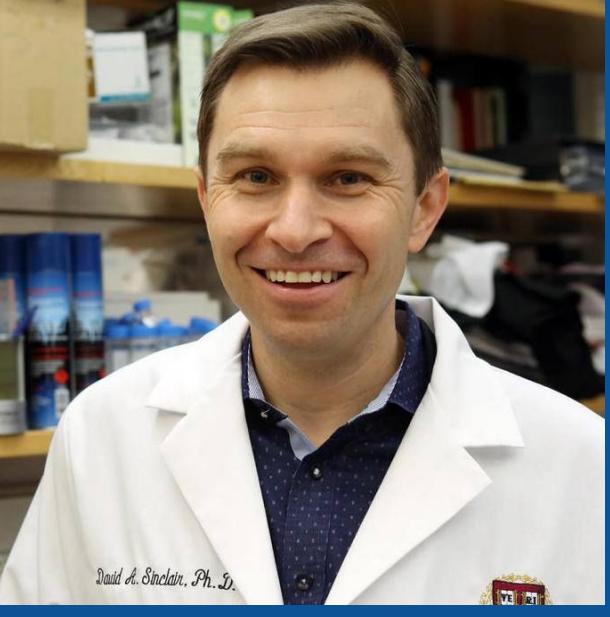
Co-founder and CEO, Methuselah Foundation



Springfield, VA, USA

Category: Entrepreneurs

David Gobel, one of the pillars of our longevity science and advocacy community, co-founded the Methuselah Foundation with Aubrey de Grey way back when, and continues to run that organization today. Over the years he has supervised a diverse set of grants, projects, and successful investments in tissue engineering and aging research, including the first SENS rejuvenation research programs, prior to the launch of the SENS Research Foundation. With the recent influx of capital to new companies seeking to produce therapies that target mechanisms of aging, investment at the Methuselah Foundation has expanded to become the Methuselah Fund, a hybrid for-profit/non-profit vehicle that will continue the work of accelerating progress towards meaningful rejuvenation therapies.



David Sinclair

Professor, Harvard University



HARVARD
UNIVERSITY

Boston, MA, USA

Category: Research and Academia

H-index: 71

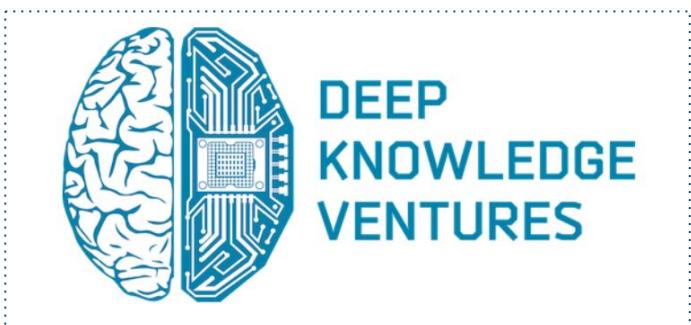
Number of publications: 181

David A. Sinclair, Ph.D., A.O. is a Professor in the Department of Genetics and co-Director of the Paul F. Glenn Center for the Biology of Aging at Harvard Medical School. He is best known for his work on understanding why we age and how to slow its effects. He obtained his Ph.D. in Molecular Genetics at the University of New South Wales, Sydney in 1995. He worked as a postdoctoral researcher at M.I.T. with Dr. Leonard Guarente where he co discovered a cause of aging for yeast as well as the role of Sir2 in epigenetic changes driven by genome instability. In 1999 he was recruited to Harvard Medical School where he has been teaching aging biology and translational medicine for aging for the past 16 years. His research has been primarily focused on the sirtuins, protein-modifying enzymes that respond to changing NAD⁺ levels and to caloric restriction (CR) with associated interests in chromatin, energy metabolism, mitochondria, learning and memory, neurodegeneration, and cancer. The Sinclair lab was the first one to identify a role for NAD⁺ biosynthesis in regulation of lifespan and first showed that sirtuins are involved in CR in mammals. They first identified small molecules that activate SIRT1 such as resveratrol and studied how they improve metabolic function using a combination of genetic, enzymological, biophysical and pharmacological approaches. They recently showed that natural and synthetic activators require SIRT1 to mediate the in vivo effects in muscle and identified a structured activation domain. Dr. Sinclair is co-founder of several biotechnology companies (Sirtris, Ovascience, Genocea, Cohbar, MetroBiotech, ArcBio, Liberty Biosecurity) and is on the boards of several others. He is also co-founder and co-chief editor of the journal Aging. His work is featured in five books, two documentary movies, 60 Minutes, Morgan Freeman's "Through the Wormhole" and other media.



Dmitry Kaminskiy

Co-Founder and Managing Partner, Deep Knowledge Ventures



London, UK

Category: Investors and Donors

Dmitry Kaminskiy is Managing Partner of Deep Knowledge Ventures and Founder of Longevity.Capital. An innovative entrepreneur and investor active in the DeepTech and is a frequent speaker on the topics of AI and Longevity at conferences organized in London by The Economist "Aging Societies and The Business of Longevity", Financial Times "Global Pharmaceutical and Biotechnology Conference", at the "Precision Medicine World Conference" in Silicon Valley as well as several others at Oxford and Cambridge Universities. He is actively involved in the work of the All-Party Parliamentary Group (APPG) for Longevity in the UK Parliament, now serving as co-director of the APPG secretariat, overseeing the APPG's international Longevity cooperation development division and is supervising all of the APPG's activities related to the concept of establishing Centres of Artificial intelligence for Preventive Medicine and Longevity in the UK.



Edwina Rogers

Founder & CEO, The Global Healthspan Policy Institute

Washington, DC, USA

Category: Politics, Policy and Governance

**GLOBAL HEALTHSPAN
POLICY INSTITUTE**

Edwina Rogers (born May 27, 1964) is an American lobbyist and former White House staff member. She is the founder and CEO of the Global Healthspan Policy Institute, the founding Executive Director and current President of the Secular Policy Institute, the CEO of the Center for Prison Reform, and a partner at the law firm of Johnson, Rogers and Clifton. After graduation from law school, Rogers worked on international trade for President George H. W. Bush at the Department of Commerce from 1989 to 1991. She practiced law in the Washington office of Balch and Bingham from 1991 until 1994, then served as General Counsel of the National Republican Senatorial Committee during the Republican take-over of the Senate in 1994. She worked for Senator Trent Lott while he was the Senate Majority Leader in 1999.

She was an Economic Advisor for President George W. Bush at the White House during 2001 and 2002 at the National Economic Council, focusing on health and social security policy. Rogers handled health policy for Senator Jeff Sessions in 2003 and 2004 before serving as Vice President of the Health Policy for the ERISA (Employee Retirement Income Security Act of 1974) Industry Committee (ERIC) in Washington, DC from May 2004 until January 2009. ERIC advocates the employee benefits and compensation interests of America's major employers.

She worked with Senator Paul Coverdell to establish the Fair Government Foundation, a non-profit, non-partisan organization established to research and educate the public on First Amendment rights, campaign finance and political action committees, lobbying, government ethics and election law fairness issues.



Elizabeth Blackburn

Professor of Biology and Physiology, University of California San Francisco (UCSF)

San Francisco, CA, USA

Category: Research and Academia

H-index: 92

Number of publications: 315



Dr. Elizabeth H. Blackburn, Morris Herzstein Professor of Biology and Physiology in the Department of Biochemistry and Biophysics at the University of California, San Francisco, is a leader in the area of telomere and telomerase research. She discovered the molecular nature of telomeres - the ends of eukaryotic chromosomes that serve as protective caps essential for preserving the genetic information - and the ribonucleoprotein enzyme, telomerase. Blackburn and her research team at the University of California, San Francisco are working with various cells including human cells, with the goal of understanding telomerase and telomere biology.

Blackburn earned her B.Sc. (1970) and M.Sc. (1972) degrees from the University of Melbourne in Australia, and her Ph.D. (1975) from the University of Cambridge in England. She did her postdoctoral work in Molecular and Cellular Biology from 1975 to 1977 at Yale. Throughout her career, Blackburn has been honored by her peers as the recipient of many prestigious awards. She was elected President of the American Society for Cell Biology for the year 1998. Blackburn is an elected Fellow of the American Academy of Arts and Sciences (1991), the Royal Society of London (1992), the American Academy of Microbiology (1993), and the American Association for the Advancement of Science (2000).

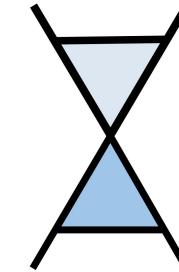
She was elected Foreign Associate of the National Academy of Sciences in 1993, and was elected as a Member of the Institute of Medicine in 2000. She was awarded the Albert Lasker Medical Research Award in Basic Medical Research (2006). In 2007 she was named one of TIME Magazine's 100 Most influential People and she is the 2008 North American Laureate for L'Oreal-UNESCO For Women in Science.



Eric Kihlstrom

Interim Director, Healthy Aging Industrial Challenge Strategy Fund / Director, Aging Analytics Agency

Lewes, East Sussex, UK
Category: Politics, Policy and Governance



**AGING
ANALYTICS
AGENCY**

Eric Kihlstrom builds eco-systems that lead change across industry, Government, 3rd sector and academia to unlock opportunities that come with demographic shift. In particular, he works in close partnership with the National Innovation Centre for Ageing and NHS to support all bidders in the UK Industrial Strategy Challenge Fund Healthy Ageing.

Eric is the Director of Aging Analytics Agency and the former Interim Director of the £98 million Healthy Ageing Industrial Strategy Challenge Fund.

He is former Digital Transformation Strategy Director with proven track record of delivering impactful innovation to multinational corporations and rapid growth start-ups. Part of pioneering team to disrupt telecoms industry in the nineties. He continues to deliver transformation via people-centred, analytics based, lean innovation.

Eric is the UK Ambassador to Aging2.0, a global innovation network supporting innovators taking on the greatest challenges and opportunities in ageing.

More recently, he was head of European Strategy for MobiQuity, a global digital transformation agency that helped to deliver health solutions that required a doctor's prescription and are clinically proven to outperform medication.



Eric Topol

Director & Founder, Scripps Research
Translational Institute

La Jolla, CA, USA

Category: Research and Academia

H-index: 176

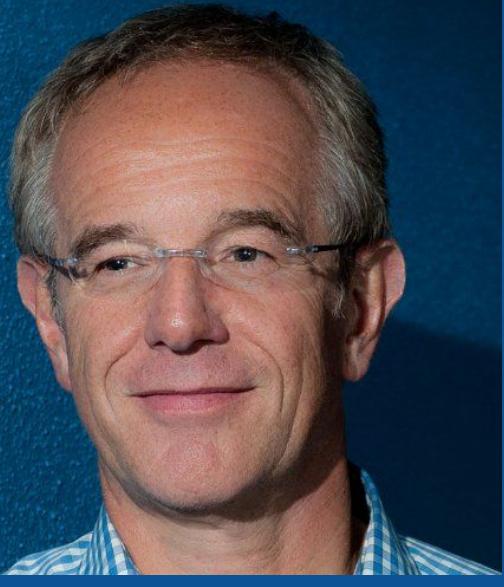
Number of publications: 1353



Eric Jeffrey Topol (born 1954) is an American cardiologist, geneticist, and digital medicine researcher. Before moving to Scripps in 2006, Topol served as chairman of cardiovascular medicine at Cleveland Clinic (1991-2005) and founded the Cleveland Clinic Lerner College of Medicine. Topol was one of the first researchers to question the cardiovascular safety of rofecoxib (Vioxx), culminating in the drug's ultimate withdrawal from the market.

His research is on individualized medicine, using the genome and digital technologies to understand each person at the biologic, physiologic granular level to determine appropriate therapies and prevention. An example is the use of pharmacogenomics and research on clopidogrel (Plavix). By determining the reasons for why such a large proportion of people do not respond to this medication, alternative treatment strategies to prevent blood clots can be used.

Topol is the Founder and Director of the Scripps Research Translational Institute in La Jolla, California. He also serves as the Chief Academic Officer for Scripps Health, a Professor of Genomics at The Scripps Research Institute, and a Senior Consultant at the Division of Cardiovascular Diseases at Scripps Clinic. He is editor-in-chief of Medscape and theheart.org. In 2012, he published a book called *The Creative Destruction of Medicine* which examined the impact of both the genomic and wireless revolutions on the health care system. In 2016, Topol co-founded YouBase, a company developing an individual-centric health data platform. He wrote the 2019 book *Deep Medicine*. In 2016, Topol was awarded a \$207M grant from the National Institutes of Health to lead a significant part of the Precision Medicine Initiative, a one million American prospective research program.



Eric Verdin

President and CEO, Buck Institute for Research on Aging

San Francisco, CA, USA

Category: Research and Academia

H-index: 95

Number of publications: 230



Eric M. Verdin is the 5th President and Chief Executive Officer of the Buck Institute for Research on Aging. A native of Belgium, Verdin received his Doctorate of Medicine (MD) from the University of Liege and additional clinical and research training at Harvard Medical School. He has held faculty positions at the University of Brussels, the National Institutes of Health (NIH), and the Picower Institute for Medical Research. Dr. Verdin is also a Professor of Medicine at University of California, San Francisco.

Dr. Verdin studies the molecular virology of HIV and novel approaches to eradicate HIV infection. Dr. Verdin's laboratory also focuses on a family of proteins—called histone deacetylases—and their role in the aging process and the immune system.

Dr. Verdin was elected as a fellow of the American Association for the Advancement of Science and as a member of the American Society for Clinical Investigation and the Association of American Physicians. Dr. Verdin serves on the National Scientific Advisory Council of the American Federation for Aging Research and on the Advisory Council of the National Institute of Drug Abuse at NIH. For his aging research, Dr. Verdin was recognized with a Glenn Award for Research in Biological Mechanisms of Aging and a senior scholarship from the Ellison Medical Foundation. His work on HIV was recognized by an Avant-Garde Award from the National Institutes of Health (NIH). Dr. Verdin has served as reviewer on study sections for the NIH, as the organizer of international meetings and as the editor of several books and reviews. He has published more than 200 international papers and is an inventor on 14 published patents.



Finian Tan

Founder and Chairman, Vickers Venture
Partners

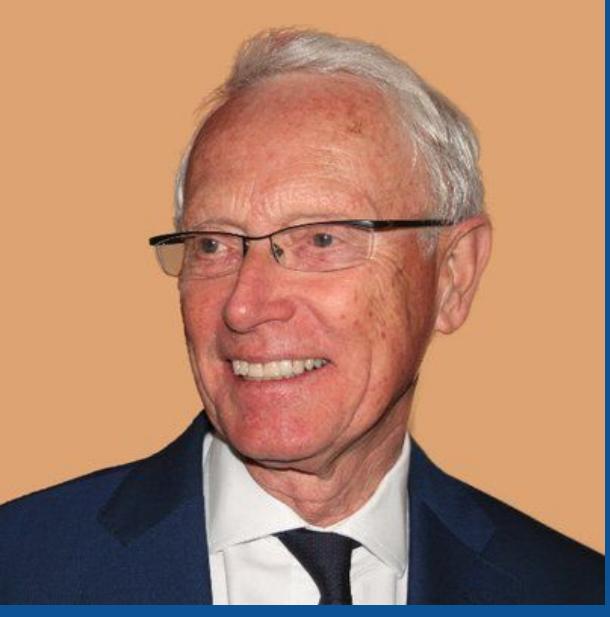


Singapore, Singapore
Category: Investors and Donors

Finian Tan is a venture capitalist, entrepreneur, and the founder and current chairman of Vickers Venture Partners, an international venture capital firm with a presence in Singapore, Shanghai, New York, Hong Kong, San Diego, San Francisco and Kuala Lumpur. Before he started Vickers, Dr. Tan was Managing Director and head of the Credit Suisse First Boston ("CSFB") group of banks in Singapore and Malaysia, a role he took on after leaving his position as the Founding Partner and Managing Director of Silicon Valley venture capital firm Draper Fisher Jurvetson ePlanet for Asia, where he made an early and probably his most famous investment in Chinese tech giant Baidu.

In 2005, Dr. Tan founded Vickers Venture Partners together with his co-founder Dr Khalil Binebine and 4 other co-founders, and is currently the Chairman of the investment committee. He is based in Singapore and travels frequently to the other cities in which Vickers has a presence; especially San Diego, California, where Samumed, the largest Vickers' portfolio company, is based and for which Dr Binebine is the sponsor of the deal and Dr Tan the co-sponsor.

He sponsored/co-sponsored and played substantial roles in several of Vickers' portfolio companies including Cambridge Industrial Trust Management (Chairman), Asia Food Channel (Founding Chairman), M-DAQ, Spark Systems (Chairman), KPIsoft (Chairman), Matchmove (Chairman), Sisaf (board member), RWDC industries (board member) and TWG, the co-owner of TWG Tea (board member).



Geoffrey Filkin

Chair of Advisory Board, All-Party Parliamentary Group for Longevity



London, UK

Category: Politics, Policy and Governance

David Geoffrey Nigel Filkin, Baron Filkin CBE (born 1 July 1944) is a British Labour politician. Filkin was educated at King Edward VI Five Ways School, Birmingham, and Clare College, Cambridge, where he read history.^[4] His early career was as a Director of Housing and then Chief Executive in Local Government. He was Chief Executive of the Association of District Councils, representing local authorities to government, promoting the foundation of the Local Government Association and creating Best Value, the policy for sourcing in local government. Later he was a policy analyst and writer, contributing to the development of Labour's policies for local and regional government. In 2000 he led the Prime Minister's Review of local government and subsequently was a government minister for four years. He founded the Public Services Research Group which published Public Matters, a critical review of Labour's public service reforms and in 2008 he founded and chaired the charity, 2020 Public Services Trust. Its Commission into Public Services in 2020 reported in 2010. He led the report, Commissioning for Outcomes, proposing and explaining the policy of paying for results. He was made an Honorary Fellow of the Chartered Institute for Purchasing and Supply. He founded the Parliament Choir in 2000, chaired the Committee on Statutory Instruments from 2005–10 and proposed and then chaired the Lords Select Committee on Public Services and Demographic Change. Its report, Ready for Ageing? was published in March 2013. Geoffrey Filkin was Chair of the House of Lords Select Committee on Public Service and Democratic Change which published a report on "Ready for Ageing?".



George Church

Harvard Professor, Harvard Medical School



HARVARD
MEDICAL SCHOOL

Boston, MA, USA

Category: Entrepreneurs

H-index: 126

Number of publications: 462

George leads Synthetic Biology at the Wyss Institute, where he oversees the directed evolution of molecules, polymers, and whole genomes to create new tools with applications in regenerative medicine and bio-production of chemicals. Among his recent work at the Wyss is development of a technology for synthesizing whole genes, and engineering whole genomes, far faster, more accurate, and less costly than current methods. George is widely recognized for his innovative contributions to genomic science and his many pioneering contributions to chemistry and biomedicine. In 1984, he developed the first direct genomic sequencing method, which resulted in the first genome sequence (the human pathogen, *H. pylori*). He helped initiate the Human Genome Project in 1984 and the Personal Genome Project in 2005. George invented the broadly applied concepts of molecular multiplexing and tags, homologous recombination methods, and array DNA synthesizers. His many innovations have been the basis for a number of companies including Editas (Gene therapy); Gen9bio (Synthetic DNA); and Veritas Genetics (full human genome sequencing).

George is Professor of Genetics at Harvard Medical School and Professor of Health Sciences and Technology at Harvard and the Massachusetts Institute of Technology (MIT). He is Director of the U.S. Department of Energy Technology Center and Director of the National Institutes of Health Center of Excellence in Genomic Science. He has received numerous awards including the 2011 Bower Award and Prize for Achievement in Science from the Franklin Institute and election to the National Academy of Sciences and Engineering.



George MacGinnis

Healthy Ageing Challenge Director,
UK Research and Innovation

UK Research
and Innovation

Oxford, UK

Category: Politics, Policy and Governance

George is an innovation leader specialising in health and care. His focus is on novel service propositions that empower service users, offer value to care systems and maximise the potential of digital technologies. His work includes supporting companies enter new markets in care, establishing scalable technology ecosystems and working at a system level to shape policy to promote new services.

George's recent work has a strong international dimension, with experience covering the USA, Ireland, the Nordics and Middle East. He recently gave evidence in Ireland to the Oireachtas Joint Committee on Health on future capacity requirements and the need to accelerate the shift of care away from hospitals and residential settings to provide a better experience and improved outcomes. For 10 years he led the user group for the Continua Health Alliance, a global industry group working to promote connected personal wellness and care.

He has twice been recognised with a Continua 'Key Contributor' award and he is member of the European special interest group advising on regulatory reform for telemedicine.



George Martin

Professor Of Pathology Emeritus, University of Washington

Seattle, WA, USA

Category: Research and Academia

H-index: 65

Number of publications: 353



Dr. Martin has led a long and productive career at the University of Washington, where he received his BS and MD degrees and has been a member of its faculty since 1957. He worked as a surgical pathologist and cytogeneticist in the UW Department of Pathology since 1957, and he served as the founding director of the Medical Scientist Training Program and the "Genetic Approaches to Aging Research" Institutional Training Grant of the National Institute on Aging. He was elected to the Institute of Medicine of the National Academy of Sciences and now serves as a Senior Member. Dr. Martin was a member of the National Advisory Council, the Board of Scientific Counselors of the National Institute on Aging, and the Scientific Advisory Board of the Ellison Medical Foundation. He currently serves as the Scientific Director of the American Federation for Aging Research. He was the Founding Editor-in-Chief of an AAAS/Science website for research on the biology of aging (SAGE KE). Dr. Martin is a Past President of the Tissue Culture Society of America, American Federation for Aging Research and the Gerontological Society of America. Dr. Martin's research has for many years been concerned with the development of genetic approaches to the study of aging and age-related diseases in mammals. One theme has been the plasticity of the genome of somatic cells. At a more clinical level, Dr. Martin has systematized knowledge of human genetic disorders from the point of view of their rich potential to elucidate specific aspects of the senescent phenotype and used this analysis to make inferences concerning the polygenic basis of aging.

Research Interests: Mechanisms of cellular aging; Genetic analysis of familial Alzheimer's disease; Transgenic mouse models of Alzheimer's disease pathology.



Gordon Lithgow

Professor, Buck Institute for Research
on Aging

San Francisco, CA, USA

Category: Research and Academia

H-index: 42

Number of publications: 92



Gordon Lithgow received his PhD in Genetics from the University of Glasgow, Scotland. He completed postdoctoral training at the Institute for Behavioral Genetics at the University of Colorado, Boulder. Lithgow was a Senior Lecturer in Molecular Gerontology at the School of Biological Sciences at the University of Manchester in England before coming to the Buck Institute in 2001. He is the Principal Investigator and Director of the Buck Institute's Interdisciplinary Research Consortium on Geroscience. He is also the Principal Investigator of the Larry L. Hillblom Network on the Chemical Biology of Aging, and is the Coordinator of the Hillblom Center for the Biology of Aging Support Award.

Lithgow sheds light on the mechanisms of aging by identifying agents that extend lifespan or prevent age-related disease. He has discovered a range of factors that can lengthen life in the microscopic worm *Caenorhabditis elegans*, and he applies these findings to studies in human cell cultures. Much evidence points to stress contributing to a breakdown in the ability to maintain optimal molecular stability resulting in aging and disease. Certain life-extending agents help *C. elegans* respond to lifelong stress by remodeling the natural stress fighting cellular mechanisms, the Lithgow lab has found. The Lithgow lab has discovered that certain cell proteins capable of extending life can also be closely involved in disease prevention. But when proteins play such dual roles, they may sometimes make tradeoffs that affect the fate of the organism. Dr. Lithgow is studying genetic variations in “checkpoint proteins” that may create a trade-off between the rate of aging and incidence of cancer. His area of interest includes uncovering genes and small molecules that prolong lifespan through enhanced molecular stability.



Gregory Fahy

Vice President and Chief Scientific Officer,
Twenty-First Century Medicine / Owner,
Intervene Biomedical
Los Angeles, CA, USA
Category: Research and Academia
H-index: 29
Number of publications: 66



21st Century Medicine
Expanding the Boundaries of Preservation Science

Gregory M. Fahy is Vice President and Chief Scientific Officer of 21st Century Medicine and serves on the company's Board of Directors. Dr. Fahy prioritizes, develops and directs the company's research activities. He also manages extramural collaborative research projects.

Dr. Fahy applies his 30+ years of experience in the field of cryobiology and cryopreservation to all research here at 21CM. As a scientist with the American Red Cross, he was the originator of the first practical method of Cryopreservation by vitrification and the inventor of computer based systems to apply this technology to whole organs. Before joining 21st Century Medicine, he was Chief Scientist for Organ, Inc and of LRT, Inc.

Prior to that he was Head of the Tissue Cryopreservation Section of the Transfusion and Cryopreservation Research Program of the U.S. Naval Medical Research Institute in Bethesda, Maryland where he spearheaded the original concept of ice blocking agents. Respected for his expertise and contributions to the advancement of Cryobiology technologies and applications, Dr Fahy is a frequent speaker at national and international scientific meetings and workshops.

A native of California, Dr. Fahy holds a Bachelor of Science degree in Biology from the University of California at Irvine and a Ph.D. from the Medical College of Georgia in Augusta.

He currently holds a joint appointment as a visiting scholar in the Department of Biochemistry at the University of California at Riverside. His scholarly work is highly published and he holds more than 15 patents.



Ilia Stambler

Chief Science Officer, Vetek (Seniority) –
the Movement for Longevity and Quality of Life

Rishon LeZion, Israel

Category: Research and Academia

H-index: 6

Number of publications: 20



וtek - התנועה לאיכות ואריכות חיים (ע"ר)

Vetek (Seniority) - the Movement
for Longevity and Quality of Life

Ilia Stambler PhD, is Chief Science Officer of "Vetek" (Seniority) Association – The Senior Citizens Movement (Israel). He received his PhD at the Department of Science, Technology and Society, Bar Ilan University, Israel. His research has focused on the historical and social implications of aging and life extension research. He is also involved in mathematical modeling of aging and aging-related diseases. He is the author of A History of Life-extensionism in the Twentieth Century and Longevity Promotion: Multidisciplinary Perspectives. He is actively involved in advocacy for aging and longevity research (www.longevityforall.org), and is chair of the Israeli Longevity Alliance and executive committee member of the International Society on Aging and Disease. His papers have appeared in Progress in Neurobiology, Aging and Disease, Cancer Detection and Prevention, Rejuvenation Research, Current Aging Science, Global Aging, Mechanisms of Ageing and Development, Frontiers in Genetics, Geroscience, and other journals.



Irina Conboy

Professor, Berkeley Research, University of California

Berkeley, CA, USA

Category: Research and Academia

H-index: 26

Number of publications: 59



Dr. Conboy received her Ph.D. in Cellular and Molecular Immunology from Stanford University in 1998. Dr. Conboy is an assistant professor of bioengineering at UCB, and she joined the department in November of 2004. Her research is focused on the cellular signaling pathways that control the behavior of adult stem cells and understanding the age-related changes that affect this signaling. She is also an experienced rodent researcher and pioneered some of the early parabiosis research examining the role of signaling factors in aging and tissue regeneration.

Since 2005, she has been a faculty mentor for the UC Berkeley chapter of the Student Society for Stem Cell Research and a sponsor of the DeCal class Stem Cells: Science and Society. She is also a reviewer for the CIRM training grant program at UC Berkeley and a member of the peer review committee for the state of Maryland's stem cell initiative, an invited peer reviewer for the Neurogenesis and Cell Fate Study Section at the NIH, and a reviewer for the Nathan Shock Center of Excellence in the Basic Biology of Aging. Irina Conboy received the CIRM New Faculty Award in 2008, the Glenn Award for Research in Biological Mechanisms of Aging in 2008, and the New Scholar in Aging award from Ellison's Medical Foundation in 2005.



James Peyer

Managing Partner, Apollo Ventures

APOLLO
VENTURES

Hamburg, Germany

Category: Investors and Donors

Dr. James Peyer, PhD, serves as Managing Partner at Apollo Ventures. He founded the firm. Prior to Apollo, Dr. Peyer served as Consultant at McKinsey and Company's biotech and pharma practice in New York, where he specialized in biotech entrepreneurship, drug launches for regenerative medicines, and R&D pipeline analysis. Dr. Peyer founded biotech company Genotyp. He has been a Scientist, Entrepreneur, and Advisor to biotech and pharma companies, always with a specialization for developing new classes of therapeutics. He was a National Science Foundation Fellow and worked on the basic biology of stem cells and improving gene therapies at University of Texas Southwestern Medical Center in Dallas. He did his PhD in Stem Cell Biology from the University of Texas Southwestern Medical Center in Dallas between 2011 to 2015. He did a Doctor of Philosophy (PhD) in Stem Cell Biology from University of Michigan - Rackham Graduate School between 2009 to 2011. Dr. Peyer did his BA with special honors from the University of Chicago between 2005 to 2009, where he studied immunology and Biology.



James Strole

Co-Director and Co-Founder, People Unlimited Inc.

Scottsdale, AZ, USA

Category: Media and Publicity Influencers



James Strole is Co-founder and Co-director of People Unlimited, and the Director of the Coalition for Radical Life Extension, who are the producers of RAADfest. He's a leading anti-death activist and community builder, who has spoken and written on radical life extension and physical immortality for over four decades.

James has dedicated his life to challenging death-oriented beliefs and practices, and has coached thousands of people to live an ageless lifestyle to achieve healthier, fuller, more vibrant lives. He started practicing Integral Yoga at 15, and identified with its founder, Sri Aurobindo, who sought to bring together the yogis of India to create a super body to match the super consciousness.

James is co-author of the book Just Getting Started: Fifty Years of Living Forever. He has appeared on numerous TV shows both domestically and abroad, and has spoken to audiences on four continents.



Jan van Deursen

Founder, Unity Biotechnology

Brisbane, CA, USA

Category: Research and Academia

H-index: 70

Number of publications: 199



Jan is passionate about basic medical research and its potential to transform human health and treatment of disease. He has a longstanding interest in questions related to cell cycle control and cellular responses to stress. He helped establish the concept that, with aging and development of age-related disease, wasteful transformed cells that cannot divide litter tissues and organs in small numbers and demonstrated that clearance of these so-called “senescent cells” extends both healthspan and lifespan. During his Ph.D. training, Jan pioneered technologies to knock down the expression of endogenous genes in mice, and these techniques have proven to be particularly useful in uncovering the physiological function of mammalian genes essential to cell division or viability. In applying these technologies to address the longstanding question as to whether aneuploidy is a cause or a consequence of cancer, Jan discovered that BubR1 (an essential mitotic checkpoint protein that ensures faithful chromosome segregation) is causally implicated in cancer, progeria and aging. Studies originating from his desire to understand these mechanisms are credited with providing the first *in vivo* evidence that p16-positive senescent cells drive aging and age-related disease, thus establishing cellular senescence as a promising target for therapeutic intervention. Dr. van Deursen holds a B.S. in Biology, M.S. in Molecular Biology, and Ph.D. in Cell Biology from University of Nijmegen. He is the Vita Valley Professor of Senescence at Mayo Clinic, where he chairs the Department of Biochemistry and Molecular Biology, and directs research programs in the Center for Biomedical Discovery, the Comprehensive Cancer Center, and the Kogod Center on Aging. He is an Honorary Professor at the University of Groningen, the Netherlands and serves on numerous national and international grant review panels.



Janet M. Lord

Director, Institute of Inflammation and Ageing

Birmingham, UK

Category: Research and Academia

H-index: 49

Number of publications: 223

UNIVERSITY OF
BIRMINGHAM



Janet Lord is director of the MRC-ARUK Centre for Musculoskeletal Ageing Research and the Institute of Inflammation and Ageing, both located within the new Queen Elizabeth super Hospital which opened in the summer of 2011.

Janet's research focuses on the innate immune system, the body's front line defense against infection, and how the efficiency of this system is affected by ageing and stress, the latter including physical trauma and emotional stress such as bereavement. She is also interested in how the ageing of the immune system predisposes adults to chronic inflammatory diseases such as Rheumatoid Arthritis and COPD and the muscle wasting associated with age and these conditions. In all of her work she aims to translate research findings into interventions, whether lifestyle (exercise, diet) or pharmacological, to improve immunity and health in old age.

Professor Lord is also a leading member of the NIHR SRMRC, researching the impact of major trauma on the immune system and how this differs with age. Find out more about the work of the research centre on the SRMRC website.

Janet has published over 200 research papers and reviews in the fields of immunescence, chronic inflammatory disease and neuroendocrineimmune biology. She was elected a Fellow of the Academy of Medical Sciences in 2015 and awarded the Lord Cohen Medal by the British Society for Research into Ageing in 2013. Her research is currently funded by grants from MRC, Arthritis Research UK, NIHR, The Scar Free Foundation and the European Commission.



Jeff Bezos

Founder, Chairman, CEO and President,
Amazon

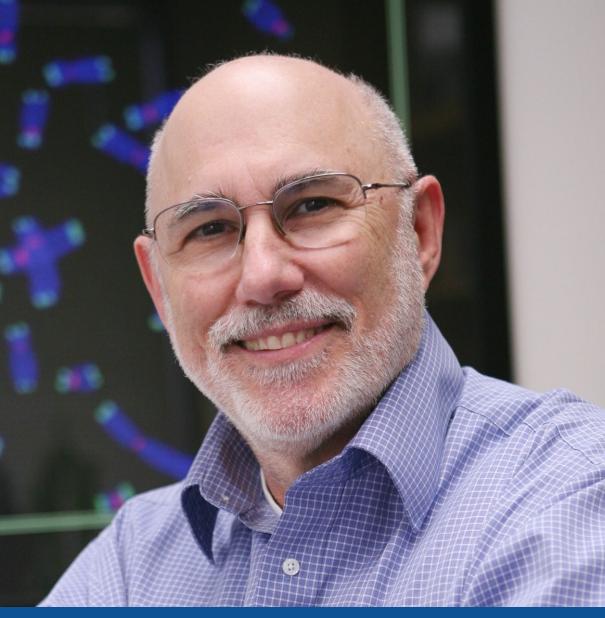


Medina, WA

Category: Investors and Donors

Jeffrey Preston Bezos is an American technology entrepreneur, investor, and philanthropist. He is the founder, chairman, CEO, and president of Amazon.

Bezos supports philanthropic efforts through direct donations and non-profit projects funded by Bezos Expeditions. Bezos used Bezos Expeditions to fund several philanthropic projects, including an Innovation center at the Seattle Museum of History and Industry and the Bezos Center for Neural Circuit Dynamics at Princeton Neuroscience Institute. Bezos donated to the Fred Hutchinson Cancer Research Center several times between 2009 and 2017. In 2013, he pledged \$500,000 to Worldreader, a non-profit founded by a former Amazon employee. Also in 2013, Bezos funded the recovery of two Saturn V first-stage Rocketdyne F-1 engines from the floor of the Atlantic Ocean. They were positively identified as belonging to the Apollo 11 mission's S-1C stage from July 1969. The engine is currently on display at the Seattle Museum of Flight. His philanthropic efforts have been negatively compared to those of Bill Gates and Warren Buffett.



Jerry Shay

Vice Chairman, Department of Cell Biology
at the University of Texas Southwestern
Medical Center

Dallas, TX, USA

Category: Research and Academia

H-index: 118

Number of publications: 550

UTSouthwestern
Medical Center

1975-1993 Assistant/Associate Professor, Department of Cell Biology/Neuroscience, UT Southwestern.
1993 - Professor, Department of Cell Biology, UT Southwestern, Southland Financial Corporation Distinguished Chair in Geriatric Research.
2002 - Associate Director, Education and Training, UT Southwestern Harold Simmons Comprehensive Cancer Center.

His research interest includes:

- Cancer stem cells;
- Cell Biology of the cancer genome;
- Mechanisms of cellular immortalization;
- Mouse models of radiation-induced cancer;
- Role of telomeres and telomerase in cancer and aging.

Professor Jerry Shay of the Shay/Wright lab is perhaps most well-known for his research on telomeres and telomerase and their relation to cancer and aging. He has been instrumental in the development of telomerase inhibitors, which turn off the expression of telomerase in cancer cells; this expression is one way in which cancer cells become immortal and divide constantly. His team is also developing another treatment, a small molecule that can uncaps the telomeres of cancer cells.



Jim Mellon

Chairman, Burnbrae

London, UK

Category: Investors and Donors



Jim is a visionary entrepreneur with a flair for identifying emerging global trends. Most notably and very publically, he predicted the credit crunch of 2007-08 in a book entitled "Wake Up! Survive and Prosper in the Coming Economic Turmoil". The book cited catalysts for the impending crisis including unsustainable levels of consumer debt in the western world, a U.S. housing crash, derivative financial instruments and governmental fiscal mismanagement - the rest is history! Jim followed this with "The Top 10 Investments for the Next 10 Years" (2008) and then "Top Ten Investments to Beat the Crunch!" (2009).

With Jim's wealth of knowledge and vast experience allows Burnbrae to capitalise on sound opportunistic investments ideas. Through these investments, Jim has built a worldwide business empire. Jim is serially amongst the top 10% in the Sunday Times Rich List and holds a master's degree in Politics, Philosophy and Economics from Oxford University.

In April 2017, Jim invested in Insilico Medicine, which is pursuing A.I. assisted drug discovery in cancer, Parkinson's, Alzheimer's, sarcopenia, and 'geroprotectors', compounds that may slow down the aging process. You can learn more about Insilico Medicine here in our exclusive interview with CEO Dr. Alex Zhavoronkov. The investment will be directed into using deep learning to create multi-modal biomarkers of human aging.



João Pedro de Magalhães

Senior Lecturer, Institute of Ageing & Chronic Disease

Liverpool, UK

Category: Research and Academia

H-index: 31

Number of publications: 99



UNIVERSITY OF
LIVERPOOL

INSTITUTE OF AGEING
AND CHRONIC DISEASE

João Pedro de Magalhães is a Portuguese microbiologist at the University of Liverpool. His lab at the University of Liverpool studies aging through both computational and experimental approaches. His ultimate goal is to cure human aging.

In 1999, he obtained his degree in Microbiology from Escola Superior de Biotecnologia. Under Olivier Toussaint, he obtained his PhD from the University of Namur in 2004. Then he did a postdoc in the George Church lab from 2004 to 2008.

He helps maintain several databases on aging - among them - GenAge, AnAge, DrugAge, CellAge, GenDR, the Digital Aging Atlas, and Who's Who in Gerontology. His research group helped sequence the transcriptome of the long-lived bowhead whale. He also helps advise the Lifeboat Foundation.

Among his many longevity-related scientific research projects, Magalhães has sequenced and analyzed the genome of the bowhead whale. And he has also contributed to analysis of the genome of the naked mole rat. Both of these mammals are exceptionally long-lived and exceptionally cancer-resistant.



John Godfrey

Corporate Affairs Director, Legal & General

London, UK

Category: Politics, Policy and Governance



John has worked in the City for over 30 years, providing advice on corporate affairs and communications to US, European and Japanese financial institutions.

He joined Legal & General as Group Communications Director in 2006, becoming Corporate Affairs Director following the global financial crisis. Since then, his responsibilities have variously included communications, public affairs and policy, corporate social responsibility and brand. In 2016 he left Legal & General to work in government as head of the Prime Minister's Downing Street Policy Unit, returning to the company in September 2017.



John D. Furber

CEO, Legendary Pharmaceuticals

LEGENDARY
PHARMACEUTICALS

Gainesville, FL, USA

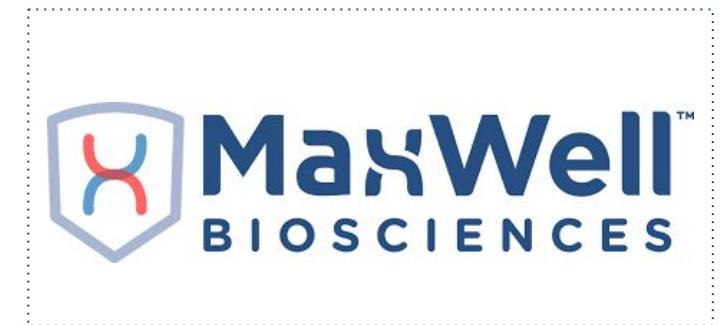
Category: Entrepreneurs

John D. Furber is a scientist and entrepreneur who has been studying the biology of aging, development, and regeneration for more than 25 years. During this time, he has been piecing together a Network Model of the Systems Biology of Human Aging, which can be seen at <https://legendarypharma.com/chartbg.html>. He is a frequent contributor at meetings in the fields of aging, mitochondria, autophagy, and oxidative stress. These include: Gordon Research Conferences, Cold Spring Harbor Conferences, Ellison Colloquia, Harvard/Glenn Symposia, American Aging Association, Gerontological Society of America, International Society on Aging and Disease, SENS Conferences, Oxygen Club of California World Congresses, and the Bay Area Aging Meetings. From 2000-2011, he served on the Board of Directors of the American Aging Association and was twice elected as VP. He earned a Bachelor degree in Physics and Mathematics from the University of California at Santa Cruz in 1975, and a Master of Science degree in Biological Sciences (Developmental and Molecular Biology) from the University of California at Irvine in 1990, where he advanced to PhD Candidacy. Between degrees, he served the United States Congress as a Technology Policy Analyst in the Congressional Office of Technology Assessment. Currently, he is running Legendary Pharmaceuticals, small pharmaceutical research company that is engaged in the discovery of pharmaceutical drugs and gene therapies able to repair and reverse accumulating molecular damage to subcellular mitochondria, lysosomes, nuclei, and extracellular proteins in order to prevent and treat serious, late-onset diseases commonly associated with aging. Legendary Pharmaceuticals is a privately-held small business. He is a frequent contributor at meetings in the fields of aging, mitochondria, autophagy, and oxidative stress. He served on the Board of Directors of the American Aging Association from 2000 to 2011, and was Vice President in 2008-2009.



Joshua McClure

CEO, Maxwell BioSciences



Austin, TX, USA

Category: Investors and Donors

Joshua has co-invented and secured over a dozen patents in the areas of multi-tissue regeneration and gene expression modulation in collaboration with co-inventors at his company, Stanford University, and University of California Berkeley. McClure leads a team of some of the world's top scientists and clinicians in the field of tissue regeneration, using computational systems medicine to personalize therapies to fight chronic disease and optimize human performance.

A graduate of the USAF Academy, McClure has been a leader of tech companies for over 15 years and comes to industry with a background in top secret USAF projects. He has invented multiple category-first companies, revolutionary new technologies and now devotes his time to biotechnologies with the capacity to reverse age-related degeneration, and optimize human longevity. MaxWell is working with Mayo Clinic, The American Red Cross and other large companies to bring these technologies to humans.



Judith Campisi

Professor, Buck Institute for Age Research

San Francisco, CA, USA

Category: Research and Academia

H-index: 94

Number of publications: 272



Campisi received a PhD in Biochemistry from the State University New York at Stony Brook and completed postdoctoral training at the Harvard Medical School. As an assistant professor at the Boston University Medical School, she became interested in the control of cellular senescence and its role in tumor suppression and aging. She joined the Lawrence Berkeley National Laboratory as a Senior Scientist in 1991. She established a second laboratory at the Buck Institute in 2002. At both institutions, she established a broad program to understand various aspects of aging, with an emphasis on the interface between cancer and aging. The Campisi laboratory has made several pioneering discoveries in these areas, and her research continues to challenge and alter existing paradigms.

Judith Campisi, has received international recognition for her contributions to understanding why age is the largest single risk factor for developing a panoply of diseases, ranging from neurodegeneration to cancer. Her highly acclaimed research integrates the genetic, environmental and evolutionary forces that result in aging and age-related diseases, and identifies pathways that can be modified to mitigate basic aging processes. The Campisi lab found evidence that senescent cells can disrupt normal tissue functions and, ironically, drive the progression of cancer over time. Senescent cells also promote inflammation, which is a common feature of all major age-related diseases. Campisi is collaborating with many other research groups at the Buck Institute to examine other suspected influences of senescent cells on other diseases of aging. Her research is shedding light on anti-cancer genes, DNA repair mechanisms that promote longevity, molecular pathways that protect cells against stress, and stem cells and their role in aging and age-related disease.



Julie Andersen

Professor, Buck Institute for Age Research

San Francisco, CA, USA

Category: Research and Academia

H-index: 43

Number of publications: 97



Andersen was born in Great Falls, Montana. She earned a doctorate in Neuromolecular Biology at the University of California, Los Angeles (UCLA). She completed a postdoctoral fellowship at Harvard Medical School and Massachusetts General Hospital before going to the University of Southern California as an assistant then an associate professor at the Andrus Gerontology Center. She joined the Buck Institute in 2000.

As a renowned expert on Parkinson's disease, Julie K. Andersen, PhD, is pursuing a wide array of leads toward treatments for this complex neurodegenerative disorder. She has identified several early risk signals for Parkinson's, an age-related illness that causes a progressive decline in movement and muscle control. The symptoms can include shaking hands and difficulty with walking.

Amongst the early risk signals identified by Andersen are elevated levels of iron and declining amounts of a protective antioxidant called glutathione. Recently, the Andersen lab has also discovered valuable clues by examining the roles of enzymes and other proteins involved in nerve cell degeneration.

The Andersen lab is also involved in identifying potential biomarkers for Parkinson's that may allow early interventional therapy.



Katy Fike

Partner, Generator Ventures /
Co-Founder, Aging2.0 / PhD Gerontologist

San Francisco, CA, USA

Category: Entrepreneurs

AGING^{2.0}

Katy Fike is a founding partner of Generator Ventures and co-founder of Aging2.0, a global innovation network and startup accelerator program. Katy is a PhD gerontologist, former investment banker and systems engineer. Recently named one of Fast Company's 100 Most Creative People in Business, Katy is a sought after speaker on topics related to innovation and aging and has been featured in national media including NPR, PBS NewsHour, Bloomberg TV, Wall Street Journal, BusinessWeek, Forbes, TIME, TechCrunch and Huffington Post. Katy has taken the stage at conferences such as South by Southwest, Consumer Electronics Show, Boomer Venture Summit, American Senior Housing Association, National Investment Center for Seniors Housing and Senior Living 100. Katy is on the Board of Directors of the American Society on Aging and the Family Caregiver Alliance. Katy earned her doctorate in gerontology from the USC Davis School of Gerontology and her undergraduate degree in Systems Engineering from University of Virginia. Katy has taught Gerontology at the university level and her research on care transitions has been published in peer-reviewed journals and presented at several national conferences.



Keith Comito

President, Life Extension Advocacy Foundation



New York, NY, USA

Category: Media and Publicity Influencers

Keith Comito is a mathematician, computer programmer and biotechnology enthusiast based in New York City. In addition to developing high-profile mobile applications such as HBO NOW and Disney Plus, he explores the intersection of technology and biology at the Brooklyn community lab Genspace, and is a passionate supporter of research aimed at extending healthy human lifespan.

Keith is also a practitioner of several martial arts, writer of music, and host of a retro video game-themed YouTube channel.

Specialties: Swift, Objective-C iPhone/iPad Development, Object Orientated Development, Crowdfunding, Video Editing, Augmented Reality



Keith Leonard

Chief Executive Officer, UNITY Biotechnology



Los Angeles, CA, USA

Category: Entrepreneurs

Keith R. Leonard is a Venture Partner at ARCH Venture Partners. He was co-founder, President and Chief Executive Officer of KYTHERA Biopharmaceuticals, Inc. from 2005 until its acquisition by Allergan in October, 2015. Prior to that, Mr. Leonard held various positions at Amgen Inc., a biotechnology company. From 2001 to 2004, Mr. Leonard served as Senior Vice President and General Manager of Amgen Europe where he was responsible for all commercial operations in 28 European countries. Prior to that role, Mr. Leonard established Amgen's presence in rheumatology with the creation of the Rheumatology Business Unit, served as Head of Information Management, and served in leadership roles in sales and marketing, engineering, operations, and finance.

Mr. Leonard serves on the board of Anacor Pharmaceuticals [ANAC], Intuitive Surgical [ISRG], Laboratoris SANIFIT, S.L, and is the Executive Chairman of UNITY Biotechnology and Sienna Biopharmaceuticals. He was formerly an active duty officer in the U.S. Navy.

Mr. Leonard received a B.S. in Engineering from the University of California, Los Angeles, a B.A. in History from the University of Maryland, an M.S. in Engineering from the University of California, Berkeley, and an M.B.A. from the Anderson School of Management at the University of California, Los Angeles.



Kevin Perrott

CEO, OpenOme

San Francisco, CA, USA

Category: Entrepreneurs



Kevin Perrott is Founder and CEO of OpenCures, Treasurer of SENS Research Foundation, co-founder of Oisin Biotechnologies.

After twenty years of growing and managing a successful retail business, Kevin became a cancer survivor and shifted direction to academics to develop methods of curing cancer and other age-related diseases. He graduated from the University of Alberta in 2006 at the age of 43 with a double major in Biology and Chemistry. He then entered the Ph.D. program and after completing two years studying the role of mitochondria in the process of aging in the nematode *C. elegans*, he shifted focus to the importance of the phenomenon of mammalian cellular senescence and its role in degenerative disease.

Kevin continues to support the advance of aging research as the VP of the American Aging Association, and through his research at the Buck Institute for Research on Aging in the lab of Judith Campisi sponsored by SENS Foundation to mitigate the negative effects of senescent cells.



Laura Deming

Partner and Founder, The Longevity Fund

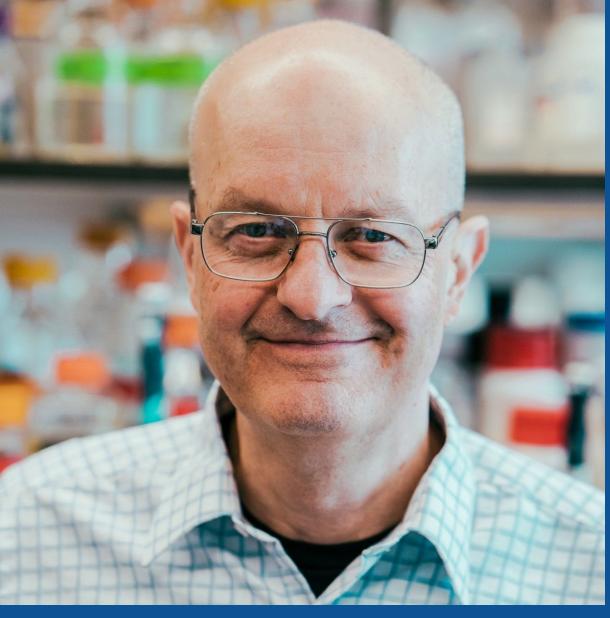


THE LONGEVITY FUND

San Francisco, CA, USA

Category: Investors and Donors

Laura Deming is the daughter of John and Tabitha Deming; she grew up in New Zealand. Deming and her brother, Trey, were homeschooled; she says she taught herself "calculus and probability and statistics, and French literature and history." At age 8, Deming became interested in the biology of aging, and at age 12 she joined the lab of Cynthia Kenyon at the University of California, San Francisco. Kenyon successfully increased the lifespan of the worm *C. elegans* by a factor of ten through genetic engineering. Deming was accepted to MIT at age 14 and studied physics, but later dropped out to accept the \$100,000 Thiel Fellowship and start a venture capital firm. Deming was one of only two women in the 2011 initial class of Thiel Fellows. Deming is a partner at and founder of The Longevity Fund, a venture capital firm focused on aging and life extension. The firm raised \$4 million in its first fund and \$22 million for its second fund, in 2017. The Longevity Fund investments include Unity Biotechnology, which develops senolytic drugs targeting diseases of aging, Navitor Pharmaceuticals, and Metacrine. In 2018, Deming launched Age1, a four-month startup accelerator program focused on founders creating longevity companies. The program graduated its first class of six on October 10, 2018, with companies including Fauna Bio, a startup using the biology of hibernation to aid in heart attack and stroke recovery, and Spring Discovery, focused on accelerating aging therapeutic research with machine learning. In August 2018, Deming also began advising the newly launched Pioneer Fund, a fund designed to find talent and "lost Einsteins" around the world, for projects in longevity.



Leonard Guarente

Novartis Professor, MIT



Boston, MA, USA

Category: Research and Academia

H-index: 121

Number of publications: 302

Leonard Guarente, Ph.D., is a founder of Elysium and the company's chief scientist, a role in which he directs research and product development. Since 1982 he has led the Glenn Center for the Biology of Aging Research at MIT, where his research has focused on the genetic and molecular basis of aging – first in model organisms and now in mouse models and humans.

Guarente is best known for his research on the role of sirtuins, a class of proteins that play a key role in regulating metabolic systems in response to stress and aging. In particular, Guarente was the first to identify SIR2 as the gene that controls aging in yeast cells. The mammalian version of SIR2, SIRT1 (and its associated proteins), has since been shown by Guarente and others to play a key role in longevity and metabolic function in mammals.

Guarente's lab is currently focused on understanding how the human brain aging transcriptional program works and how it is regulated, to pave the way for anti-aging therapeutic strategies for neurodegenerative disease. His team is particularly interested in the role of sirtuins in human brain aging and neurodegeneration. They are investigating the role of sirtuin levels and also sirtuin polymorphisms in regulating human brain aging rates and neurodegenerative disease risk, as well as looking broadly using unbiased genome-wide strategies.

Guarente is the Novartis Professor of Biology at MIT. He holds a B.S. from MIT and a Ph.D. from Harvard.



Lindsay Cook

Co-Founder, Financial times

Redhill, UK

Category: Media and Publicity Influencers



FINANCIAL
TIMES

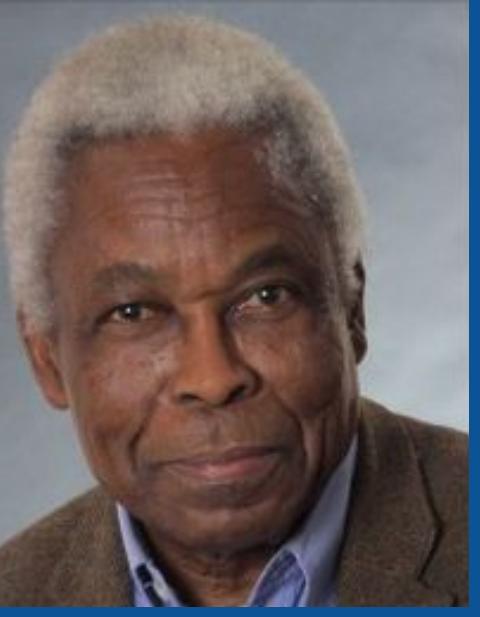
A consultant to several publishing companies, Lindsay is also an award-winning financial journalist and author. Co-founder of MoneyFightClub.com, which offers financial well-being workshops for major British companies. Writes the Money Mentor column for the Weekend Financial Times and appears regularly on Share Radio. Lindsay was a speaker at the Women at the Top Summit in September 2016. She also appeared at the FT Weekend Live Festival.

Lindsay was the first woman to be appointed Business Editor of The Times and subsequently moved into newspaper and magazine management.

She is also the deputy chair of the Citizens Advice Bureau in West Sussex.

She is the co-author of Money Fight Club (Harriman House) with Anne Caborn, a practical guide to saving money the smart way and tackling the High Street rip-offs - from supermarkets to banks and insurance companies. She has also launched a website: moneyfightclub.com, which has loads of resources including downloadable letters of complaint for a wide range of problems.

She also wrote Working Mum: The Survival Guide helping parents to find their way through the intricacies of flexible working and employment law and The Money Diet: Three Months to Financial Fitness, which was serialised in three newspapers.



Lloyd Demetrius

Mathematician and Theoretical Biologist,
Max Planck Institute for Molecular Genetics



MAX PLANCK INSTITUTE
FOR MOLECULAR GENETICS

Berlin, Germany

Category: Research and Academia

Lloyd A. Demetrius is a mathematician and theoretical biologist at the Max Planck Institute for Molecular Genetics at Berlin, Germany, and the Department of Organismic and Evolutionary biology, Harvard University. He is best known for the discovery of the concept, evolutionary entropy, a statistical parameter that characterizes Darwinian fitness in models of evolutionary processes at various levels of biological organization - molecular, organismic and cultural. Evolutionary entropy, an analogue of the Gibbs entropy in statistical physics, is the cornerstone of directionality theory, an analytical study of evolution by variation and selection. The theory has applications to: a) the development of aging and the evolution of longevity; b) the origin and progression of age related diseases such as cancer, and neurodegenerative disorders such as Alzheimer's disease and Parkinson's disease; c) the evolution of cooperation and the spread of inequality.



Maria Blasco

Director, Spanish National Cancer Research Centre (CNIO)

Madrid, Spain

Category: Research and Academia

H-index: 31

Number of publications: 84



Centro Nacional
de Investigaciones
Oncológicas

Maria A. Blasco obtained her PhD in 1993 at the Centro de Biología Molecular "Severo Ochoa" under the supervision of M. Salas. That same year, Blasco joined the Cold Spring Harbor Laboratory in New York (USA) as a Postdoctoral Fellow under the leadership of C. W. Greider. As a postdoc she isolated one of the telomerase essential genes and generated the first telomerase deficient mouse model, which served to demonstrate the importance of telomerase in telomere maintenance, chromosomal instability and disease. In 1997, she returned to Spain to start her own research Group at the Centro Nacional de Biotecnología in Madrid. She joined the Spanish National Cancer Research Center (CNIO) in 2003 as Director of the Molecular Oncology Programme and Leader of the Telomeres and Telomerase Group. In 2005, she was also appointed Vice-Director of Basic Research at CNIO. Since June 2011, she is the CNIO Director.

For more than 20 years, Blasco's work has focused in demonstrating the importance of telomeres and telomerase in cancer, as well as in age-related diseases. Blasco has published more than 250 papers in international journals and has an h-index of 81. Her achievements have been recognized by the following international and national awards: Josef Steiner Cancer Research Award, Swiss Bridge Award for Research in Cancer, Körber European Science Award, the EMBO Gold Medal, the "Rey Jaime I" Award in Basic Research, the Fundación Lilly Preclinical Research Award, and the "Santiago Ramón y Cajal" National Award in Biology. Blasco holds two Doctorate Honoris Causa from the Universidad Carlos III of Madrid and from Universidad de Alicante and in October 2017 she received the Scientific Merit Award of the Generalitat Valenciana.



Matt Hancock

Secretary of State for Health and Social Care,
UK Government

London, UK

Category: Politics, Policy and Governance



Matthew John David Hancock (born 2 October 1978) is a British Conservative Party politician, since 2018 Secretary of State for Health and Social Care. He has been Member of Parliament (MP) for West Suffolk since 2010.

Hancock was born in Cheshire, where his family run a software business. Hancock studied PPE at Exeter College, Oxford and Economics at Christ's College, Cambridge. He was an economist at the Bank of England before becoming an economic advisor (and later Chief of Staff) to George Osborne.

Elected in 2010, he served in a number of middle-ranking ministerial positions from September 2013 under both David Cameron and Theresa May. He was promoted to the Cabinet as Secretary of State for Digital, Culture, Media and Sport in January 2018. On 9 July 2018, after the promotion of Jeremy Hunt to Foreign Secretary, Hancock was named Secretary of State for Health and Social Care. On 25 May 2019, Hancock announced his intention to stand for leadership of the Conservative Party.



Michael Fossel

President, Telocyte

Grand Rapids, MI, USA

Category: Entrepreneurs

H-index: 10

Number of publications: 41



Dr. Fossel is the driving force behind Telocyte and has been the leader in proposing the use of telomerase to treat human disease for the past two decades. Born in 1950, Michael Fossel grew up in New York, and lived in London, Palo Alto, San Francisco, Portland, and Denver. He graduated cum laude from Phillips Exeter Academy, received a joint BA and MA in psychology in four years from Wesleyan University in Connecticut, and, after completing a PhD in neurobiology at Stanford University in 1978, went on to finish his MD at Stanford Medical School in two and a half years. Dr. Fossel was a Clinical Professor of Medicine at Michigan State University for almost three decades and taught the Biology of Aging at Grand Valley State University. He has been a member of numerous scientific organizations including the American Association for the Advancement of Science, the American Aging Association (he was their executive director and served on their board of directors), the American Gerontological Society, the American Society on Aging, the American Geriatrics Society, and the Alzheimer's Association ISTAART, among others. He was founding editor of Rejuvenation Research. In 1996, Dr. Fossel published *Reversing Human Aging*, the first book to ever describe the medical aspects of extending human telomeres and the potential for curing age-related disease. Still the only medical textbook on the clinical potential of telomerase, it includes in depth discussions of Alzheimer's disease, the progerias, atherosclerosis, osteoporosis, immune senescence, skin aging, and cancer, as well as the potential for fundamentally new therapies for these diseases using telomerase therapy. His most recent book, *The Telomerase Revolution* (BenBella Books, 2015), discusses aging, clinical disease, and the prospective FDA clinical trials of telomerase therapy.



Michael Greve

Founder, Forever Healthy / CEO,
Kizoo Technology Ventures

Berlin, Germany
Category: Entrepreneurs



Michael Greve is the CEO and Founder of Kizoo Technology Ventures and the Forever Healthy Foundation.

As Michael himself says, his lifestyle during his hacker days wasn't among the healthiest; his interest in healthy life extension developed as a consequence of his efforts to switch to a healthier way of living. Eventually, his research into the science of staying healthy led him to the work of Dr. Aubrey de Grey and the realization that staving off age-related diseases and preserving health indefinitely was a potentially achievable goal. Following this serendipitous discovery, he founded and launched the Forever Healthy Foundation.

Forever Healthy's mission is to enable people to vastly extend their healthy lifespan and be part of the first generation to cure aging.

They support the development of rejuvenation therapies that undo the damage of aging by funding basic research, bringing together the world's leading scientists at their Undoing Aging conference, and helping startups that work on actual therapies for human use.

KIZOO helps young start-up teams grow by providing mentoring, seed, and early stage financing in SaaS, Internet, and mobile services, with growing focus on Rejuvenation Biotech. Apart from their financial resources, KIZOO shares its longtime experience in development, marketing, and product management.



Michael Rae

Science writer, SENS Research Foundation

Mountain View, CA, USA

Category: Media and Publicity Influencers



Michael Rae is the co-author of Ending Aging and is one of Dr Aubrey de Grey's research assistants at SENS.

Michael was also a member of the Society's Board for several years. Michael is heavily steeped in the science of CR, as well as the broader field of aging research. He is also Science Writer at SENS Research Foundation, a biomedical charity developing a new class of therapies to remove and repair the cellular and molecular damage of aging. To further the Society's mission of supporting the science and practice of human CR, Michael will be coordinating with researchers to help promote, initiate, and advance this new science.

Michael Rae is the author of five scientific articles and commentaries in peer-reviewed scientific journals. Much of his work has been devoted to elucidating the SENS platform for anti-aging biomedicine for a popular audience. His undergraduate minor was in biology. He is a long-time member and one-time Board Member of the Calorie Restriction Society, a main contributor to the Society's "How-to Guide", and was core scientific investigator with the CR Society Cohort Study.



Michael Rose

Senior Project Manager, 10X Genomics

San Francisco, CA, USA

Category: Research and Academia

H-index: 46

Number of publications: 167



Michael is a Senior Project Manager at 10X Genomics. He was a Senior Research Associate at the Cell Biology Department, Genitope. He also was a Sr. Laboratory Operations Analyst, Genomic Health for almost 5 years. He was engaged in: CLIA, CAP, ISO 15189, Pharma laboratory audits (scribe; audit room coordination; observation/deficiency response management; CAPA, NCDR, Root Cause Analysis (RCA); Laboratory Licensing (CA, RI, PA, MD, FL application and renewals). Michael was a Senior Manager, Histology Laboratory (Genomic Health) during 2 years. He was engaged in: Management of Histology Department (45 FTE); 16 FTE hired to expand Histology Department; Management of 4 supervisors/managers (Hiring, performance review, etc.); Planning/execution of laboratory move (Facilities, Architect, IT, EH&S, Histology staff, Clinical Lab Quality).



Michael West

CEO, AgeX Therapeutics / Co-CEO, BioTime

San Francisco, CA, USA

Category: Entrepreneurs

H-index: 38

Number of publications: 162



Michael D. West is a gerontologist, and a pioneer in stem cells, cellular aging and telomerase. He is the founder and CEO of AgeX Therapeutics, a startup focused on the field of interventional gerontology, and Co-CEO of its parent company, BioTime, Inc. of Alameda, California (San Francisco Bay Area), a biotechnology company regarded as a leader in the field of regenerative medicine with a focus on cell therapy. Prior to joining BioTime, West was Chairman of the Board, Chief Scientific Officer and CEO of Advanced Cell Technology (ACT), another biotechnology company focused on stem cell research. ACT later changed its name to Ocata Therapeutics, and was acquired by Japanese pharmaceutical company Astellas Pharma for US\$379M or \$8.50 per share in February 2016. Prior that, West was founder, director, and Chief Scientific officer of Geron, for which he secured venture capital investment from Kleiner Perkins Caufield & Byers, Venrock and Domain Associates. At Geron, West initiated and managed programs in telomere biology relating to aging, cancer and human embryonic stem cell technology. West organized the first collaborative effort to isolate human pluripotent (embryonic) stem cells for the purpose of manufacturing products in regenerative medicine in collaboration with James Thomson at the University of Wisconsin at Madison, John Gearhart at Johns Hopkins School of Medicine, and Roger Pedersen at the University of California, San Francisco. West and colleagues at Geron cloned the RNA component of telomerase and collaborated with Thomas Cech (winner of 1989 Nobel Prize in Chemistry), with whom they cloned the catalytic component of the enzyme telomerase, and sponsored collaborative research in the laboratory of Carol Greider, then at Cold Spring Harbor Laboratory.



Mike Kope

CEO and Co-Founder,
SENS Research Foundation

Mountain View, CA, USA
Category: Entrepreneurs



CEO and Co-Founder of SENS Research Foundation, Mr. Kope received his J.D. from the University of Michigan in 1990. He has served as the University of Michigan's Intellectual Property Counsel; as Director of Corporate Development for Aviron, and for MedImmune, Inc.; and as CEO and officer of a number of start-ups in the biotechnology space. He specializes in business development and consulting, and is widely experienced with biotechnology organizations. Mike has negotiated a broad range of business acquisition and partnership agreements, designed strategies for technology protection and promotion in many fields of research, and facilitated a number of successful startups.



Ned David

Co-Founder and President,
UNITY Biotechnology

Los Angeles, CA, USA

Category: Research and Academia

H-index: 4

Number of publications: 4



Ned co-founded UNITY in 2011, largely because he thought it was “simply the coolest biology he had ever seen.” Before UNITY, Ned co-founded four other biotechnology companies that together raised over \$1.5 billion in financing and today employ over 400 scientists, engineers, and business people. Ned builds companies because he sees company creation as a means to create technologies that change the world. Ned is a co-founder of Syrrx (acquired by Takeda), Achaogen (AKAO), Kythera Biopharmaceuticals (KYTH, acquired by Allergan), and Sapphire Energy. Ned holds pending and issued patents in fields such as nanovolume crystallography, antibiotic resistance, aesthetic medicine, and cellular senescence. He has served on the board of directors of Kythera Biopharmaceuticals, Sapphire Energy, and the Buck Institute for Research on Aging and is a member of the board of trustees of the University of California Foundation. Ned was named one of the Top 100 innovators in the world under 35 by the MIT Technology Review. He holds a Ph.D. from the University of California, Berkeley in Molecular and Cellular Biology and an A.B. in Biology from Harvard University.



Nir Barzilai

Director, Institute for Aging Research at the
Albert Einstein College of Medicine

New York, NY, USA

Category: Research and Academia

H-index: 68

Number of publications: 244



EINSTEIN

Albert Einstein College of Medicine

Born in Israel, Dr. Barzilai served as chief medic and physician in the Israel Defense Forces. He is currently leading an international effort to approve drugs that can target aging. Targeting Aging with METformin (TAME) is a specific study designed to prove the concept that multi-morbidities of aging can be delayed by metformin, working with the FDA to approve this approach which will serve as a template for future efforts to delay aging and its diseases in humans. Dr. Nir Barzilai is the director of the Institute for Aging Research at the Albert Einstein College of Medicine and the Director of the Paul F. Glenn Center for the Biology of Human Aging Research and of the National Institutes of Health's (NIH) Nathan Shock Centers of Excellence in the Basic Biology of Aging. He is the Ingeborg and Ira Leon Rennert Chair of Aging Research, professor in the Departments of Medicine and Genetics, and member of the Diabetes Research Center and of the Divisions of Endocrinology & Diabetes and Geriatrics. Dr. Barzilai's research interests are in the biology and genetics of aging. One focuses on the genetic of exceptional longevity, where we hypothesize and demonstrated that centenarians have protective genes, which allows the delay of aging or for the protection against age-related diseases. In a Program he is leading we take full advantage of phenotypes, DNA, and cells from the Ashkenazi Jewish families with exceptional longevity and the appropriate controls and his group have established at Einstein and discovered underlying genomic differences associated with longevity. Longevity Genes Project (LGP) is a cross-sectional, ongoing collection of blood and phenotype from families with centenarian proband. The second direction, for which Dr. Barzilai is holding an NIH Merit award that focuses on the metabolic decline of aging, and his team hypothesize that the brain leads this decline.



Paul Irving

Chairman, Milken Institute Center for the Future of Aging



MILKEN INSTITUTE
CENTER FOR THE FUTURE OF AGING

Santa Monica, CA, USA

Category: Media and Publicity Influencers

Paul Irving is chairman of the Milken Institute Center for the Future of Aging and distinguished scholar in residence at the University of Southern California Davis School of Gerontology. Irving also serves as chairman of Encore.org, a director of East West Bancorp, Inc. and Pharos Capital BDC, Inc., and an advisory board member at USC, Stanford University, the Global Coalition on Aging, and WorkingNation.

He previously served as the Milken Institute's president, an advanced leadership fellow at Harvard University, and chairman and CEO of Manatt, Phelps & Phillips, a law and consulting firm. Author of "The Upside of Aging: How Long Life Is Changing the World of Health, Work, Innovation, Policy, and Purpose," a Wall Street Journal expert panelist and contributor to PBS Next Avenue and Forbes, Irving is involved in initiatives at the National Academy of Medicine and the Bipartisan Policy Center, and was a participant in the 2015 White House Conference on Aging. He was honored with the Janet L. Witkin Humanitarian Award by Affordable Living for the Aging, the Life Journey Inspiration Award by Stanford's Distinguished Careers Institute, and the Board of Governors Award by Loyola Law School, Los Angeles. PBS Next Avenue named Irving an "Influencer" for his work in aging and longevity.



Paul F. Glenn

Founder, Paul F. Glenn Center for the
Biology of Aging



PAUL F. GLENN
CENTER FOR THE BIOLOGY OF AGING
AT STANFORD UNIVERSITY

Boston, MA, USA

Category: Entrepreneurs

In 1965, Paul Glenn founded the Glenn Foundation for Medical Research, a vehicle devoted to supporting basic research in the molecular biology of aging and age-related diseases. The foundation has been a leader in this field for decades. Glenn has also bankrolled aging research at his alma maters Harvard and Princeton, as well as other institutions such as the Buck Institute, MIT, UCSF and Stanford University.

The Glenn Foundation for Medical Research supports its programs through the American Federation for Aging Research (AFAR), a more than three decades old outfit that has supported the science of healthier aging and has provided grants to more than 3,000 scientists. The Glenn/AFAR Postdoctoral Fellowship Program for Translational Research on Aging supports postdoctoral fellows who specifically direct their research toward translational findings and who will demonstrate how their research will have direct benefits for human aging.

Glenn has also supported aging research centers at universities and research institutions. The Paul F. Glenn Center for Aging Research at University of Michigan is one of these, and began its operations in September 2014. Other outfits include The Glenn Center For Quantitative Aging Research at Princeton University, and the Paul F. Glenn Laboratories for the Biological Mechanisms of Aging at Harvard Medical School.



Peter Diamandis

Chairman / CEO, Human Longevity;
X PRIZE; Planetary Resources;
Singularity University; Space Adventures



HUMAN
LONGEVITY,
INC.

Los Angeles, CA, USA

Category: Investors and Donors

Peter Diamandis was recently named by Fortune Magazine as one of the World's 50 Greatest Leaders. He is the Founder and Executive Chairman of the XPRIZE Foundation which leads the world in designing and operating large-scale incentive competitions. Diamandis is also the Co-Founder and Vice-Chairman of Human Longevity Inc. (HLI), a genomics and cell therapy-based company focused on extending the healthy human lifespan. He is also the Co-Founder and Executive Chairman of Singularity University, a graduate-level Silicon Valley institution that counsels the world's leaders on exponentially growing technologies. In the field of commercial space, Diamandis is Co-Founder and Co-Chairman of Planetary Resources, a company designing spacecraft to enable the detection and prospecting of asteroid for fuels and precious materials. He is also the Co-Founder of Space Adventures and Zero Gravity Corporation. Diamandis is a New York Times Bestselling author of two books: *Abundance – The Future Is Better Than You Think* and *BOLD – How to Go Big, Create Wealth and Impact the World*. He earned degrees in Molecular Genetics and Aerospace Engineering from the MIT, and holds an M.D. from Harvard Medical School.



Peter Thiel

Founder, Thiel Capital / Partner, Founders Fund

THIEL

Los Angeles, CA, USA

Category: Investors and Donors

Peter Thiel is an entrepreneur and investor. He started PayPal in 1998, led it as CEO, and took it public in 2002, defining a new era of fast and secure online commerce. In 2004 he made the first outside investment in Facebook, where he serves as a director. The same year he launched Palantir Technologies, a software company that harnesses computers to empower human analysts in fields like national security and global finance. He has provided early funding for LinkedIn, Yelp, and dozens of successful technology startups, many run by former colleagues who have been dubbed the “PayPal Mafia.” He is a partner at Founders Fund, a Silicon Valley venture capital firm that has funded companies like SpaceX and Airbnb. He started the Thiel Fellowship, which ignited a national debate by encouraging young people to put learning before schooling, and he leads the Thiel Foundation, which works to advance technological progress and long-term thinking about the future. Peter is also the #1 New York Times bestselling author of *Zero to One: Notes on Startups, or How to Build the Future*.



Prince Michael of Liechtenstein

Prince, House of Liechtenstein

Vaduz, Liechtenstein

Category: Politics, Policy and Governance



Prince Michael of Liechtenstein has completed his trainings at the Faculty of Economics with the University of Vienna (Austria) with a Magister der Sozial- und Wirtschaftswissenschaften (M.A. in Business Administration). During his studies he took various practical training periods / work with banks and manufacturing companies in Canada, the US and Belgium (Brussels).

From 1978 to 1987 he worked for Nestlé SA in the fields of controlling, management and marketing on various markets in Europe and Africa.

In 1987 he returned to Liechtenstein where he took over the position of a Managing Director with Industrie- und Finanzkontor Ets. Vaduz, which today is a leading trust company with tradition and expertise in the long-term and trans-generational preservation of wealth, especially family wealth. Today, Prince Michael von und zu Liechtenstein is Chairman of Industrie- und Finanzkontor Ets. as well as Founder and Chairman of Geopolitical Intelligence Services AG Vaduz.

Prince Michael von und zu Liechtenstein is member of various professional organisations such as STEP. Furthermore, he is board member of the Liechtenstein Institute of Professional Trustees and Fiduciaries as well as Chairman of the European Center of Austrian Economics Foundation Vaduz.



Rafael de Cabo

Senior Investigator, Translational Gerontology
Branch at The National Institute on Aging

Baltimore, MD, USA

Category: Research and Academia

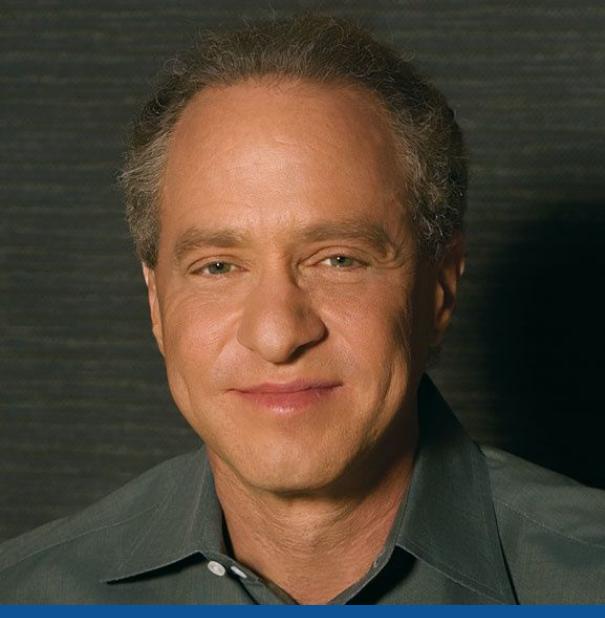
H-index: 74

Number of publications: 288



After receiving his B.S. and M.S. from the University of Cordoba, Spain, Dr. de Cabo earned his Ph.D. in 2000 from the Department of Foods and Nutrition at Purdue University. Upon completion of his graduate education, he received a postdoctoral position in the Laboratory of Neurosciences at the National Institute on Aging in Baltimore, Maryland. In 2004, he was appointed as a tenure track investigator in the Laboratory of Experimental Gerontology, where he now heads the Aging, Metabolism, and Nutrition Unit (AMNU). The AMNU applies both physiological and tissue-specific molecular approaches to investigate effects of nutritional interventions on basic mechanisms of aging and age-related diseases. Research within his unit strives to identify protective mechanisms invoked by caloric restriction and to evaluate the consequences of dietary interventions on lifespan, pathology, and behavioral function. The AMNU balances the exploration of in vivo rodent, as well as in vitro, paradigms of caloric restriction. Dr. de Cabo is an active member of the Board of the American Aging Association.

AMNU applies whole body physiological and tissue-specific molecular approaches to investigate effects of nutritional interventions on basic mechanisms of aging and age-related diseases. Caloric restriction (CR), without malnutrition, is widely known to extend lifespan and retard a wide variety of aging processes in several short-lived species and is the primary paradigm employed by AMNU scientists. Research within this unit uses both rodent models of CR as well as an in vitro model for CR. CR affects metabolic regulation to induce an overall phenotypic change leading to a decrease in cellular proliferation and growth rates.



Ray Kurzweil

Director of Engineering, Google



Cambridge, MA, USA

Category: Entrepreneurs

Raymond Kurzweil (born February 12, 1948) is an American inventor and futurist. He is involved in fields such as optical character recognition (OCR), text-to-speech synthesis, speech recognition technology, and electronic keyboard instruments. He has written books on health, artificial intelligence (AI), transhumanism, the technological singularity, and futurism. Kurzweil is a public advocate for the futurist and transhumanist movements, and gives public talks to share his optimistic outlook on life extension technologies and the future of nanotechnology, robotics, and biotechnology.

Kurzweil received the 1999 National Medal of Technology and Innovation, the United States' highest honor in technology, from President Clinton in a White House ceremony. He was the recipient of the \$500,000 Lemelson-MIT Prize for 2001. And in 2002 he was inducted into the National Inventors Hall of Fame, established by the U.S. Patent Office. He has received 21 honorary doctorates, and honors from three U.S. presidents. The Public Broadcasting Service (PBS) included Kurzweil as one of 16 "revolutionaries who made America" along with other inventors of the past two centuries. Inc. magazine ranked him #8 among the "most fascinating" entrepreneurs in the United States and called him "Edison's rightful heir".

Kurzweil has written seven books, five of which have been national bestsellers.



Reason

Founder, Repair Biotechnologies

Lafayette, NY, USA

Category: Entrepreneurs



Over the years, Reason has been a patient yet relentless advocate, acting not only as an information provider for the public but also helping out innumerable organizations and companies in the field of rejuvenation biotechnology in financial and other ways. Back in the day when SRF didn't exist yet, Reason was a volunteer for Methuselah Foundation; eventually, he helped fund companies such as Oisin Biotechnologies, CellAge, and LysoCLEAR; and, earlier this month, Reason and Bill Cherman co-founded Repair Biotechnologies, a company focused on gene therapy for rejuvenation, as announced on FA.

He is the founder and writer of Fight Aging!, a leading blog in the aging biotech community. Reason is also an active angel investor in the space. Previously, Reason was principal software engineer at technology startups. Reason has Masters degrees in Space Physics and Astrophysics.



Richard Barker

Founding Director, New Medicine Partners



Madison, WI, USA

Category: Research and Academia

H-index: 9

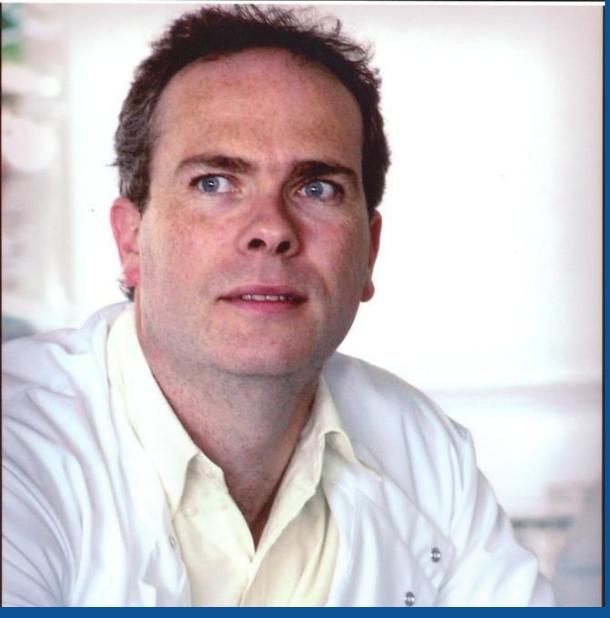
Number of publications: 46

Richard W. Barker was educated at Exeter College, Oxford, where he received a Bachelor's degree in Chemistry. Following completion of his degree, he researched biological applications of magnetic resonance techniques in pursuit of an Oxford DPhil and in post-doctoral studies in Munich, Germany and Leeds, England.

At Chiron, a multinational biotechnology firm that was acquired by Novartis in 1996, he headed the diagnostics business, which brought the latest immunodiagnostics to market. He subsequently served as chairman and chief executive of Molecular Staging, whose genome amplification technology enables gene sequencing on rare DNA samples.

With colleagues in Oxford and UCL, he has formed CASMI to develop, test and promote new models of medical innovation, including adaptive licensing, cell therapy regulation and a combination of therapeutic and diagnostic products to focus treatments on the patients most likely to benefit.

He chairs the South London Academic Health Science Network, which aims to improve the quality and consistency of care in that part of the National Health Service (NHS), and to facilitate innovations emerging from academic and industrial research into NHS application. He chairs the charity International Health Partners that brings donated medicines to developing countries, crisis situations and refugee camps.



Richard Faragher

Professor of Biogerontology, University of Brighton

Brighton, UK

Category: Research and Academia

H-index: 25

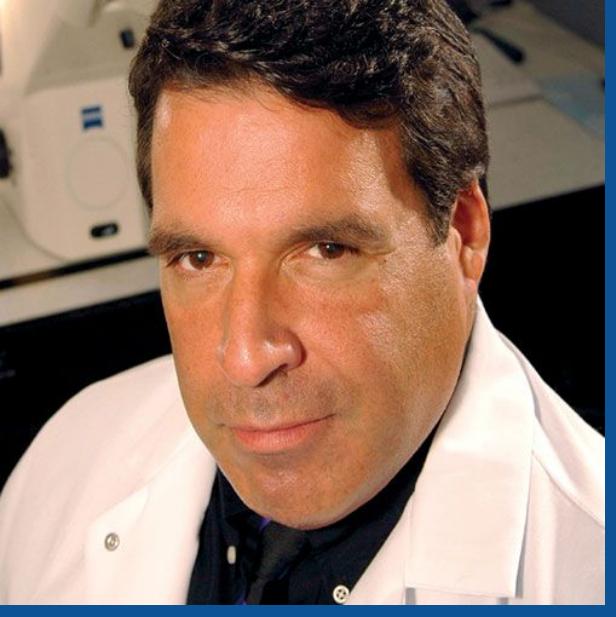
Number of publications: 79



University of Brighton

Richard Faragher is Professor of Biological Gerontology at the University of Brighton and past Chair of the British Society for Research on Ageing, the International Association of Biomedical Gerontology and the American Aging Association. His primary research interest is the relationship between cellular senescence and organismal ageing. In 2002 his work on the accelerated ageing disease Werner's syndrome led to the award of the Royal Pharmaceutical Society Conference Science Medal for outstanding scientific achievement. In 2005 he became the first ever scientist to receive a Help the Aged award for my championship of older people and the use of research for their benefit.

In 2010, he became the first ever British recipient of the Paul F Glenn Award for research into the biological mechanisms of the ageing process. He is a visiting Professor at the Moscow Institute of Physics and Technology and a Trustee of the Biogerontology Research Foundation. He has served as a member of the Research Advisory Council of the Charity Research into Ageing and on strategy and funding panels for the BBSRC, the US National Institutes on Ageing and the European Union. From 2005-2008 he was Co-director of the BBSRC-EPSRC SPARC programme, a research network designed to build national capacity to conduct inter-disciplinary ageing research. In 2015 he became the first British citizen to be elected to the Board of Directors of the American Federation for Aging Research, the leading US non-profit organization supporting and advancing healthy aging through biomedical research. In 2016 he was presented with the highest award for services to gerontology in the United Kingdom, the Lord Cohen of Birkenhead Medal and became a Fellow of the American Aging Association.



Robert Hariri

Co-Founder, Human Longevity Inc



HUMAN
LONGEVITY,
INC.

Warren, USA

Category: Entrepreneurs

Bob Hariri is a surgeon, biomedical scientist and highly successful serial entrepreneur in two technology sectors: biomedicine and aerospace. The Chairman, Founder, Chief Scientific Officer, and former Chief Executive Officer of Celgene Cellular Therapeutics, one of the world's largest human cellular therapeutics companies, Dr. Hariri has pioneered the use of stem cells to treat a range of life threatening diseases and has made transformative contributions in the field of tissue engineering.

Dr. Hariri was recipient of the Thomas Alva Edison Award in 2007 and 2011, The Fred J. Epstein Lifetime Achievement Award and has received numerous other honors for his many contributions to biomedicine and aviation. Dr. Hariri also serves on numerous Boards of Directors including Myos Corporation and Provista Diagnostics. Dr. Hariri is an Adjunct Associate Professor of Pathology at the Mount Sinai School of Medicine and a member of the Board of Visitors of the Columbia University School of Engineering & Applied Sciences and the Science & Technology Council of the College of Physicians and Surgeons, and is a member of the scientific advisory board for the Archon X PRIZE for Genomics, which is awarded by the X PRIZE Foundation. Dr. Hariri is also a Trustee of the Liberty Science Center and has been appointed Commissioner of Cancer Research by NJ Governor Christie. Dr. Hariri is also a member of the Board of Trustees of the J. Craig Venter Institute.



Robert Young

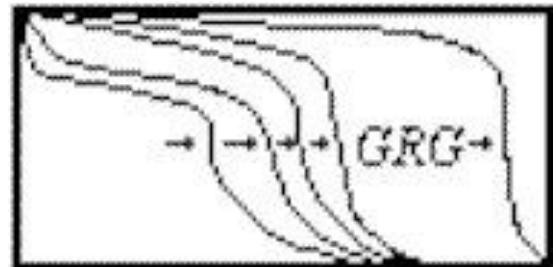
Co-Director, Gerontology Research Group

Los Angeles, CA, USA

Category: Research and Academia

H-index: 7

Number of publications: 24



Robert Douglas Young is a gerontology consultant and researcher best known for validating supercentenarian cases and debunking longevity claims. He is the current Senior Consultant for Gerontology for Guinness World Records (since 2005) and the Co-Director for the Gerontology Research Group (since 2015). Young has worked on several books, including Guinness World Records editions 2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2005 and 1997, World Almanac 2004, The Wisdom of the World's Oldest People (2005), by Jerry Friedman (whose photographic exhibits of supercentenarians were presented at the United Nations in July 2006), and Living in Three Centuries (2006), by Mark Story. Young graduated summa cum laude from Georgia State University in 2006, with a Bachelor of History degree and an Undergraduate Certificate in Gerontology. In August 2008, Young obtained a Master of Arts in Gerontology degree from Georgia State University. Young obtained a second Masters in History at GSU in 2011, with a concentration in World History endorsement. Young's interdisciplinary approach, combining gerontology and history, led to such works as the history of extreme longevity tracking, the history of longevity mythology, and the like. Robert has, since 1999, maintained lists of the world's oldest people for the Gerontology Research Group (becoming the main person in charge of the data since May 2002), and has also worked with the Max Planck Institute for Demographic Research, the New England Centenarian Study and the Social Security Administration to establish global databases on the world's oldest people. Jean-Marie Robine of France, validator of the Jeanne Calment case, worked with INSERM to establish the International Database on Longevity in 2005. Young is now a listed contributor as of 2010.



Robin Farmanfarmaian

Vice President, Business Development,
Actavalon

Palo Alto, CA, USA
Category: Media and Publicity Influencers



Robin Starbuck Farmanfarmaian is a professional speaker, entrepreneur and angel investor working on companies in cutting edge tech poised to impact 100M people or more. With over 125 speaking engagements in 12 countries, she educates audiences on technology, the future of healthcare, patient empowerment, building thought leadership, and more. Her first book, "The Patient as CEO: How Technology Empowers the Healthcare Consumer", is a #1 Best Seller on Amazon. Her 2nd book published in March, 2019: "The Thought Leader Formula: Strategically Leverage Your Expertise to Drive Business & Career Goals".



S. Jay Olshansky

Co-Founder and Chief Scientist, Lapetus Solutions Inc

Buffalo Grove, IL, USA

Category: Research and Academia

H-index: 30

Number of publications: 110



Stuart Jay Olshansky (born February 22, 1954) is a professor in the School of Public Health at the University of Illinois at Chicago concentrating on biodemography and gerontology and is co-founder and Chief Scientist at Lapetus Solutions, Inc.

He is also a research associate at the Center on Aging (University of Chicago) and at the London School of Hygiene and Tropical Medicine. Olshansky is an associate editor of the Journal of Gerontology: Biological Sciences and Biogerontology and is a member of the editorial boards of several other scientific journals. Olshansky has been working with colleagues in the biological sciences to develop the modern "biodemographic paradigm" of mortality – an effort to understand the biological nature of the survival and dying out processes of living organisms. The focus of his research has been on estimates of the upper limits to human longevity, exploring the health and public policy implications associated with individual and population aging, forecasts of the size, survival, and age structure of the population, pursuit of the scientific means to slow aging in people (The Longevity Dividend), and global implications of the re-emergence of infectious and parasitic diseases, and insurance linked securities.

Olshansky has been a vocal supporter of scientific attempts increase the human healthspan. He is an advocate for prolonging the healthy life-span compared to increasing the overall length of life as such. In an interview he advocated for further study of calorie restriction, genetic study of humans centenarians, and for further study on life extension and senescence. He is co-author with Bruce A Carnes of *The Quest for Immortality: Science at the Frontiers of Aging* (Norton, 2001) and with Jim Kirkland and George Martin he co-edited "Aging: The Longevity Dividend", published in 2015.



Sally Greengross

Treasurer, All-Party Parliamentary Group for Longevity

London, UK

Category: Politics, Policy and Governance



Sally Greengross, Baroness Greengross, OBE (born 29 June 1935) is a British politician. Awarded an OBE in the 1993 New Year's Honours, Sally Greengross was raised to the peerage as Baroness Greengross, of Notting Hill in the Royal Borough of Kensington and Chelsea in the year 2000, sitting as a crossbencher. Greengross was Director General of Age Concern England from 1987 until 2000; also until 2000, she was joint Chair of the Age Concern Institute of Gerontology at King's College London, and Secretary General of Eurolink Age. Her appointments include that of Chair of the Advisory Groups for the English Longitudinal Study of Ageing (ELSA) and the New Dynamics of Ageing (NDA); and Chief Executive of the International Longevity Centre - UK, President of the Pensions Policy Institute and Honorary Vice President of the Royal Society for the Promotion of Health. She has been an independent crossbench member of the House of Lords since 2000 and chairs three All-Party Parliamentary Groups: Corporate Social Responsibility, Intergenerational Futures: Old & Young Together and Continence Care. She is the Vice Chair of the All-Party Parliamentary Group on Dementia and Ageing and Older People, and is Treasurer of the All-Party Parliamentary Group on Equalities. In December 2006, it was announced that she would be a Commissioner for the Equality and Human Rights Commission. She holds honorary doctorates from a number of British universities. She has been awarded an Honorary Doctor of Letters (DLitt) degree by the University of Ulster in 1994, Brunel University in 2002, University of Keele in 2004. She was awarded a Doctor of the University (DUniv) degree by the Kingston University in 1996, the Open University and Leeds Metropolitan University in 2002. She was awarded an Honorary Doctor of Laws (LLD) by the University of Exeter in 2000.



Sam Altman

President, Y Combinator / Co-Chairman,
OpenAI

Y Combinator

San Francisco, CA, USA

Category: Investors and Donors

Sam Altman grew up in St. Louis, Missouri; his mother was a dermatologist. He received his first computer at the age of 8. He was raised Jewish and is gay. He attended John Burroughs School for high school and studied computer science at Stanford University until dropping out in 2005. While studying at Stanford, he worked in the AI Lab. In 2017 he received an honorary degree from the University of Waterloo. In 2005, at age 19, Altman co-founded and became CEO of Loopt, a location-based social networking mobile application. Loopt was shut down in 2012 after failing to get traction and was acquired by the Green Dot Corporation for more than \$43 million. Altman began as a part-time partner at Y Combinator in 2011. In February 2014, Altman was named president of Y Combinator by its co-founder Paul Graham.

He is a personal investor in many companies, including Airbnb, Stripe, Reddit, Asana, Pinterest, Teespring, Zenefits, FarmLogs, Shoptiques, Instacart, Optimizely, Verbling, Soylent, Reserve, Vicarious, Clever, Notable PDF and Change.org.

He was the CEO of Reddit for eight days in 2014 after CEO Yishan Wong resigned. As part of his investment, he developed a new way for the community to own part of the company. He announced the return of Steve Huffman as CEO on July 10, 2015. He is chairman of the board for Helion and Oklo, two nuclear energy companies. He has said that nuclear energy is one of the most important areas of technological development.

Altman and Elon Musk were the co-chairmen of OpenAI. OpenAI is a nonprofit whose goal is to advance digital intelligence in a way that is most likely to benefit humanity as a whole, rather than cause harm.



Sergey Young

Founder, Longevity Vision Fund



Delaware, DE, USA

Category: Investors and Donors

Sergey Young is the Founder of the \$100M Longevity Vision Fund ("LVF"), which invests in startups and companies that develop technologies, products, and services to extend healthy human lifespans and overcome the negative effects of aging and age-related diseases.

Sergey's investment activity at LVF builds on his 20-year expertise delivering above-average returns at a private equity fund with \$2B in assets and as a Co-Founder of Peak State Ventures, a US-based fund focused on new technologies in Real Estate, Digital Healthcare and the Future of Work. Sergey Young is also an Innovation Board Member at XPRIZE Foundation, a non-profit organization founded by Peter Diamandis, and Development Sponsor for the soon-to-be-launched Longevity XPRIZE.

Sergey Young: "Global longevity has gone from underfunded sector to a booming industry embraced by investors, scientists and the media within just a few years. I launched Longevity Vision Fund to help at least 1 billion people to live longer and healthier lives through investing into companies working at the forefront of science and technology. This open-access report, landscaping Longevity Industry efforts in California, reflects only a small portion of the enormous volume of activities aiming to extend healthy human longevity that are happening around the world."



Stephen Bloch

Investment, Innovation & Disruption,
Innovation Warehouse

INNOVATION
WAREHOUSE

London, UK

Category: Investors and Donors

Stephen Bloch is an experienced business professional, advisor, mentor and entrepreneur with a broad range of UK and international experience. Engaging with start up & early stage businesses as well as having held Multiple Board level positions and placements with companies in the UK, Australia and Spain. He has working knowledge and established contacts in a range of markets in TMT, life sciences, resources, real estate, and in the entertainment industries.

He makes investments for technology entrepreneurs and start-ups at the Innovation Warehouse London. Interests include Longevity and Sustainability sectors. Stephen held multiple board level positions with companies in the UK, Australia, and Spain.



Stephen Johnston

Co-founder, Aging 2.0

AGING^{2.0}

San Francisco, CA, USA

Category: Entrepreneurs

Stephen Johnston MBA is a co-founder of Aging2.0 a global innovation platform for aging and senior care, founder of Fordcastle, an innovation consultancy and a member of the Future Agenda, the world's largest open foresight initiative. Stephen serves on the board of Music and Memory a New York 501c3 nonprofit focused on improving the quality of life for older people, He is co-author of Growth Champions (Wiley, 2012), a book about sustainable corporate growth. He has an MA in Economics from Cambridge University and an MBA from Harvard Business School where he was a Fulbright Scholar.



Steve Hill

Social Media Manager, SENS Research Foundation / Science Journalist, Life Extension Advocacy Foundation
Luton, UK
Category: Media and Publicity Influencers



Steve serves on the LEAF Board of Directors and is the Editor in Chief, coordinating the daily news articles and social media content of the organization. He is an active journalist in the aging research and biotechnology field and has to date written over 500 articles on the topic as well as attending various medical industry conferences.

In 2019 he was listed in the top 100 journalists covering biomedicine and longevity research in the industry report – Top-100 Journalists covering advanced biomedicine and longevity created by the Aging Analytics Agency. His work has been featured in H+ magazine, Psychology Today, Singularity Weblog, Standpoint Magazine, and, Keep me Prime, and New Economy Magazine.

Steve has a background in project management and administration which has helped him to build a united team for effective fundraising and content creation, while his additional knowledge of biology and statistical data analysis allows him to carefully assess and coordinate the scientific groups involved in the project.

In 2015 he led the Major Mouse Testing Program (MMTP) for the International Longevity Alliance and in 2016 helped the team of the SENS Research Foundation to reach their goal for the OncoSENS campaign for cancer research.



Steven Horvath

Professor of Human Genetics & Biostatistics,
UCLA School of Public Health

Los Angeles, CA, USA

Category: Research and Academia

H-index: 40

Number of publications: 429

**UCLA
FIELDING
SCHOOL OF
PUBLIC HEALTH**

Dr. Horvath is an aging researcher and bioinformatician whose research lies at the intersection of epidemiology, chronic diseases, epigenetics, genetics, and systems biology. He developed systems biologic approaches such as weighted gene co-expression network analysis. He works on all aspects of biomarker development with a particular focus on genomic biomarkers of aging.

He developed a highly accurate multi-tissue biomarker of aging known as the epigenetic clock. Salient features of the epigenetic clock include its high accuracy and its applicability to a broad spectrum of tissues and cell types. He develops and applies methods for analyzing and integrating gene expression-, DNA methylation-, microRNA, genetic marker-, and complex phenotype data. His lab members apply and develop data mining methods to study a broad spectrum of diseases, e.g. aging research, cancer, cardiovascular disease, HIV, Huntington's disease, neurodegenerative diseases.



Suzanne Wait

Managing Director, Health Policy Partnership

London, UK

Category: Entrepreneurs

The
Health Policy
Partnership

In a health policy career spanning more than 15 years, Suzanne has helped to run multi-stakeholder initiatives in numerous disease areas. She has broad knowledge of the challenges of intersectoral working and the need for sustainable and person-focused healthcare systems.

Having begun her career at IRDES, the French national centre for health economics in Paris, she worked as Global Health Economist at Novartis Pharma and later as Associate Director of Health Outcomes for Europe and the UK at Bristol-Myers Squibb. She went on to become Director of Research at the International Longevity Centre – UK. She was also a founding member of the European Nutrition for Health Alliance, and is a member of the Coalition to Eradicate Viral Hepatitis in Asia Pacific (CEVHAP).

Suzanne has authored numerous peer-reviewed papers, book chapters and policy reports. She spent five years teaching at the School of Public Policy at University College London, is a former Nuffield Trust Research Fellow at the Judge Institute of Management at Cambridge University, and was Adjunct Professor at the University of Strasbourg.

Suzanne has a Master of Public Health from Columbia University and a PhD in Public Health from the University of Strasbourg. In 2006, she completed a Nuffield Trust-funded post-doctoral fellowship at the University of Cambridge, which looked at benchmarking health systems and public involvement in healthcare.



Thomas Rando

Deputy-Director, Stanford Center on Longevity



STANFORD
CENTER ON
LONGEVITY

San Francisco, CA, USA

Category: Research and Academia

H-index: 64

Number of publications: 171

Thomas Rando is Professor of Neurology and Neurological Sciences at Stanford where he is the Director of the Glenn Laboratories for the Biology of Aging. He is also Chief of Neurology and Director of the Rehabilitation Research & Development Center of Excellence at the Veterans Affairs Palo Alto Health Care System. He is a founding director of the Muscular Dystrophy Association clinic at the Stanford Medical Center. Research in the Rando laboratory focuses on tissue-specific stem cells in aging and disease, and on pathogenetic mechanisms and gene therapy for muscular dystrophies. His research on aging has demonstrated that it is possible to identify biochemical stimuli that can induce stem cells in old tissues to repair injuries as effectively as in young tissues, and this work has broad implications for the fields of regenerative medicine and stem cell transplantation.

He is a member of several professional societies, including the American Neurological Association. He is a former Paul Beeson Physician Faculty Scholar in Aging awarded by the American Federation for Aging Research and a former Ellison Medical Foundation Senior Scholar in Aging. In 2005, he received an NIH Director's Pioneer Award for his groundbreaking research in stem cell biology. He received a BA from Harvard College, MD from Harvard Medical School and PhD in Cell and Developmental Biology from Harvard University.



Tina Woods

Founder & CEO, Collider Health



London, UK

Category: Entrepreneurs

Tina Woods is founder of Collider Health, a health innovation catalyst that works with organisations of all shapes and sizes to think and do differently and transform health with meaningful impact. Tina is chair of Future Health Collective, a multi-disciplinary, cross-industry group geared to foster collaboration and radical innovation in areas of unmet need in health and social care. Tina is passionate about helping young businesses and new ventures succeed and looking to pioneer more socially-driven collaborations. She has established relationships with leading incubators, accelerators, investors, digital health startups, clinical innovators and tech corporates. Before founding Collider Health Tina spent many years in the agency world, helping big pharma and other healthcare corporates educate doctors and create awareness around new drugs, treatments and diagnostics. Alongside her commercial work, Tina runs a social enterprise on science innovation, Collider SCIENCE, working with leading scientists, innovators and designers to equip young people with the skills and confidence to become inventors and change agents in science and medicine.

Collider Health is a health innovation catalyst that works with organisations of all shapes and sizes to think and do differently and transform health with meaningful impact, via collaborative ventures and strategic partnerships. The pace of innovation needs to keep up with today's relentless quest for better health solutions at lower cost. Companies need to be more agile and evolve business models to avoid being left behind or becoming extinct. Innovators across the spectrum of wellcare and sickcare, in large and small organisations, need support to connect ideas with money and collaborate better together.



Tom Kirkwood

Associate Dean for Ageing, Newcastle University



Newcastle University

Newcastle, UK

Category: Research and Academia

H-index: 65

Number of publications: 320

Tom Kirkwood is Professor of Medicine and Director of the Institute for Ageing and Health at Newcastle University, UK. After training in mathematics and biology at the Universities of Cambridge and Oxford he first worked on the measurement of blood clotting and fibrinolytic factors. Early in his career he began an interest in the biology of ageing which he has followed since 1975. In 1977 he put forward the 'disposable soma' theory that unites the evolutionary and mechanistic understanding of ageing within a single framework. His subsequent research has included pioneering studies on the intrinsic ageing of stem cells, on the genetic factors underpinning longevity, and on systems biology approaches to unravelling the complexity of the mechanisms of ageing. He was awarded the inaugural Henry Dale Prize of the Royal Institution for multidisciplinary research and was BBC Reith Lecturer in 2001 bringing the science of ageing to a global audience. His books include the award winning Time of Our Lives: The Science of Human Ageing written for a general readership, Chance, Development and Ageing (with Caleb Finch), and Accuracy in Molecular Processes: Its Control and Relevance to Living Systems.

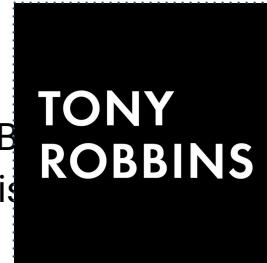
Kirkwood was appointed Commander of the Order of the British Empire (CBE) in the 2009 New Year Honours.



Tony Robbins

#1 New York Times
Life and Business
Entrepreneur

B
Strategist



Author,
philanthropist,

San Diego, CA, USA
Category: Media and Publicity Influencers

For over 30 years his passion has been helping people to BREAKTHROUGH and take their lives to another level - no matter how successful they already are - in the areas that matter most: their business, personal finance, intimate relationships, families, careers and health.

He has been honored to help over 50 million people from more than 100 countries transform their lives and their businesses through his live events, books, audio programs, health products and personal coaching. He has been fortunate enough to work with everyone from presidents of countries, to some of the true legends of entertainment, sports and the business world. But his work is not limited to Fortune 500 CEOs and athletes. He has a special passion for small business owners, parents and students.

Being the Chairman of 7 privately-held companies and 5 holding companies in diverse industries keeps him pretty busy. Many of our companies have become brands that are leaders in their category - from the award winning Namale Resort & Spa in the Fiji Islands, to Twinlab and Metabolife in the sports nutrition field, to the Anthony Robbins brand in personal & professional improvement.



Vadim Gladyshev

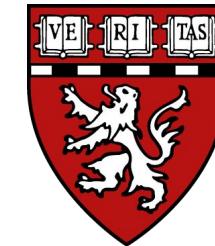
Professor at Harvard Medical School

Boston, Massachusetts, USA

Category: Research

H-index: 79

Number of publications: 388

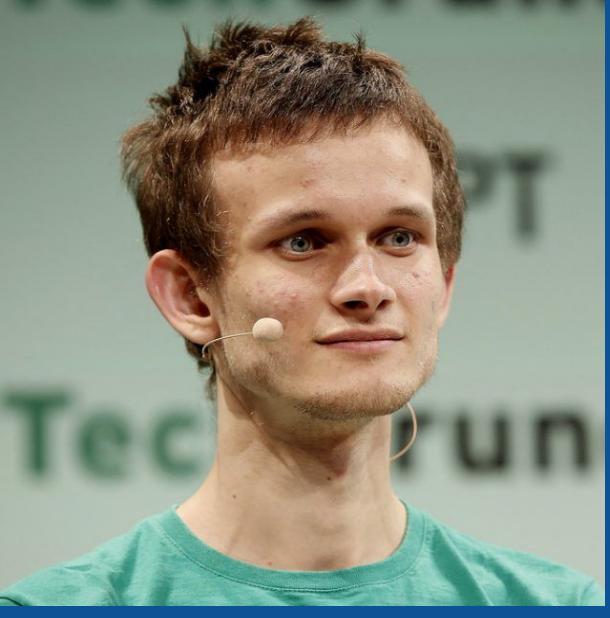


and

Academia

Dr. Vadim Gladyshev, Professor of Medicine and Director of Redox Medicine at Brigham and Women's Hospital, Harvard Medical School, in Boston, Massachusetts. He is an expert in aging and redox biology and is known for his characterization of the human selenoproteome. His research laboratory focuses on comparative genomics, selenoproteins, redox biology, and, naturally, aging and lifespan control.

Dr. Gladyshev graduated from Moscow State University, in Moscow, Russia; his postdoctoral studies in the 1990s took place at the National Heart, Lung, and Blood Institute, and the National Cancer Institute, in Bethesda, Maryland. Even when he was young, he was very much interested in chemistry and experimental science: he twice won the regional Olympiad in chemistry and graduated from high school with a gold medal. He also graduated with the highest honors from Moscow State University. This enviable track record is even more impressive considering that Dr. Gladyshev completed music school and high school at the same time and became a chess player equivalent to national master during his college years.



Vitalik Buterin

Co-founder, Ethereum

Toronto, Canada

Category: Investors and Donors



ethereum

“Boy Genius” and “Wunderkind” are just some of the terms that have been used to describe Vitalik Buterin, the 24-year-old co-founder of Ethereum. The Russian-Canadian math genius is responsible for creating Ethereum, the second most valuable cryptocurrency in the world.

Unlike the unknown Bitcoin creator, Satoshi Nakamoto, whose identity remains a mystery to this day, Vitalik is a known face in the cryptocurrency and blockchain communities. He has continued to lead the way in the development and advocacy for the blockchain tech movement. He is even a regular participant in conferences and online discussions centered around not just only the technical aspects of the technology, but also the general philosophy and how it affects mankind.

Vitalik donates money in different spheres, including longevity:

- Donation of \$763,970 worth of Ether to the Machine Intelligence Research Institute in 2017.
- Donation of \$2.4 million worth of Ether to the SENS Research Foundation in 2018, for the research on rejuvenation biotechnologies and human life extension.
- Donation of \$1 million worth of Ether in conjunction with the Ethereum-based OmiseGO open payment platform to the GiveDirectly organization aimed at helping the poorest of poor refugees in Africa, in 2018.
- Donation of \$93,469 worth of Ether, matched by the Pineapple Fund, to the Internet Archive in 2018.



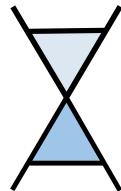
Zoltan Istvan

Transhumanist

Mill Valley, CA, USA

Category: Politics and Government Officials

Zoltan Istvan, an American-Hungarian, began a solo, multi-year sailing journey around the world at the age of 21. His main cargo was 500 handpicked books, mostly classics. He's explored over 100 countries—many as a journalist for the National Geographic Channel—writing, filming, and appearing in dozens of television stories, articles, and webcasts. His work has also been featured by The New York Times, Outside, Wired UK, Slate, Vice, San Francisco Chronicle, BBC Radio, CNN, CBS, RT, Fox News, the Travel Channel, and in much other media. In addition to his award-winning coverage of the war in Kashmir, he gained worldwide attention for pioneering and popularizing the extreme sport of volcano boarding. Zoltan later became a director for the international conservation group WildAid, leading armed patrol units to stop the billion-dollar illegal wildlife trade in Southeast Asia. Back in America, he started various successful businesses, from real estate development to filmmaking to viticulture, joining them under ZI Ventures. He is a philosophy and religious studies graduate of Columbia University and resides in San Francisco with his daughters and physician wife. Zoltan recently published "The Transhumanist Wager," an award-winning fictional thriller describing philosopher Jethro Knights and his unwavering quest for immortality via science and technology. It was a Top 5 Amazon book. Zoltan writes futurist and transhumanist-themed blogs for The Huffington Post, Psychology Today, and Vice's Motherboard. Zoltan is also founder of the Transhumanist Party and ran a successful and widely viewed 2016 US presidential campaign. He is one of the most visible and popular futurists in the world. In 2018, he was an endorsed Libertarian candidate for California Governor.



AGING ANALYTICS AGENCY

www.aginganalytics.com | info@aginganalytics.com

Aging Analytics Agency is the world's premier provider of industry analytics on the topics of Longevity, Precision Preventive Medicine and Economics of Ageing, and the convergence of technologies such as AI, Blockchain, Digital Health and their impact on the healthcare industry, renowned for its development of sophisticated comparative analytical frameworks allowing for practical and tangible forecasts to be applied to industries that are otherwise too complex for standard analytical approaches to be used in a relevant way. The company provides strategic consulting services in fields relating to Longevity, and currently serves as the primary source of analytics and data for the UK All-Party Parliamentary Group for Longevity.

The agency focuses on the convergence of technological megatrends, deep science and advanced technologies, and the development of multidimensional analytical frameworks that possess a level of complexity proportional to the industries and domains they are analysing, was a necessary requirement in order to conduct effective industry analysis, forecasting and benchmarking of the Longevity, Advanced Biomedicine and Precision / Preventive / Personalised Medicine at the minimum level of relevance and pragmatism.

These ongoing proprietary analytics have consistently been accompanied by the production of vast open-access landscape overviews on the Longevity industry of particular geographic regions, and on specific technological domains, in many cases more than 1,000 pages in length. The purpose of producing these broad landscape overviews is to serve as a kind of analogue of Wikipedia and the Encyclopedia Britannica for the Longevity industry, widely disseminating ongoing developments in the global Longevity Industry in order to promote its continued growth, expansion and refinement. But, they also serve an important secondary purpose as well: laying the groundwork for a comprehensive understanding of the entire scope of the industry across the globe, and facilitating a greater comprehension of the specific industry players, their activities, and their interconnections. In other words, these reports establish the necessary foundation upon which more targeted, relevant and complex analyses can be executed.

Today, these analytical methodologies have evolved to incorporate 3-D frameworks where metrics and submetrics can be visualized simultaneously, as well as the development of "timeline machines" that allow to review the changing state of a company's strength in specific areas ranging from scientific validation to business development, R&D, etc. to be visualized over time, and projected into the future based on the statistical properties of its past behaviour.



AGING ANALYTICS AGENCY

Link to the Report: <https://www.aginganalytics.com/top-100-leaders>

E-mail: info@aginganalytics.com

Website: www.aginganalytics.com

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