Appendix I

Top 100
Longevity Companies
Profiles

Top 100 Longevity Companies

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50. Ichor Therapeutics
51. Inception Sciences
52. Insilico Medicine
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54. Juventas Therapeutics
55. Kailos Genetics
56. Leadhexa Biotechnologies
57. LifeGen
58. Longevity Biotech
59. MacuCLEAR
60. Mesoblast
61. Metabomed
62. Mitobridge
63. Mitotech
64. Navitor
65. Nemaura
66. NovaDip Biosciences
67. NuSirt
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69. NOX Technologies
70. Orig3n
71. Osiris Therapeutics
72. Oxstem
73. PHIGENIX
74. Pluristem
75. Population Bio
76. Prana Biotechnology
77. Proteome Sciences
78. Proteostasis Therapeutics
79. PureTech Health
80. Retrotope
81. Quark Pharmaceuticals
82. Quincy Bioscience
83. Rapamycin Holdings
84. ReThink Pharmaceuticals
85. Revance Therapeutics
86. BiomX
87. Samumed
88. Semma Therapeutics
89. Signum
90. Silene Biotech
91. Sierra Sciences
92. SIWA Therapeutics
93. TauRx Therapeutics
94. Unity Biotechnology
95. Universal Cells
96. Vault
97. Vericel Corporation
98. Veritas Genetics
99. Visgeneer
100. Youth Laboratories

Aeonian Pharmaceuticals

Aeonian Pharmaceuticals, Inc. is an early stage research and development biopharmaceutical company based in the San Francisco Bay Area. The company harnesses the latest scientific breakthroughs to discover, develop and commercialize innovative therapeutics for the treatment of rare and age-related diseases. Aeonian's research focus falls on the causes of disease initiation and progression; it develops compounds that are are novel and highly selective therapeutics that modulate the mTORC1 pathway, which is at the core of many different rare diseases.

Aeonian's proprietary platform is supported by an extensive intellectual property portfolio. Part of that portfolio has been obtained by assignment from the Buck Institute of Novato, California, the nation's first independent research facility focused solely on dissecting the connection between aging and chronic diseases.

https://www.aeonianpharma.com/

Board of Directors:

James Peyer

Management team:

Stelios Tzannis: Chief Executive Officer

Funding To Date

Apollo Ventures

AgeX Therapeutics

AgeX Therapeutics is a subsidiary of BioTime Inc., a regenerative medicine company that provides a wide range of therapies with a focus on pluripotent stem cells. As BioTime grew, becoming one of the leaders in the regenerative medicine field, it created numerous subsidiary companies to structure its research programs. AgeX is a biopharmaceutical company formed in order to consolidate BioTime's subsidiaries and commercialize IP of their parent company. AgeX's initial goal is to develop anti-aging therapies using both telomere and pluripotent stem cells approaches. The company is currently researching stem cell-mediated means to treat Type II diabetes and cardiovascular disease with the project concerning the latter launched in April 2017. AgeX is also working on Induced Tissue Regeneration (iTR) — an anti-ageing system that allows adult tissues to express the restorative properties normally found only in infants. The research conducted in collaboration with Insilico Medicine shows that those regenerative mechanisms can enable the regrowth of tissues and, potentially, even organs. With AgeX functioning, BioTime is able to allocate its resources towards age-related macular degeneration (AMD) and drug delivery research, while giving its anti-ageing projects more financial freedom.

http://www.agexinc.com/

Board of Directors*:*

Alfred Kingsley J.D.
Michael Mulroy

Management team:

Michael D. West, PhD: Chief Executive Officer
Aubrey de Grey, PhD: Vice President of New Scientific Discovery
Russell Skibsted, MBA, Interim Financial Officer
Hal Sternberg, Ph.D., Vice President of Research
Dana Larocca, Ph.D. Vice President, Discovery Research
Ivan Labat, Ph.D., Corporate Secretary

Funding To Date

$10M (BioTime Inc.)

Alkahest

Alkahest was founded in 2014 by Tony Wyss-Coray as a spin-off at Stanford University. It is also one of the first companies settled in Johnson & Johnson's incubator from South San Francisco, San Carlos. Tony Wyss- Coray discovered that the transfusion of blood from young mice to older ones can reverse the process of age-related cognitive impairment. Further research allowed the company to isolate blood factors and currently the company works on plasma-based therapies applicable to humans. Currently Alkahest is conducting clinical trials on patients with different types of dementia and other neurodegenerative diseases. Alkahest has taken on one of the most innovative approaches in dealing with Alzheimer's. Most research focuses on interrupting the creation of the Tau protein, whereas Alkahest aimed at a pathway in which memories are cleaved. Currently the company seeks partnership opportunities that would facilitate further development of therapies aiming to treat age-related diseases. In March 2015 their first strategic investment was made with $37.5 million for a 45% share of Grifols. This strategic partner is a leader in plasma-based medicines worldwide.

Board of Directors:

Tony Wyss-Coray: Founder
Karoly Nikolich: Founder/Chairman of Board of Directors
Joseph S. McCracken: Vice president of Business Development
Thomas Glanzman: Director of Grifols

Management team:

David Bell: Corporate Vice President of Grifols
Management Team:
Karoly Nikolich: CEO
Steven Braithwaite: CSO
Joseph S. McCracken: Vice President of Business Development
Tammy Ken: Vice President Human Resources and Operations

Funding To Date :

Last Round: $37.5 M

Antoxis

Antoxis is a private pharmaceutical company that provides a drug discovery platform for various pharmaceutical markets. The company uses Kromex chemistry scaffold to generate novel treatments. Currently, Antoxis develops therapies for regenerative medicine and oncology. The company has a broad intellectual property position covering more than 100 million compounds within Kromex scaffold. Among numerous chemical structures, few have already shown enough potential pharmaceutical value to be included in the drug development pipeline. They include Proxison, an inhibitor of lipid peroxidation used in mediating damage from transplanted stem cells; Oncamex, mitochondrial redox modulator with an ability to sensitize TRAIL-resistant cancer cell lines; and Proxison, an inhibitor of oxidative stress in mitochondrial dysfunction, with proven efficacy in Parkinson's and Stroke models of disease.

https://antoxis.com/

Leadership:

Board of Directors:
Andrew Johnstone: Founder, Board Member & Chief Executive Officer
Andrew Porter Ph.D: Co-Founder Douglas Thomson: Board Member
Keith Winton: Board Observer and Company Secretary
Malcolm Gillies: Board Member

Management team:

Donald McPhail: Co-Founder, Chief Scientific Officer & Scientific Consultant
Leslie Patmore Ph.D: Director of Drug Development
Keith Winton: Board Observer and Company Secretary
Andrew Johnstone: Founder, Board Member & Chief Executive Officer

Funding To Date:

$2M from 6 investors (Genomia Fund, Grampian Biopartners, Kapital Ventures, Scottish Enterprise, TRI Cap)

AstraZeneca

AstraZeneca is an international public biopharmaceutical company based in Cambridge, England. AstraZeneca was formed from Astra AB and Zeneca Group plc in 1999. AstraZeneca is known to have intense R&D workflow with over 11,000 employees at the company's research facilities around the globe. The company holds a portfolio of drugs in various major disease areas, including age-related diseases and oncology. AstraZeneca's drug pipeline consists of 133 projects with 12 candidates in Phase III clinical trials. AstraZeneca is developing several rapalogs, short for rapamycin analogs. Rapalogs are highly effective inhibitors of mechanistic target of rapamycin (mTOR) that are used as immunosuppressants and anticancer drugs. AstraZeneca has developed multiple oncology medicines and has past experience in researching mTOR inhibitors. The company's most promising candidate is Vistusertib, also known as AZD2014. Vistusertib is a selective rapalog designed to be administered orally. The drug has shown its efficacy in treating various types of cancer, with Phase II trials successfully finished for colorectal, gastric, non-small cell lung, ovarian cancer, solid tumors and diffuse large B-cell lymphoma.
https://www.astrazeneca.com

Leadership:

Board of Directors:
Leif Johansson: Non-Executive Chairman of the Board
Pascal Soriot: Executive Director and Chief Executive Officer
Marc Dunoyer: Executive Director and Chief Financial Officer
Rudy Markham: Senior independent Non-Executive Director
Geneviève Berger: Non-Executive Director
Bruce Burlington: Non-Executive Director
Philip Broadley: Non-Executive Director
Graham Chipchase: Non-Executive Director
Baroness Shriti Vadera: Non-Executive Director
Marcus Wallenberg: Non-Executive Director
Nazneen Rahman: Non-Executive Director

Management team:

Pascal Soriot: Executive Director and CEO
Marc Dunoyer: Executive Director and CFO
Katarina Ageborg: Chief Compliance Officer
Sean Bohen: Executive Vice-President, Global Medicines Development and Chief Medical Officer
Pam Cheng: Executive Vice-President, Operations and Information Technology
Fiona Cicconi: Executive Vice-President, Human Resources

Funding To Date:

Funding undisclosed.
IPO / Stock: May 21, 1993/LSE:AZN
Revenue 2015/2014: $24,708/$22.500 million
Number of Clinical/Preclinical Trials:
IPO Date May 21, 1993.

Athersys INC

Founded in 1995 in Delaware, Athersys is a biotech company that develops stem cell therapies for applications of various diseases. Their patented product, MultiStem®, is currently being included in a number of clinical trials to prove its efficacy against different diseases. The most advanced ones are Ischemic Stroke (Phase II completed, moving to Phase III), Acute Myocardial Infarction (Phase I completed, moved to Phase II), Inflammatory Bowel Disease (final stage of Phase II), and HSC Transplant (Phase I completed, Orphan designation by FDA granted). Moreover, there are a number of early stage projects in areas such as Neurological, Cardiovascular, Inflammatory and Immune, and Metabolic diseases that are in the preclinical stage or have made it through the IND phase. The company had also successfully licensed its MAPC technology to RTI SurgicalTM for orthopedic applications. Athersys aims to develop a diverse range of therapeutic products that can treat different diseases and, potentially, extend and enhance human life and healthspan. The company also seeks partnership opportunities with research, clinical, and commercial institutions in order to develop more cost-effective treatments.
http://www.athersys.com

Leadership:
Board of Directors:

Gil Van Bokkelen, PhD
Lee Babiss, PhD
John Harrington, PhD
Ismail Kola, PhD
Lorin J. Randall
Kenneth H. Traub
Jack L. Wyszomierski

Management Team:

Gil Van Bokkelen, PhD: Chairman and Chief Executive Officer
John Harrington, PhD: Executive Vice President and Chief Scientific Officer
William (B.J.) Lehmann J.D.: President and Chief Operating Officer
Laura Campbell: Vice President of Finance
Manal Morsy MD, PhD: Vice President, Global Regulatory Affairs

Funding To Date :

$65.1M in 4 Rounds
$23M (Post Ipo Equity) in Feb, 2017 (Investors Undisclosed)
$9M (Post Ipo Equity) in Mar, 2012 from 3 Investors (Piper Jaffray Private Capital Group, William Blair, First Analysis)
$20M (Post Ipo Equity) in Nov, 2011 from 1 Investor (Aspire Capital Partners LLC)
$13.1M (Post Ipo Equity) in Jan, 2011 from 2 Investors (William Blair, First Analysis)

Revenue 2015/2014: $11.9/$9.6 million.
Number of Clinical/Preclinical Trials:
IPO Date Jun 22, 2007

AxoGen

AxoGen is a Florida-based company that has its stock publicly traded on NASDAQ. AxoGen made its IPO in 2013 and raised $18 million. The company focuses on peripheral nerve repair and already possesses a number of products dedicated to its application. The company's products are mainly available on the North American market (USA, Canada) with a presence in other countries such as the UK, Israel, Switzerland, Spain, Austria, and Greece. However, AxoGen has not yet received wide EU approval. AxoGen based its products on the grafting technique, enabling the reconstruction of damaged nerve connections (Avance® Nerve Graft) on extracellular matrix products that protect damaged nerves (AxoGuard® Nerve Connector, AxoGuard® Nerve Protector) and devices (AcroValTM, AxoTouchTM). According to the company's information, AxoGen is now involved in a major initiative which will enable an increase in sales and marketing capabilities whilst also increasing acceptance among the medical community. The company relies on the manufacturing capabilities of subcontractors regarding its medical device products such as AcroValTM and AxoTouchTM.
https://www.axogeninc.com/

Leadership:

Jamie M. Grooms
Mark Gold M.D.
joe Mandato
Guido J. Neels
Robert J. Rudelius
Karen Zaderej
Gregory G. Freitag

Management Team:

Karen Zaderej - President and Chief Executive Officer
Peter J. Mariani - Chief Financial Officer
Gregory G. Freitag - Senior Vice President Business Development
Mark Friedman, PhD - Vice President of Regulatory Affairs and Quality Assurance
Erick DeVinney - Vice President of Clinical and Translational Science

Funding To Date :

$69.92M in 7 Rounds from 5 Investors
$17.5M (Post Ipo Equity) in Aug, 2015 from 1 Investor (Essex Woodlands Health Ventures)
$13M (Post Ipo Equity) in Feb, 2015 (Investors undisclosed)
$18M (Post Ipo Equity) in Aug, 2013 (Investors undisclosed)
$3M (Debt Financing) in Jun, 2011 (Investors undisclosed)
$3.7M (Debt Financing) in Jan, 2011 (Investors undisclosed)
$2.62M (Debt Financing) in Jun, 2009 (Investors undisclosed)
$12.1M (Post Ipo Equity) in Dec, 2007 from 4 Investors (Springboard Capital)

Revenue 2015/2014: $27.33/$25.3 million
Number of Clinical/Preclinical Trials:
IPO Date Jan 10, 2003

Avalon AI

Avalon AI use Machine learning to automatically derive accurate brain features (e.g. the volume of the hippocampus) from brain scans and compare them to a normative population. Avalon AI also provide handy 2D and 3D visualisations of brain features. This not only saves time to neuroradiologists but also empowers them to make highly accurate reports, by using the latest techniques and findings in neurosciences. We are currently running trials with select clinics in India, Pakistan and Ukraine. Avalon AI are building the world's most accurate brain degeneration predictor using brain imaging data. Most brain degeneration predictors use only volumetric measurements to predict whether a brain is degenerating, which limits their accuracies. We use data not only from structural MRI scans but also from diffusion and functional MRI scans to maximize the sensitivity and specificity of our prediction. Combining these three types of scans has been shown to reduce the rate of misdetection of Alzheimer's Disease by half, compared to using only structural scans.

http://avalonai.strikingly.com

Leadership:

Olivier van den Biggelaar - CEO & Co-Founder
Alejandro Vicente Grabovetsky - Chief Scientific Officer & Co-Founder

Funding To Date :

BGI

Being the developer of a human genome sequencing technology, this company has established its own technical platforms based on large-scale genomic sequencing, efficient bioinformatics analyses, and innovative genetic health care initiatives.
http://www.genomics.cn/en/index

Leadership:

Jian Wang: Co-Founder & Executive Director

Management Team:

Yin Ye - Board Member & General Manager, bgi Genomics Co,. Ltd.
Zhang Ling - Chief Operating Officer, Bgi Genomics Co., Ltd.
Liu Na - Vice-president, Bgi Genomics Co., Ltd.
Chen Yiqing - Chief Financial Officer, Bgi Genomics Co., Ltd
Li Zhiping - Chief Human Resource Officer, Bgi Genomics Co., Ltd.
Wang Wei - Chief Medical Officer, Bgi Genomics Co., Ltd.
Xu Qian - Board Secretary & General Counsel, Bgi Genomics Co., Ltd.

Funding To Date :

$875.86M in Unknown Number of Rounds
$653.86M (Series B) in January 2015 from 1 Investor (Magic Stone Alternative)

Revenue 2015-2014: $301.64/281.16 M

BIOAGE Labs

BIOAGE Labs is a developer of drugs that impact human aging. The company engages in the development of biomarkers and drugs that will impact human aging by coupling genomic data with machine learning.
http://bioagelabs.com

Leadership:

Kristen Fortney: Chief Executive Officer

Management Team:

Eric Morgen, MD
Alexandra Stolzing, PhD
Jonah Sinick, PhD
Chris Morrissey, PhD

Funding To Date :

$10.9M 28-Jul-2017 Early Stage VC (Series A)

BioLife Solutions

BioLife Solutions is a Delaware-based company that produces a range of biopreservation tools and cryopreservation freeze media for cells, tissues and organs used in the regenerative medicine field, biobanking, organ transplant, stem cell field, drug discovery research, and many others. The portfolio of the company presents patented hypothermic storage and cryopreservation freeze media products, generic blood stem cell freezing and cell thawing media products, custom product and logistics services. The company operates in the field of cryopreservation of biologic material with its patented products HypoThermosol®, CryoStor®, and BloodStor®. The products are uniquely marketed and formulated with a great distinction in quality from other generic products on the market.
https://www.biolifesolutions.com

Leadership: Michael Rice Raymond W. Cohen Andrew Hinson Joseph Schick Rick Stewart Thomas Girschweiler	**Management Team:** Michael Rice: President and Chief Executive Officer Aby J. Mathew, PhD: Senior Vice President and Chief Technology Officer Todd Berard: Vice President of Marketing Mat Snyder: Vice President, Global Sales
Funding To Date : $15.4M IPO in March 2014	IPO / Stock:Jan 10, 2003 Revenue 2015/2014: $3.8/$1.8 million

BioMarin Pharmaceutical

BioMarin Pharmaceutical is a biotechnology company based in San Rafael, California. The company was founded in 1997 and its core business and research focuses on Enzyme Replacement Therapies (ERTs) for life-threatening rare genetic disorders. The most advanced product in the pipeline is the small molecule Disapersen for Duchenne Muscular Dystrophy, which has advanced from clinical trials and is being led to FDA and EMA for approvals. Two other drugs are already in Phase III of clinical trials (Pegvaliase for PKU and Reveglucosidase alfa for Pompe disease). There are other ERTs molecules in Phase II for Duchenne Muscular Dystrophy and Achondroplasia. BioMarin is also testing the possibility of gene therapy for Hemophilia type A, which is currently in the preclinical phase. BioMarin has a history of acquisitions and partnerships with a number of other companies and institutions. In 2009 the company acquired LEAD Therapeutics (small molecules for rare types of cancer), which was followed by the acquisition of ZyStor, a company developing ERTs for lysosomal storage disorders. In 2012 BioMarin acquired Zacharon Pharmaceuticals (small molecules targeting glycan metabolism) and in 2014 a histone deacetylase inhibitor chemical library from Repligen for $2 million with the intention of advancing work toward therapies for Friedreich's ataxia and other neurological disorders.
http://www.biomarin.com

Leadership:

Jean-Jacques Bienaimé: Chairman and Chief Executive Officer
V. Bryan Lawlis
David Pyott
Alan Lewis, PhD
Michael Grey
Randy Meier
Elaine Heron

Management Team:

Jean-Jacques Bienaimé: Chairman and Chief Executive Officer
Scott Clarke: Senior Vice President,Product Development
Robert A. Baffi, PhD: Executive Vice President,Technical Operations Joshua A. Grass: Senior Vice President, Corporate and Business Development
Henry J. Fuchs, M.D.: Executive Vice President and Chief Medical Officer Philip Lo Scalzo: Senior Vice President, Chief Compliance Officer
Dan Spiegelman: Executive Vice President and Chief Financial Officer
Ed Von Pervieux: Group Vice President and Chief Information Officer

Funding To Date:

Undisclosed
Acquisitions:
Prosensa ($840M in Cash & Stock) on Nov 24, 2014
Zacharon Pharmaceuticals (undisclosed amount) on Jan 7, 2013

IPO / Stock: Jul 23, 1999 NASDAQ:BMRN
Revenue 2015/2014: $889.9 M/$749.3 M
Number of Clinical/Preclinical Trials: 8/2

BioMarker

BioMarker is a California-based biotechnology company that develops nutraceutical products. Biomarker focuses on identifying genes and proteins involved in aging and age-related diseases. By comparing the differences in expression in animals and humans with the changes in gene and protein expression in models in which aging has been slowed, BioMarker is pinpointing targets for the development of the new anti-aging and anti-disease therapies. The company focuses on approaches that would mimic calorie restriction. The company's nutritional products were supported by in vitro and in vivo data from both animals and humans. Its portfolio of products consists of plant-based combinations BM-A1, BM-A2, and BM-A3.
http://www.biomarkerinc.com

Leadership:

Xi Zhao-Wilson, PhD, MBA: Chairman, Founder
Saul Kent: Director, Founder
Victor V. Vurpillat, PhD, MBA: Vice President, Corporate Affairs, Director

Management Team:

Charles Garvin, J.D.: Chief Executive Officer
Victor V. Vurpillat, PhD, MBA: Vice President, Corporate Affairs, Director Paul C. Watkins, S.M.: Vice President, Business Development
Mike Kope, J.D.: Vice President, Corporate Development
Ivan Labat, PhD: Senior Director, Research & Product Development

BioTime

BioTime is a California-based biotechnology company founded in 1990. Focusing on the field of regenerative medicine, the company is publicly listed on the NYSE. Its diverse pipeline consists of therapies in the area of stem cells, cancer diagnostics, stem cell delivery matrix, and progenitor cells. The most advanced product designed by the company, Renevia®, is for HIV related lipoatrophy, and it is currently in Phase III/ pivotal stage. Another product of BioTime's subsidiary, Asterias Biotherapeutics, is used in Leukemia and has reached Phase II of clinical trials. The company holds in its portfolio a number of subsidiaries that develop products: Asterias Biotherapeutics, Oncocyte, LifeMap Solutions, Ascendance, Cell Cure Neurosciences, OrthoCyte, LifeMap Sciences, and ReCyte Therapeutics. In 2015 BioTime and its portfolio companies achieved significant progress on multiple fronts. The company management currently oversees existing opportunities to expand the product pipeline across all business lines. During the first nine months of 2015 BioTime spent $11.4 million and $29.8 million for research and development, increasing by 17.2% as compared to the same period in 2014. The company also plans to simplify its structure in order to allocate the resources more effectively to develop the most promising stem cell therapies and, thus, benefit from commercial opportunities.
http://www.biotimeinc.com

Leadership:

Board of Directors:
Alfred D. Kingsley: Chairman of the Board
Deborah Andrews
Neal C. Bradsher: CFA
Stephen C. Farrell
Adi Mohanty: Co-Chief Executive Officer
Michael H. Mulroy
Angus C. Russell
David Schlachet
Judith Segall
Michael D. West, PhD

Management Team:

Adi Mohanty: Co-Chief Executive Officer
Michael D. West, PhD: Co-Chief Executive Officer
Russell Skibsted: Chief Financial Officer
François Binette, PhD: Head of Global Development
Oscar Cuzzani, M.D., PhD: Vice President of Clinical Development
Judith Segall: Vice President of Administration and Corporate Secretary
Hal Sternberg, PhD: Vice President of Research

Funding To Date:

$76.38M in 9 Rounds
$10.55M (Post Ipo Equity) in Sep, 2016
$2.2M (Grant) in Jun, 2016
$3.3M (Post Ipo Equity) in May, 2015
$31M (Post Ipo Equity) in Oct, 2014

IPO / Stock: May 5, 1992 / NYSEMKT:BTX
Revenue 2015/2014: $7.04 M/ $5.24 M
Number of Clinical/Preclinical Trials: 6/2

BrainPatch

This company is working on developing a platform technology which uses brain recordings and artificial intelligence to optimise non-invasive brain stimulation for each individual. By releasing the APIs and training materials, the company's aim is to work together with developers around the world to adapt the technology for the widest possible range of clinical and non-clinical applications. As examples of potential use-case scenarios, they are claiming tremor control in patients with Parkinson's, prevention of epileptic fits, and memory enhancement in Alzheimer's in clinics as well as restoration of sleep and concentration in non-clinical settings.

AI-optimised Stimulation: concept stage
Closed-loop Stimulation: adaptation for clinical setting, partnered with Monash University, Australia.
Temporal interference deep-brain stimulation: pre-clinical completed, optimisation for patients, partnered with Imperial College London.
https://brainpatch.io

Leadership:

CEO: Dr. Nickolai Vysokov
CFO: Dauren Toleukhanov

Management Team:

Chief Executive Officer: Dr. Nickolai Vysokov
Chief Financial Officer: Dauren Toleukhanov
Chief Engineer: Illya Tarasenko
IR director: Olga Vysokova
Scientific Advisors: Prof. Steve Potter, Prof. Bazbek Davletov
Blockchain Advisor: Sergey Petkevich
Financial Advisor: Dmitry Kaminskiy

Bluebird Bio

Bluebird Bio is a company based in Cambridge, Massachusetts. It was founded in 1992 focusing on gene therapies and gene editing in application for rare diseases with few or no treatment options. In the pipeline, the company has diverse products under development out of which Lenti-D™ (Cerebral Adrenoleukodystrophy treatment) and LentiGlobin™ advanced to Phase 2/3 of clinical trials. There is also a product for Multiple Myeloma which went through Preclinical stage, while a number of other potential therapies with oncological applications are being developed. All of the therapies are based on a modified Human Immunodeficiency Virus Type-1 (HIV-1). In 2013 collaboration was established with Celgene to develop T cell-based therapies against cancerous cells based on reimbursement system against milestones, and after the development stage, to better manage further licensing agreements. In 2015 a partnership with Kite Pharma was announced to jointly develop and commercialize second generation TCR products against human papillomavirus.
https://www.bluebirdbio.com

Leadership:

Daniel S. Lynch: Chairman
Wendy L. Dixon, PhD
James Mandell, M.D.
John M. Maraganore, PhD
David P. Schenkein, PhD
Mark Vachon
Nick Leschly

Management Team:

Nick Leschly: Chief Executive Officer
David Davidson, M.D.: Chief Medical Officer
Jeffrey T. Walsh: Chief Financial and Strategy Officer
Phillip D. Gregory, PhD: Chief Scientific Officer
Jason F. Cole, Esq.: Chief Legal Officer
Mark D. Angelo, PhD: Senior Vice President, Pharmaceutical Sciences Cyrus Mozayeni, M.D.: Vice President, Business Development and Alliance Management
Manisha Pai: Senior Director, Investor Relations and Corporate Communications

Funding To Date :

$409M in 8 Rounds
$250M (Post IPO Equity) in Dec, 2016
$9.3M (Venture) in Oct, 2012 from 1 Investor (California Institute for Regenerative Medicine)
$60M (Series D) in Jul, 2012 from 7 Investors (RA Capital Management, Deerfield Partners, Third Rock Ventures, ARCH Venture Partners, Forbion Capital Partners, TVM Capital, Ramius Advisors)
$30M (Venture) in Apr, 2011 from 5 Investors (Third Rock Ventures, TVM Capital, Forbion Capital Partners, Easton Capital, ARCH Venture Partners) $4.2M (Grant) in Mar, 2011 (Investors Undisclosed)

Acquisitions: Pregenen in July 2014 ($139.9M in Cash & Stock)
IPO / Stock: Jun 19, 2013 / NASDAQ:BLUE
Revenue 2015/2014: $14.08 M/ $25.42 M
Number of Clinical/Preclinical Trials: 4/6

Calico

Calico is an independent R&D biotech company established in 2013 by Google Inc. and CEO Arthur D. Levinson. Calico's stated goal is to harness advanced technologies to increase our understanding of the biology that controls lifespan in order to devise interventions that enable people to lead longer and healthier lives. Calico has since received an investment of $250 million from the pharmaceutical company AbbVie. Additionally, AbbVie has the option to contribute an extra $500 million at a later date. Both investments will be matched by Google; making this deal worth a possible $1.5 billion. Calico has agreed to be responsible for research and early development during the first five years and continue to advance collaboration projects through Phase 2A for a ten-year period. AbbVie will support Calico in its early R&D efforts as well as after the completion of Phase 2A studies and activities. Both parties will share the costs and profits equally. In another announcement, Calico revealed one of its first development areas: drugs related to a class of compounds called P7C3s, which appear to protect nerve cells in the brain from dying by activating an enzyme called nicotinamide phosphoribosyltransferase that inhibits cell death. The P7C3 compounds, discovered in 2010 by researchers at University of Texas Southwestern in Dallas, have been tested in numerous models of neurodegenerative diseases associated with aging, including Alzheimer's and Parkinson's disease. The P7C3 compounds were previously licensed to Dallas-based 2M Companies. In a new deal, 2M and Calico have entered into a license agreement under which Calico will develop and commercialize compounds resulting from the research program. Additionally, Calico will fund academic and industry research laboratories to support the program.
https://www.calicolabs.com

Leadership:

Daniel S. Lynch: Chairman
Wendy L. Dixon, PhD
James Mandell, M.D.
John M. Maraganore, PhD
David P. Schenkein, PhD
Mark Vachon
Nick Leschly

Management Team:

Nick Leschly: Chief Executive Officer
David Davidson, M.D.: Chief Medical Officer

CCARL

Canada Cancer and Aging Research Laboratories (shortened as CCARL) is a Canadian personalized (P3) medicine company that has a broad therapeutic portfolio. Their main field of work, though, centers around implementing Oncofinder, an Insilico Medicine-patented algorithm that analyses tumor data for the streamlined, personalized and efficient cancer treatment. The company is improving upon Oncofinder technology. CCARL has released a Leukemia Module that is designed specifically to detect this specific cancer type that requires different methods due to its liquid properties. Besides cancer research, the company also takes and active role in anti-ageing research. The core of CCARL scientific team consists of experienced biologists that specialize in various fields of life sciences. CCARL's team has published over 200 publications throughout its history. CCARL implements novel diagnostic methods that are powered by the joint research projects with Pathway Pharmaceuticals and is the only company in Canada that provides transcriptome profiling, analysis of the affected intracellular molecular signaling pathways, and the target therapeutic predictions.
http://www.ccarl.ca

Management Team:

Olga Kovalchuk, MD, PhD, CEO
Igor Kovalchuk, MD, PhD
Andrey Golubov, PhD

Funding To Date
Undisclosed amount (Seed) in 2015 from 1 Investor (Deep Knowledge Ventures)

CELL

Cell Guidance Systems is based in Cambridge (UK), at the heart of one of the world's most exciting biotech regions. We develop medical research tools and technologies that expand the possibilities of life science research and medicine. Established in 2010, our growing success has been achieved by working closely with many researchers from around the world (including Japan, USA, Netherlands, Italy, Singapore, and the UK) to develop truly innovative products that address unmet needs. Many of our products are groundbreaking: For example, ETS-embryo medium (developed in the lab of Prof Magdalena Zernicka-Goetz at Cambridge University) enables the production of "artificial embryos" from stem cells. Another of our technologies, PODS™ (developed in the lab of Prof Hajime Mori at Kyoto Institute of Technology) is overcoming stability issues of many proteins, offering new possibilities in research and hope for new therapies.
https://www.cellgs.com

Leadership:

Michael Jones - Founder, CEO

Funding To Date :

Nov 1, 2015 - £378.1K from undisclosed investors
Oct 30, 2013 - £242.8K from undisclosed investors

CellAge

CellAge is currently developing synthetic promoters specific to senescent cells because promoters that are currently being used to track senescent cells are simply not good enough to be used as therapies. The most prominently used p16 gene promoter has a number of limitations. First, it is involved in cell cycle regulation, which poses a danger in targeting cells that are not diving but are not senescent either, such as quiescent stem cells. Second, organism-wide administration of gene therapy might currently be too dangerous. This means senescent cells only in specific organs will be safe enough to be targeted as the p16 promoter does not provide this level of specificity required to do otherwise. Third, the p16 promoter is not active in all senescent cells. Therefore, after therapies utilize this promoter, a proportion of senescent cells would still remain. Moreover, the p16 promoter is relatively large (2.1kb), making it difficult to incorporate in present gene therapy vehicles. Lastly, to achieve the intended therapeutic effect, the p16 promoter may not be reliable. CellAge is currently constructing a synthetic promoter that has the potential to overcome all of the mentioned limitations. A number of gene therapy companies, including uniQure, AGTC, and Avalanche Biotech, have successfully targeted other types of cells using this technology. Overall, CellAge represents a high risk, high gain candidate portfolio company for potential investors. CellAge has no preclinical studies, only an idea. However, if their idea has scientific merit, they could be a valuable acquisition as the acquisition price would be relatively inexpensive due to a lack of investor competition. The drawbacks with using the p16 promoter to target senescent cells have merit, and if the use of a synthetic promoter could be shown to effectively clear senescent cells as effectively as other approaches while avoiding the drawbacks of using the p16 promoter, they could become a valuable company in the senescent cell clearance space. Other companies (e.g. uniQure, AGTC, and Avalanche Biotech) have successfully targeted other types of cells using synthetic promoters, and evaluating the historical success of this approach vs. their competition, in combination with evaluating the merit of CellAge's current partners (with emphasis on Synpromics), would lead to a reasonable assessment of this company's potential future value.
http://www.cellage.org

Leadership:

Advisory Board:
Dr Mike Capaldi, Business Advisor
Dr Alexandra Stolzing, Scientific Advisor
Dr Juan Carlos Acosta, Scientific Advisor

Management Team:

Mantas Matjusaitis: Founder and CEO
Azuolas Ciukas: COO
Eryk Jan Grzeszkowiak: CMO

Partnerships:

Amino Labs, My Heritage DNA, Robotical, Synpromics, Genomix

Funding To Date
$34K (Crowdfunding) in February 2017

Celularity

Celularity is a privately-held regenerative medicine biopharmaceutical company. Celularity's research revolves around placenta-derived cells as a source of regenerative and stem therapies. With the proprietary technologies, the company is focusing on three main areas: cell therapy, functional regeneration and biosourcing. Celularity's cell therapy technologies are targeting degenerative diseases, such as Crohn's disease, diabetic foot ulcers and peripheral neuropathy. The company is also developing immuno-oncology therapeutics that aim to ensure safe and efficient treatment of oncology pathologies. The other main area of research is functional regeneration. Celularity has an IP over FDA-approved placental biomaterial platform that has a variety of applications from wound treatment to reconstructive surgery. In perspective, this technology may allow functional recreation of lost organs and limbs. Lastly, the company makes biosourcing research. Celularity develops a proprietary platform known as BLUPRINT. This platform is meant to act as a biorepository of cellular information that is combined with genomic and cellular information networks. The main goal of BLUPRINT is to accelerate the innovation process in regenerative and cellular medicine field. Celularity's main advantage over their competitors is their development cycle. While most other regenerative medicine are effectively R&D facilities, Celularity own the end-to-end value chain from procurement of the placenta to deployment of therapies.
https://www.celularity.com

Leadership:

Board of Directors:
Peter H. Diamandis, MD: Co-Founder & Vice-Chairman
John Sculley: Vice-Chairman
Bill Maris: Board Member
Dean Kamen: Board Member
David Deming: Board Member
Andrew Pecora: Board Member
Andrew von Eschenbach: Board Member
Henry Ji: Board Member
Jaisim Shah: Board Member

Management Team:

Robert Hariri, MD, PhD: Chief Executive Officer & Founder
Henry Brock: Chief Commercial Officer
Steven French: Chief Information Officer
Yaron Turpaz, PhD, MBA: Chief Data Scientist & MD of Celularity Singapore
John R. Haines, MBE: Chief Administrative Officer
Brian T. Berning: Chief Financial Officer
Wolfgang Hofgartner, MD, DSc: Chief Operations Officer
Xiaokui Zhang, PhD: Vice President of Research
Jodi Gurney: Chief Innovation Officer
Timothy L. Smith, JD, PhD: Head of Intellectual Property & Business Development

Funding To Date:

$250,000,000 Feb 15, 2018
$40,000,004 Sep 28, 2017

Centagen

Centagen is a biotech company producing novel therapies in regenerative medicine. The company is developing a means for activating regenerative abilities of adult stem cells without the loss of their stem functions. Centagen demonstrates an approach that is mostly unique to anti-aging stem cells therapies by using the person's own cells. By implementing this strategy the company aims to avoid the immunosuppression inevitable in conventional stem therapy (e.g. using exogenous cells). Centagen currently produces Stem Cell 100, a line of nutraceutical supplements that promote stem cell function while inhibiting inflammatory reactions that limit the aforementioned functions.
http://centagen.com

Leadership:

Board of Directors:
Bryant Villeponteau, Ph.D.: President and CSO
Carl Fowler, BSEE.: COO
Gregory Benford, Ph. D.: Chairman
Pierluigi Zappacosta, MS Standford

Management Team:

Bryant Villeponteau, Ph.D.: President and CSO
Carl Fowler, BSEE.: COO

Centrillion Technologies

Centrillion Technologies aims to “finish the work of the human genome project,” which sequenced approximately 98% of the human genome, by utilizing advances in genomic analysis technology. It possesses a fairly robust IP portfolio related to these technologies, and aims to position itself as the leading company capable of delivering the most robust genome analysis. Centrillion offers a range of services to academic and industrial genomic labs, including next generation sequencing, droplet digital PCR, and bioinformatics. The firm also plans to offer a consumer service called Tribecode DNA Ancestry Testing in late 2017, which it claims provides the most detailed ethnicity composition profile available to consumers, which maps consumers’ DNA to roughly 60 distinct populations, including Europe, Asia, Africa, America, and Oceania.
http://www.centrilliontech.com

Leadership:

Wei Zhou, PhD, J.D.: President and Chief Executive Officer
Glenn McGall, PhD: Senior Vice President of Technology
Janet Warrington, PhD: Senior Vice President of Research and Development
James Zhang, PhD: Chief Strategy Officer Jeremy Edwards, PhD: Vice President, Sequencing Technology and Member of Scientific
Suzanne Dee, PhD: Vice President, Product Science

Management Team:

Wei Zhou, Ph.D., J.D - .President and Chief Executive Officer
Suzanne Dee, Ph.D. - Vice President, Product Science
Jeremy Edwards, Ph.D. - Vice President, Sequencing Technology
Michael Henry - Senior Vice President and General Manager Consumer Genomics
Glenn McGall, Ph.D. - Senior Vice President of Technology
Janet Warrington, Ph.D.- Senior Vice President of Research and Development
James Zhang, Ph.D.-Chief Strategy Officer

Funding To Date:

$24.3M in 4 Rounds
$9M Series B in April 2013
$2M Series A in July 2010
$7.5M Series in April 2010
$5.8M Venture in October 2009

Chipscreen Biosciences

Chipscreen Biosciences is a leading biotechnology company specializing in the discovery and development of novel small molecule pharmaceuticals. The company has utilized its proprietary chemical genomics-based discovery platform to successfully develop a portfolio of clinical and preclinical stage programs in a number of therapeutic areas. Its core competence is the science-driven approach to discovery, strong pipeline building capability, experience with IP, and regulatory expertise. Chipscreen's business strategy is to generate differentiated drug candidates across multiple therapeutic areas. Drug candidates are either developed by Chipscreen or co-developed and commercialized in a partnership at the research, preclinical, and clinical stages. Chipscreen was established as Sino-foreign joint venture in 2001 by several highly regarded Chinese returnees from the United States with academic, scientific, and industrial experience. Its founders established the company out of a common vision to create the leading drug discovery and pharmaceutical business in China.
http://www.chipscreen.com/en/

Leadership:

Board of Directors:
Junquan Xu: Chairman
Xian-Ping Lu: CSO & CEO

Management Team:

Xian-Ping Lu: Co-Founder, Chief Scientific Officer, Chief Executive Office
Zhi-Qiang Ning: Co-Founder & Vice President
Su-Mei Zhao: Vice President, Administration
Jian-Xun Li: Vice President, Finance
Ji-Hui Yi: Vice President, Sales & Marketing

Funding To Date:

$7.7M (Venture) in April 2015 from 2 Investors (LYZZ Capital, Vertex Ventures)

Chronos Therapeutics Ltd.

Chronos Therapeutics Ltd. is a privately held biotechnology company focused on ageing diseases, brain and nervous system disorders. Chronos has a dedicated laboratory in Oxford, which screens for activity of drugs in brain disease through its proprietary platform, Chronoscreen[TM]. It has a promising extensive library of repurposed molecules for brain and neurological diseases. The lead compound, RDC5, is being developed for the fatal neurodegenerative disease, Amyotrophic Lateral Sclerosis (ALS). Chronos recently acquired three new chemical entity (NCE) development programs for CNS diseases. The most advanced programme is initially targeting fatigue associated with multiple sclerosis with the others addressing behavioural and neurodegenerative conditions. Chronos' shareholders include the University of Oxford, Vulpes Testudo and Life Sciences funds, Odey European and Swan funds, the Board and Management.
https://www.chronostherapeutics.com

Leadership:

Dr.Huw Jones, PhD: Chief Executive Officer
Professor Peter Jenner, DSc : Chief Scientific Officer
Dr. David Eckland, PhD, FRCP: Chief Medical Officer
Dr. Helen Kuhlman, PhD: VP Corporate Development

Management Team:

Tanya Palmer: Clinical Development Director
Dr. Kevin Thompson, DPhil: Director, Chronoscreen™
Mark Donaldson, BA, FCCA: Finance Director
Martin Reeves: Strategic Advisor

Funding To Date:

$12.12M (investment type undisclosed) in December 2013 from 4 Investors (Odey Asset Management, Odey Swan, Testudo Funds, University of Oxford)

CohBar

CohBar was founded in 2007 in Menlo Park, California. CohBar's research focuses on mitochondrial derived peptides to treat age-related diseases such as type 2 diabetes, cancer, Alzheimer's, atherosclerosis, myocardial and cerebral ischemia. CohBar's lead clinical development program is based on MOTS-c, an MDP discovered in 2012 by their founders and their academic collaborators. The company's research has shown that MOTS-c plays a significant role in the regulation of metabolism. It has developed optimized analogs of the MOTS-c peptide and identified two of these analogs, CB4209 and CB4211, as drug candidates for advancement into IND-enabling activities. The drug candidates have demonstrated significant therapeutic potential in preclinical models for the treatment of obesity, with additional ongoing studies to determine their therapeutic potential for the treatment of nonalcoholic steatohepatitis (NASH), an advanced form of fatty liver disease, and as an add-on to other drugs for the treatment of Type-2 diabetes. SHLP-6 and SHLP-2 are small humanin-like peptides. CohnBar is evaluating SHLP-6 for potential utility in the suppression of tumor angiogenesis and apoptosis induction in the treatment of cancer. SHLP-2, a part of their in-licensed MDP portfolio, has shown to have protective effects in vitro against neuronal toxicity and may be useful in the treatment of Alzheimer's disease. In addition to their two lead MOTS-c analogs, CB4209 and CB4211, and the other peptides in their portfolio, CohnBar's scientists have also discovered more than 50 new biologically active MDPs encoded within the mitochondrial genome. The company continues to evaluate new and existing MDPs to prioritize and optimize their clinical development efforts and resources, especially towards age-related diseases.
https://www.cohbar.com

Leadership:

Board of Directors:
Albion J. Fitzgerald: Director and Chairman of the Board
Nir Barzilai, M.D.: Founder and Director
Pinchas Cohen, M.D.: Founder and Director
Jon L. Stern, MBA: Chief Operating Officer and Director
Marc Goldberg, JD, MBA: Director

Management Team:

Simon J. Allen, MBA: Chief Executive Officer
Jon L. Stern, MBA: Chief Operating Officer
Kenneth C. Cundy, PhD: Chief Scientific Officer
Jeffrey F. Biunno, CPA, MBA: Chief Financial Officer

Funding To Date:

$450K in Feb, 2014 (Investors Undisclosed)

Revenue 2015/2020: $4.83M/$4.95M

Color Genomics

Color Genomics provides a high-quality, physician-ordered genetic test at a low cost. It includes support for physicians, as well as genetic counseling as part of every purchase. Color's goal is to expand physician-supported access to genetic testing for hereditary cancer risk to every person, everywhere. Color is a genetic testing service that analyses 30 genes to give customers a report on their susceptibility to common hereditary cancers including breast, colon, ovarian, and pancreatic cancers for $249 USD. It also provides complimentary genetic counseling. The company claims 99.9% accuracy for their results as reported by a blinded study using 500 samples. Color's scientific team is a unique interdisciplinary mix of geneticists from UCSF, Stanford and MIT, and clinical lab experts from Penn, UCSF, Illumina, Complete Genomics and Agendia. Color collaborates with leading clinicians and scientists from UCSF and the University of Washington. Their Scientific Advisory Board includes Mary-Claire King, PhD who discovered BRCA1—the first gene linked to breast cancer—and Tom Walsh, PhD, another leading cancer geneticist.
https://www.color.com

Leadership:

Othman Laraki: Founder
Taylor Sittler: Founder
Nish Bhat: Founder
Elad Gil: Founder

Funding To Date:

$98.55M in 3 Rounds from 17 Investors
$45M Series B in September 2016: General Catalyst (Lead investor), Emerson Collective, Khosla Ventures
$38.55M Venture in August 2016: Brainchild Holdings
$15M Series A in April 2015: Angels, Aaron Levie, AME Cloud Ventures, Drew Houston, Formation 8, Julia Hartz, Katie Stanton, Khosla ventures, Laurene Powell Jobs, Mariam Naficy, Max Levchin, Padmasree Warrior, Raymond Tonsing, Ruchi Sanghvi

Cyfuse Biomedical

Cyfuse Biomedical is contributing to significant advances in medical treatments through its revolutionary 3D tissue-engineering technology. In addition to cell quality, the performance of cellular products relies on their composition. The conventional approach of injecting cell suspension has proved unsuitable for regenerating solid tissue because it does not introduce sufficient cell numbers while scaffolding, such as with animal-derived collagen. It also raises safety concerns related to allergies and viral vectors. With Cyfuse's proprietary tissue-engineering technologies, cellular aggregates are assembled into three-dimensional macrostructures without the need for scaffolding materials. The subsequent self-organization/maturation process in the company's customized bioreactor generates functional tissues/organs. To promote its platform technologies, Cyfuse has successfully developed the 3D bioprinter, Regenova®. Regenova® is a state-of-the-art robotic system that enables fully automated fabrication of three-dimensional artificial tissues/organs from living cells.
https://www.cyfusebio.com/en/

Leadership:

Takakiyo Kawano: CEO

Management Team:

Shizuka Akieda - Member of Board of Directors CEOShizuka Akieda
Masahiro Sanjo - Member of Board of Directors CFOMasahiro Sanjo

Funding To Date:

$12M (Venture) in Mar, 2015 from 2 Investors (Cyberdyne, Shibuya Kogyo)

Cytori Therapeutics

Cytori Therapeutics, formerly MacroPore, founded in 1996, is developing cell therapies based on autologous adipose-derived stem cells (ADSCs) to treat osteoarthritis, scleroderma, cardiovascular disease, and other medical conditions. The company's scientific data suggests that ADSCs improve blood flow, moderate the inflammatory response, and rescue tissue at risk of dying. As a result, it is believed these cells can be applied across multiple "ischemic" conditions. Cytori's cell based therapeutics are known by the trademark Cytori Cell Therapy, which consists of a population of specialized cells among which are stem cells responsible for injury repair and healing. Cytori's leading product for hand impairment in schleroderma is set to be the first on the market. Since 2002, Cytori has enabled researchers and clinicians to study and administer cell therapies using its novel Celution® System platform, which harnesses the potential of stem and regenerative cells from adipose tissue. In 2017, Cytori strengthened its specialty therapeutics position by acquiring a nanomedicine platform technology that combines widely-known and prescribed chemotherapy agents, doxorubicin and docetaxel, both with liposomal encapsulation technology.
http://www.cytori.com

Leadership:

Board of Directors:
David M. Rickey (Chairman)
Richard J. Hawkins
Paul W. Hawran
Gary A. Lyons
Tommy G. Thompson
Marc H. Hendrick
Gail K. Naughton

Management Team:

Marc H. Hendrick MD: President, CEO
Tiago M. Girao: CFO
Steven Kesten, MD: CMO
John K. Fraser, PhD: Chief Scientist
John Harris: Vice President & General Manager of Cell Therapy
Cheri Rice: Vice President, Portfolio Management and Development

Funding To Date:

$71.85M in 5 Rounds
$17.1M (Post Ipo Equity) in Jun, 2016 (Investors Undisclosed)
$13.5M (Post Ipo Equity) in Oct, 2014 (Investors Undisclosed)
$10M (Post Ipo Equity) in May, 2014 (Investors Undisclosed)
$27M (Debt Financing) in Jul, 2013 from 3 Investors (GE Capital, Oxford Finance Corporation, Silicon Valley Bank)
$4.25M (Venture) in Jun, 2009 (Investors Undisclosed)

IPO - Date Dec 30, 2005

DeepWave Technologies

DeepWave Technologies is a neurotechnology research and development company. The company develops solutions that enhance memory, learning, and cognitive capabilities, as well as improving health condition. The primary technology of DeepWave Technologies revolves around Slow Wave Sleep. Slow Wave Sleep, at which brainwave cycles slow 20-fold, is a special phase of the sleep that starts most of the restorative sleep processes. DeepWave Technologies plan on commercializing the research performed by Giovanni Santostasi, Ph.D., who is the CEO of the company. The research shows that by prolonging Slow Wave Sleep it is possible to enhance the restorative capabilities of the sleep. It is claimed that it would seriously improve both mental and physical health. DeepWave Technologies plan on producing a wearable device that can be easily used to control brain waves during sleep in order to elongate Slow Wave Sleep phase. The company was founded in 2017 and is currently in its early stage of development.
https://www.deepwave.tech

Leadership:

Board of Directors: o N/A
Management team: o Giovanni Santostasi: CSO

Management Team:

Giovanni Santostasi, Ph.D. - Chief Scientific Officer

Funding To Date:

Undisclosed amount (Seed) in September 2017 from 1 Investor (Deep Knowledge Ventures)

DefiniGEN

DefiniGEN are a Cambridge UK company providing highly functional human cell products including liver, pancreas, lung, and intestinal cells plus custom services for drug discovery and disease model generation. Our proprietary platform technology OptiDIFF delivers our products and custom services including induced Pluripotent Stem Cell (iPSC) generation, CRISPR-CAS9 gene editing, iPSC differentiation and custom disease model development. ground-breaking OptiDIFF differentiation system utilizes GMP-compatible conditions to generate human cell products which have similar function and performance to primary human cells on an industrial scale. The provision of high quality QC tested cell products with the functionality of primary cells enables you to accelerate your research and optimise your workflo
https://www.definigen.com

Leadership:

Marek Gumienny ACA - Director

Management Team:

Jonathan Milner PhD - Chairman
Marcus Yeo PhD - Chief Executive Officer
Richard Willock - Chief Business Officer
Ludovic Vallier PhD - Chief Scientific Officer
Marek Gumienny - ACA Director

Funding rounds:

May 23, 2016 - £1.5M
Jun 2, 2014 - £2.3M
Dec 12, 2013 - £1.3M

Editas Medicine

Editas Medicine, Inc. operates as a genome editing company. It focuses on treating patients with genetically defined diseases by correcting their disease causing genes. It is developing a proprietary genome editing platform based on CRISPR/Cas9 technology to target genetically defined diseases with an initial focus on debilitating illnesses where there are no approved treatments. Editas Medicine, Inc. has a collaboration agreement with Adverum Biotechnologies, Inc. to explore the delivery of genome editing medicines for the treatment of inherited retinal diseases. The company was formerly known as Gengine, Inc. and changed its name to Editas Medicine Inc. in November 2013. Editas Medicine, Inc. was founded in 2013 and is headquartered in Cambridge, Massachusetts. Currently, their most advanced program is designed to address a specific genetic form of retinal degeneration called Leber Congenital Amaurosis type 10, or LCA10, a disease with no available therapies or potential treatments in clinical trials in either the United States or European Union. This program is expected to enter a clinical trial phase in 2017. In May 2015, Editas entered into a strategic collaboration with JUNO Therapeutics, a leader in immuno-oncology, to develop new T-cell based therapy against cancer.
http://www.editasmedicine.com

Leadership:

Board of Directors:
Alexis Borisy
Douglas Cole, M.D.
Kevin Bitterman, PhD
Katrine Bosley
Boris Nikolic, M.D.
John D. Mendlein, PhD

Management Team:

Katrine Bosley: Chief Executive Officer
Alexandra Glucksmann, PhD: Chief Operating Officer
Andrew Hack, M.D., PhD: Chief Financial Officer
Vic Myer, PhD: Chief Technology Officer

Funding To Date:

$71.85M in 3 rounds from 17 investors
$120M (Series B) in Aug, 2015 from 15 investors (Boris Nikolic, Alexandria Venture, Casdin Capital, Deerfield, EcoR1 Capital, Fidelity Management and Research Company, Flagship pioneering, GV, Jennison associates, Khosla Ventures, Omega funds, Polaris partners, T. Rowe Price, Third Rock Ventures, Viking Global Investors)
$47M (Undisclosed) in May, 2015 from Juno Therapeutics
$43M (Series A) in Nov, 2013 from 4 investors (Flagship pioneering, Polaris partners, Third Rock Ventures, Partners innovation fund)

IPO Date Feb 3, 2016; $94.4 million were raised.
Revenue 2015: $1,123,098

Elysium Health

Elysium Health is a company founded in Silicon Valley with research laboratories in Cambridge Massachusetts and a development center in New York City. Elysium focused on dietary supplementation with its first product, Basis, in the form of pills. Basis is a proprietary formulation of two ingredients — nicotinamide riboside and pterostilbene — designed to support long-term well-being at the cellular level. It is a daily dietary supplement designed to keep cells healthy as well as repair cells damaged by natural health decline and environmental toxins over time. Elysium implements a strategy of delivering the product directly to the client and also enables customers to purchase the service via their website. In its marketing philosophy, Elysium tried to avoid the rhetoric of an 'anti-aging', 'take-one-solve-all' pill. Therefore, it presented the product firmly based on the scientific language of DNA repair, cellular detoxification, energy production, and the enhancement of overall biological functions. In recent news, Chromadex, the sole supplier of anti-aging Elysium Health's two main product ingredients, pterostilbene and Nicotinamide Riboside (NR), is suing the startup for failure to make payments on those ingredients and for breach of a trademark and royalties agreement.
https://www.elysiumhealth.com

Leadership:

Eric Marcotulli: CEO, Co-founder
Dan Alminana: COO, Co-founder
Leonard Guarente: Chief Scientist, Co-founder

Funding To Date:

$20M in 2 rounds
$20M (Series B) in Dec, 2016 from 2 investors (General Catalyst, Robert Nelson) Undisclosed amount (Seed) in Dec, 2015 (TYLT Ventures)
March 29, 2018 - Elysium Health announced that the FDA has granted Orphan Drug Designation (ODD) to its experimental therapeutic EH301 for the treatment of amyotrophic lateral sclerosis (ALS).

Emulate

Emulate Inc. is a spin-out from the Wyss Institute for Biologically Inspired Engineering at Harvard University, founded in 2013 by the institute's founding director, Donald Ingber, who is considered by many to be the father of biologically-inspired engineering. Emulate Inc. is a privately held company that creates living products for understanding how diseases, medicines, chemicals, and foods affect human health. Its Human Emulation System sets a new standard for recreating true-to-life human biology and is being used to advance product innovation, design, and safety across a range of applications, including drug development, agriculture, cosmetics, food, and chemical-based consumer products. Its founding team pioneered the Organs-on-Chips technology at the Wyss Institute for Biologically Inspired Engineering at Harvard University, as mentioned above. Emulate holds the worldwide exclusive license from Harvard University to a robust and broad intellectual property portfolio for the Organs-on-Chips technology and related systems. Emulate continues to develop a wide range of Organ-Chips and disease models through collaborations with industry partners and internal R&D programs. Emulate is also working with clinical partners to produce Organ-Chips personalized with an individual patient's stem cells for applications in precision medicine and personalized health.
https://emulatebio.com/

Leadership:

Donald Ingber: Co-founder.
James Coon: Co-Founder, CO.
Geraldine Hamilton: President and CSO.

Funding To Date:

$57M in 3 Rounds from 8 Investors.
$12M (Series A) in July 2014: NanoDimension, Cedars Sinai Medical Center $28M (Series B) in March 2016: OS Fund, LabCorp, ATEL Ventures
$17M (Series B) in October 2016: ALS Finding a Cure, ATEL Ventures, Cedars Sinai Medical Center, Hansjorg Wyss, NanoDimension, OS Fund, Techammer.

Epitracker

Epitracker, Inc. brings together the world's leaders in life science, business, advanced technologies, and novel animal patient populations to make groundbreaking medical discoveries that translate into improved global health and economies. Currently, Epitracker is unlocking secrets long held by dolphins, including potential therapeutics and diagnostics for metabolic disorders, aging, skin repair, and dementia. Epitracker currently has the following four projects in its Discovery-to-Therapeutic Pipeline: ETI101: Metabolic Syndrome; ETI102: Anti-Aging; ETI103: Skin Repair; and ETI104: Dementia. For ETI101, Epitracker recognizes that like people, bottlenose dolphins have large brains that need a lot of glucose and the company thinks that may be why older dolphins (including those in the wild) and older people can both develop conditions related to the metabolic syndrome. For ETI102, Epitracker is exploring how inflammation and oxidative stress can be reduced in older dolphins, which is resulting in newly discovered molecules that can help slow senescence (aging) in humans, too. For ETI103, Epitracker is working with world leaders in regenerative medicine to understand mechanisms of skin repair in dolphins, which may lead to new therapeutics to heal wounds and repair the effects of aging on skin in humans. For ETI104, Epitracker has developed a novel approach to search for early-stage, blood-based biomarkers in dolphins that may aid in early detection of dementia and more effective treatment options for people.
http://www.epitracker.com

Leadership:

Stephanie Venn-Watson: Co-Founder & Chief Executive Officer
Steve Morrison: Chief Financial Officer
Eric Venn-Watson: Co-Founder & Chief Medical Officer

Funding To Date:

$1.65M 29-Mar-2017 Seed Round

Eterly

Eterly is a machine learning company that is currently developing an AI-powered personal assistant platform. Unlike other similar projects, Eterly platform focuses on promoting healthy and longevity inducing lifestyle. The company uses a proprietary Life Extension Algorithm to measure different statistics from the user. Eterly is planning to suit its platform to each individual user by measuring user's characteristics: age, weight, fitness level and health condition. The platform will then continually measure activity, sleep and food consumption of the user. By implementing artificial intelligence algorithms, the app will then form suggestions on lifestyle changes that will promote longevous healthspan. The app is currently in development and is available for pre-order.

Eterly is an AI-driven health and fitness advisor that goes far beyond the capabilities of the fitness trackers that have become so popular recently. The app works seamlessly with your wearable device, helping you record steps, heart, activity and sleep data, whilst its extra features ensures that the app understands you on a deeply personal level. Using proprietary technology, cutting edge science, and advanced AI techniques, Eterly acts like a personal coach, custom designing and adjusting, in real time, a health and fitness routine mapped to precisely fit each and every user's specific needs. Eterly uses an abundance of life extension information to create users' highly personalized profile and improve their longevity score. Use Eterly in combination with users' wearable fitness trackers, smartwatches, or any device that has bluetooth connectivity. Jawbone, Heart, Apple Watch, Fitbit, Eterly works with almost all major wearable fitness brands.

http://eterly.com

Leadership:

Andrew Ahachinsky - CEO

Deep Knowledge Life Sciences - Undisclosed amount (Seed) in 2017

Everist Health

Everist Health is a personalized medicine company that develops personalized diagnostics, prognostics and therapeutic selection technologies to help physicians improve clinical outcomes and reduce the cost of care. It was formed by combining the assets, product portfolios, and IP of Genetics Squared, Inc., and Angiologix, Inc. It focuses on early disease detection via proprietary diagnostic and prognostic medical devices. Its main product is the AngioDefender, which measures the health of a user's endothelium via a proprietary process the company calls Flow-Mediated Dilation, which measures the user's response to increased blood flow. It then combines this data with blood pressure analysis, pulse wave analysis, and a proprietary data analysis algorithm. The company claims that this method yields increased accuracy over other standard-of-care methods used by physicians to predict heart disease risk. They also offer an Age Calculator service, which uses the data obtained from their AngioDefender system in combination with other data input by the user or their physician in order to calculate the age of the user's cardiovascular system.
http://everisthealth.com

Leadership:

Matt Bartlam: CEO
Steve Everist: CTO
Peter F. Lenehan, PhD, MD: CMO

Funding To Date:

$12.54M Venture in 2 Rounds
$9.48M (Venture) in February 2012 (investors not disclosed)
$3.06M (Venture) in September 2012 (investors not disclosed)

Everon Biosciences

Everon Biosciences Inc. was founded in 2010 and aims to target the cellular bases of ageing, and eradicate them through the scientific program developed by Prof. Andrei Gudkov, who is also a Senior Vice President of Research Programming and Development of Roswell Park Cancer Institute, the world's oldest cancer research center. Since the beginning of Everon Biosciences, the institute formed a partnership with the company, giving access to modern technical equipment and gaining insights from a leading scientist in the field. The R&D department focuses on developing pharmacological agents that can block or slow down age-related waste products, facilitate the efficacy of natural mechanisms to eliminate waste products, and create a diagnostic platform that can estimate the severity of aging-related frailty and the efficacy of anti-aging related drugs. In February 2017, Everon Biosciences identified a new biomarker for senescent cells, an oxidized form of the vimentin protein, the results of which were published in PNAS. This novel biomarker could be used in a practical assay to detect senescent cells, which would significantly speed up the development of anti-aging drugs that could be capable of reducing or even reversing aging. Everon Biosciences Inc. is located in Buffalo, NY.
http://everonbio.com

Leadership:

Alexander Polinsky: Co-Chief Executive Officer
Andrei Leonov: Co-Chief Executive Officer
Andrei Gudkov: Founder & Chief Scientific Officer
Olga Chernova: Vice President, Research

Funding To Date:

Funding Received: $8.88M
Last Round: $5M

Evox Therapeutics

Based in Oxford, UK, Evox Therapeutics was founded in 2016 by Professor Matthew Wood of Oxford University and Associate Professor Samir EL Andaloussi and Dr. Per Lundin of the Karolinska Institute, to capitalize on foundational intellectual property springing from the groundbreaking exosome research carried out in these two world-leading labs. Evox's IP portfolio is mainly based on exosomes for delivery of nucleic acid-based agents, delivery of protein therapeutics such as antibodies and receptors, targeting exosomes to precisely reach tissues and organs of interest and developing exosomes for small molecule delivery. Current development programs are aimed at using the unique capabilities of exosomes, namely to modulate the immune system and to target tissues and organs that are normally difficult to reach. Accordingly, Evox's development pipeline is initially focused on immunological and inflammatory diseases, neuroscience and various rare disease with unmet medical interventions.
https://www.evoxtherapeutics.com

Leadership:

Dr Antonin de Fougerolles, CEO
Matthew Wood, MD, PhD
Samir EL Andaloussi, PhD
Xandra Breakefield, PhD
Bernd Giebel, PhD
Robert Langer, ScD
Anastasia Khvorova, PhD

Management:

David Virley

Funding To Date:

$14.43M in 1 round from 1 investor
$14.43M (Seed) in May 2016: Oxford Sciences Innovation

FRONTEO Healthcare

FRONTEO Healthcare's AI-based technology is capable of acquiring the tacit knowledge of people and using it to predict behavior. They intend to expand the application of this technology in the medical industry as quickly as possible, using data analysis to help people around the world to receive the best healthcare services, and pave the way to a healthier, more secure future.
https://www.fronteo-healthcare.com/en/

Leadership:

Executive Chairman: Masahiro Morimoto
Chief Executive Officer: Kuniko Nishikawa
Director: Naritomo Ikeue
Director: Hideki Takeda
Director: Takuji Kurio
Auditor: Tomohiro Uesugi

Funding To Date:

February 1, 2017 - Capital amount JPY 327,000 thousand yen.

IPO DateMay 24, 2013
Revenue 2015/2014: $57.71/$47.07 million

Genedrive

Genedrive® is a patented small polymerase chain reaction (PCR) platform which enables rapid nucleic acid amplification and detection from various sample types including plasma, sputum and buccal swabs. With minimal hands on time and single button operation, it provides unambiguous diagnostic results, without the need for specialist knowledge or data interpretation. With no manual calibration or maintenance required, Genedrive® is ideal for low throughput, decentralised laboratories.
https://www.genedrive.com

Leadership:

Ian Gilham - Ph.D., Non-Executive Chairman
David Budd - Chief Executive Officer
Matthew Fowler - Chief Financial Officer
Catherine Booth - Ph.D., Managing Director, Contract Research Services
Roger Lloyd - Ph.D., Non-Executive Director

Management:

Catherine Booth - Ph.D., Managing Director, Contract Research Services

Funding To Date:

$19.74M in 2 rounds from 2 investors
$15M (Series B) in Sep, 2014: OrbiMed
$4.74M (Series A) in Jan, 2008: Inventages Capital Investment Inc.

Revenue 2014/2015 - $342/$345 millions

Genescient

Genescient is a company that provides a wide spectrum of services. By utilizing the longevous fruit fly strain (the so-called 'Methuselah Fly'), Genescient offers screening for anti-aging pharmaceutical companies. Methuselah Flies share most of their metabolic genetic pathways with humans; this allows the company to use them as a highly efficient animal aging model. Genescient refers to itself as 'a Genomics 2.0 company' as it is the only company to use amplified genome signal that allows for more efficient analysis of metabolic changes. Furthermore, it provides general screening services as well as disease-specific research.
http://www.genescient.com

Leadership:

Board of Directors:
Gregory Benford, Ph.D.: Chairman of the Board
Cristina Rizza, M.D.: Chief Medical Officer and Director
James N. Benford, Ph.D.: Director
Yaron Brook, Ph.D.: Director
Peter LePort, M.D.: Director

Management team:

Carlos Balarezo: Chief Executive Officer
Bryant Villeponteau, Ph.D.: Senior Vice-President, Research and Development
Cristina Rizza, M.D.: Chief Medical Officer
Johnny Borjesson: Chief Information Officer
Anupama Kotiankar: Controller

Funding To Date:

$500k (Angel Funding) in December, 2009 (investor undisclosed)

Genos

Genos offers next-generation sequencing services to consumers. Based in San Francisco, Genos Research is a spin-out of Complete Genomics' consumer division that was founded in 2016 by two former executives of the company. Genos offers whole-exome sequencing for $499 USD. This includes sequencing roughly 20,000 genes, covers over 85% of known disease variants and whole-exome sequencing reveals 50x more information than genotyping. It also offers genetic counseling services, but each kit must be ordered and reviewed by a physician.

https://genos.co

Leadership:

Mark Blumling: CEO and Co-Founder
Dr. Clifford A. Reid: Executive Chairman and Co-Founder

Funding To Date:

28 Mar 2014 $6,000,000

GenSight Biologics

GenSight Biologics is a French biotech company that specializes in regenerative ophthalmic therapeutics. The company addresses neurodegenerative and mitochondrial diseases of the eye. GenSight aims to use gene therapy to restore the eyesight of patients suffering from retinal degenerative pathologies. There are two main products in the company pipeline; GSO10 treats LHON (a genetic disease that can inflict complete sight loss over time) and GSO30 enables vision restoration in patients with Retinitis Pigmentosa (RP), another hereditary illness that hinders eyesight. While GSO30 has just passed pre-clinical trials, GSO10 has successfully completed Phase III and is estimated to enter the market in the nearest future.
https://www.gensight-biologics.com

Leadership:

Board of Directors:
Michael Wyzga: Chairman - Independent Director
Bernard Gilly, PhD: Co-Founder, CEO – Director
Genghis Lloyd-Harris, MD, PhD: Director
Guido Magni, MD, PhD: Director
Earl M. Collier, J.D.: Independent Director
Maïlys Ferrère: Director
Peter Goodfellow: Independent Director
Jose-Alain Sahel, MD, PhD: Observer
Thibaut Roulon, PhD: Observer

Management team:

Bernard Gilly, PhD: Co-Founder, Chief Executive Officer
Thomas Gidoin: Chief Financial Officer
Mohamed Genead, MD: Chief Medical Officer
Nilza Thomasson, PhD: Chief Pre-Clinical Officer
Didier Pruneau: Chief Scientific Officer

Funding To Date:

$77.67M in 2 Rounds from 9 Investors
$36M (Series B) from Abingworth',Fidelity Management and Research Company, HealthCap, Index Ventures, Jennison Associates, Novartis Venture Fund, Perceptive Advisors, Sphera Funds Management, and Varsant Ventures
€32M (Series A) from Abingworth, Index Ventures, Novartis Venture Fund and Versant Ventures

IPO / Stock: Jul 13, 2016 / NASDAQ:GNST

Genzyme Corporation

Genzyme Corporation is an American biotechnology company based in Cambridge, Massachusetts, focused on rare diseases, multiple sclerosis, immunology and oncology. Genzyme was founded in 1981 by Sheridan Snyder and George M. Whitesides in Boston and has become part of Sanofi in 2011 after its acquisition. Genzyme has a broad portfolio of products already present on the market, including Aldurazyme®(laronidase), AUBAGIO®(teriflunomide), Cerdelga® (eliglustat), Cerezyme®(imiglucerase), Fabrazyme®(agalsidase beta), LEMTRADA®(alemtuzumab), Lumizyme®(alglucosidase alfa), and Thyrogen®(thyrotropin alfa for injection). Genzyme currently has multiple products in its pipeline across several clinical stages, including medication and therapies for Fabry disease, Multiple Sclerosis, Cutaneous Squamous Cell Carcinoma and hemophilia, among others.
https://www.sanofigenzyme.com/en/

Leadership:

David Meeker, M.D.: Executive Vice President and Head of Sanofi Genzyme
Mark Barrett: Vice President, Global Head of Strategy & Business Development
James W. Burns, PhD: Head of the Sanofi-Genzyme R&D Center; Head of Sanofi's Boston R&D Hub
Wolfram Carius: Corporate Senior Vice President, Industrial Affairs and Biologics Platform
David Ford: Head, Human Resources
Carlo Incerti, M.D.: Senior Vice President; Head of Global Medical Affairs
Sandeep Sahney: Vice President, Head of Japan-Asia Pacific Region
Philippe Sauvage: Chief Financial Officer

Management team:

Philippe Sauvage - Chief Financial

Funding To Date:

Jun 7, 2006 - $12M
Sep 23, 2008 - $20M
Jan 13, 2014 - $700M
Feb 11, 2015 - $30M
Number of Clinical/Preclinical Trials: 8/0

Geron

Geron is a clinical stage biopharmaceutical company focused on the development of a telomerase inhibitor, imetelstat, in hematologic myeloid malignancies. Telomerase is an enzyme that enables cancer cells including malignant progenitor cells to maintain telomere length, which provides them with the capacity for limitless uncontrolled proliferation. The company's focus is the potential implications of telomerase in cancer development. Imetelstat is currently being tested in two clinical trials: IMbarkTM, a Phase 2 trial in myelofibrosis (MF), and IMergeTM, a Phase 2/3 trial in myelodysplastic syndromes (MDS). These clinical trials are being conducted by Janssen Biotech, Inc., under the terms of an exclusive worldwide collaboration and license agreement. Early data suggests that imetelstat may have disease-modifying activity by inhibiting the proliferation of malignant progenitor cell clones for the underlying diseases.
http://www.geron.com

Leadership:

Board of Directors:
Hoyoung Huh, M.D., PhD: Chairman of the Board
Daniel M. Bradbury
Karin Eastham
V. Bryan Lawlis, PhD
Susan M. Molineaux, PhD
John A. Scarlett, M.D.: President and Chief Executive Officer
Robert J. Spiegel, M.D.

Management Team:

John A. Scarlett M.D.:- President, Chief Executive Officer and Director
Olivia K. Bloom - Executive Vice President, Finance, Chief Financial Officer and Treasurer
Melissa A. Kelly Behrs: - Executive Vice President, Business Development and Portfolio & Alliance Management

Funding To Date:

$96.7M in 1 round
$96.7M (Post IPO) in Feb, 2014

Number of Clinical/Preclinical Trials: 0/7
IPO Date Aug 9, 1996
Revenue 2015/2014: $36,371/$1,153 Mill.

Harbour BioMed

Harbour BioMed is a global biotechnology company that discovers and develops innovative therapeutics for cancer with a focus on immuno-oncology. Discovery and development programs are centered on its two patented transgenic mouse platforms for human antibody discovery. The company is building its proprietary pipeline internally, through collaborations with co-development partners, and selective preclinical and clinical stage asset acquisitions. Harbour BioMed also licenses the platforms to companies and academic institutions through its Harbour Antibodies subsidiary. One of the fastest growing segments of the global pharmaceutical industry is the therapeutic monoclonal antibodies (mABs). Harbour BioMed uses two patented transgenic mouse technologies developed in the laboratory of Professor Frank Grosveld at Erasmus MC (Rotterdam, the Netherlands) to generate fully human antibodies. http://www.harbourbiomed.com/en/aboutus.html

Leadership:

Jingsong Wang: Chief Executive Officer & Founder
Jeff He: Chief Financial Officer
Liang Schweizer: Chief Scientific Officer
Mai-Jing Liao: Head, Business Development

Management Team:

Xiaoxiang Chen, MD Executive Vice President, Head of Clinical Development and Regulatory Science
Mai-Jing Liao, PhD Senior Vice President, Head of Business Development and Portfolio Management
Mai-Jing Liao, PhD Senior Vice President, Head of Business Development and Portfolio Management
George Liu, PhD Vice President, Head of Early Development and Scientific Operation

Funding To Date:

$50M in 1 round from 2 investors
$50M (Series A) in Dec, 2016 (Advantech Capital, Legend Capital)

Hua Medicine

Hua Medicine is a leading clinical-stage innovative drug development company in China, focusing on novel therapies for the treatment of diabetes and CNS disorders. Currently, the company has two products in the pipeline. The first, HMS5552, is a novel glucokinase activator that restores the impaired GK activity in patients with type 2 diabetes in a blood glucose dependant manner, reducing the risk of hypoglycemia. The drug is currently in clinical phase 2 trials and shows highly promising results, both for efficacy and safety profile. The other product in the pipeline is a mGluR5 allosteric modulator with potential for multiple CNS diseases including Parkinson's disease (PD) associated dyskinesia, depression, anxiety, fragile X syndrome (FXS), and drug abuse. The drug showed promising results and is currently in its preclinical trial. The drug, sinogliatin, is a fourth-generation glucokinase activator in-licensed from Roche ($RHHBY), belonging to a class of therapies that help the body better recognize glucose and thus produce more insulin, lowering baseline blood sugars. Similar therapies from Merck ($MRK) and others never made it to the market, but Hua believes its drug has a novel mechanism of action that sets it apart from its forebears in the space.
http://www.huamedicine.com

Leadership:

Bryan Roberts
Daniel Auerbach
Frank Yu
Ge Li
John Baldwin
Leon Chen
Li Chen
Robert Nelsen

Management Team:

Li Chen: Co-Founder, Chief Executive Officer
Xiaowei Jin: Director, Discovery Biology
John Choi: Co-Founder & CBO
Jin She: Vice President, Chemistry
Yi Zhang: Vice President, Clinical Research
Qizhong Song: Vice President, Operations
Yong-Guo Li: Vice President, Pharmaceutical R&D

Funding To Date:

$125M in 3 rounds from 8 investors
$50M (Series C) in Apr, 2016 from: Harvest Global Investments
$25M (Series B) in Jan, 2015 from: Ally Bridge Group, Venrock
$50M (Series A) in Sep, 2011 from: Arch Venture Partners, Eight Roads Ventures, F-Prime Capital Partners, Sino-alliance International Ltd, Venrock, WuXi Healthcare Ventures

Human Longevity, Inc.

Human Longevity, Inc, (HLI)is a genomics and cell therapy company founded by J. Craig Venter, a human genome pioneer, founder and CEO of the J. Craig Venter Institute, Celera Genomics, The Institute for Genomics Research (TIGR), and Synthetic Genomics. Additionally, HLI is co-founded by former CEO, CSO, chairman and founder of Celgene, Robert Hariri, and Peter Diamandis, chairman and CEO of the X PRIZE Foundation and Co-Founder/Co- Chairman of Planetary Resources. HLI's strategy is to build the largest and most comprehensive genetic database linking human genotypes, microbiomes and phenotypes. Using this database, HLI hopes to be able to use Big Data types of analysis to discover the genetic and molecular basis underlying disease and aging. In order to facilitate this type of analysis, HLI has hired Franz Och, the former head of Google Translate, as its Chief Data Scientist. Additionally, HLI has also partnered with Personal Genome Diagnostics, Inc (PGDI). An additional application is to create a preventive healthcare model that can take baseline measurements of stem-cell function, monitor them in real time and correct any drift from optimal activity with therapeutics or potentially stem-cell therapy. While HLI certainly intends to profit from the development of novel therapeutics and diagnostics developed internally or with partners, it is likely that it will also attempt to gain revenue from licensing its database to pharmaceutical, biotechnology, insurance companies, hospitals and academic organizations.
https://www.humanlongevity.com

Leadership:

Board of Directors:
J. Craig Venter, PhD: Co-Founder, Executive Chairman, CEO
Peter H. Diamandis, MD: Vice-Chairman & CoFounder
KT Lim: Chairman and Chief Executive of Genting Berhad
Bryan Johnson: Founder and CEO of OS Fund
Brett Blundy: Chairman and Founder of BB Retail Capital (BBRC)
Steve Boultbee Brooks: Chair of BoultbeeLDN, Principal of the Brooks Foundation
Annie Hazlehurst: Founder of Faridan Ventures

Funding To Date:

$300M in 2 round from 10 investors
$220M (Series B) in Apr, 2016 from: Illumina, Amino Capital, Celgene, Draper Fisher Jurvetson, GE Ventures, StartUp Health
$80M (Series A) in Mar, 2014 from: Bryan Johnson, Celgene, Daniel Curran, Draper Fisher Jurvetson, Illumina, Synthetic Genomics, Tan Thay

Management Team:

J. Craig Venter, PhD: Co-Founder, Executive Chairman, CEO
Kenneth J. Bloom, MD: President
William A. Roper, Jr.: Chief Financial Officer
Kurt Oreshack: General Counsel
Robert (Bob) Hariri, MD, PhD: Co-Founder, President, Human Longevity Cellular Therapeutics
Mark Winham: Chief Operating Officer
Brad Perkins, MD, MBA: Chief Medical Officer
Ashley Van Zeeland, PhD, MBA: Chief Technology Officer
Franz Och, PhD: Chief Data Scientist
Yaron Turpaz, PhD, MBA: Chief Information Officer
Amalio Telenti, MD, PhD: Head of Genome Discovery
William Biggs, PhD: Head of Genomic Sequencing

Ichor Therapeutics

Ichor Therapeutics is a pre-clinical company that creates therapies for age-related diseases. The company broadly uses regenerative medicine as a canvas in its effort to discover drugs. Ichor is currently developing two main branches of products. One is Lysoclear, an enzyme product that removes toxic bis-retinoid A2E, with the potential to treat age-related macular degeneration (AMD) and Stargardt's macular degeneration (SMD). Lysoclear has finished pre-clinical trials and may start Phase I trials in 2018. The other product is Antoxerene, a small molecule drug discovery program that includes diverse groups of potential inhibitors in age-related disease pathways. Currently one of them, BulkyProtetor, has entered preclinical trials with several others being discovered only recently.
http://www.ichortherapeutics.com

Leadership:

Kathleen Kelly Study - Director

Management Team:

Kelsey Moody, MBA: CEO
William Gannon, Jr. MD/MBA: CMO
Adam Blanden: CSO
Aaron Wolfe: COO
Scott Ruston: CTO
Peter Korytko PhD, MBA: Pre-clinical Director
Scott Campbell: Quality Assurance Director
David Reed, JD: General Counsel

Funding To Date:

$2.49M in 7 Rounds from 1 Investor
$600k in July, 2016 (Investors Undisclosed)
$1.35M in March, 2016 from KIZOO
$80k in July, 2015 (Investors Undisclosed)
$25k in February, 2015 (Investors Undisclosed)
$18k in September, 2014 (Investors Undisclosed)
$383k in August, 2014 (Investors Undisclosed)
$540k in May, 2013 (Investors Undisclosed)

IPO 2016-12-09

Inception Sciences

Inception Sciences is a drug discovery engine co-founded with Versant Ventures in 2011, with operating sites in the US (San Diego) and Canada (Vancouver and Montreal). Inception Sciences creates new companies in partnership with pioneering academic researchers and major biopharmaceutical companies, which provide funding and a path to liquidity through pre-negotiated acquisitions. The Inception team previously developed clinical-stage drugs in diverse disease areas including neurology, oncology, arthritis and osteoporosis, among others. Current Inception start-up companies investigate development of novel therapies and drug candidates for oncology, fibrotic disease, sensorineural hearing loss, eye disease, multiple sclerosis and inflammatory bowel disease. Current pharma partners include Roche, Bayer, Celgene and Shire. Prior to Inception, the company comprised Amira Pharmaceuticals which was acquired by Bristol Myers-Squibb in 2011.
http://www.inceptionsci.com

Leadership:

Board of Directors:
Bradley Bolzon
Jerel Davis
Paul Anderson
Petpiboon Prasit
Thomas Woiwode

Management Team:

Petpiboon Prasit: Co-Founder, Chief Executive Officer
Paul Anderson: Chief Scientific Officer
Nicholas Stock: Director & Co-Founder
Zack McNealy: Chief Financial Officer

Funding To Date:

$20M in 3 rounds from 8 investors
$5M (Venture) in Jun, 2014 from Undisclosed investor
$10M (Series A) in Dec, 2013 from: Versant Ventures
$5M (Venture) in Nov, 2011 from Undisclosed investor

Insilico Medicine

Insilico Medicine was founded in 2014 by Alex Zhavoronkov and specializes in taking a computational approach to pharmaceutical development. The company is a result of a multi-year research project in signaling pathway activation differences between healthy and cancerous tissues, which was performed by a large international team and funded with over $2.5 million in non-dilutive financing. Insilico Medicine, Inc. is an artificial intelligence company headquartered at the Emerging Technology Centers at JHU in Baltimore, with R&D and management resources in Belgium, Russia, UK, Taiwan and Korea sourced through hackathons and competitions which received early-stage seed funding from Deep Knowledge Ventures. The company utilizes advances in genomics, big data analysis, and deep learning for in silico drug discovery and drug repurposing for aging and age-related diseases. Insilico pioneered the applications of the generative adversarial networks (GANs) and reinforcement learning for generation of novel molecular structures for the diseases with a known target and with no known targets. In addition to working collaborations with the large pharmaceutical companies, the company is pursuing internal drug discovery programs in cancer, dermatological diseases, fibrosis, Parkinson's Disease, Alzheimer's Disease, ALS, diabetes, sarcopenia, and aging. Through a partnership with LifeExtension.com the company launched a range of nutraceutical products. It also provides a range of consumer-facing applications including Young.AI and Aging.AI. The company raised venture capital and partnered with Juvenescence Limited, a holding company focused on longevity biotechnology. The company aspires to become the "Bell Labs" for artificial intelligence and associated technologies for healthcare and longevity biotechnology and commercialize its research by forming subsidiaries around the specific technologies and licensing the intellectual property, molecules and data to the biotechnology and pharmaceutical companies. In 2018, the company was named the one of the global top 100 AI companies by CB Insights.
Website: http://www.Insilico.com

Leadership:

Alex Zhavoronkov, PhD: CEO, Founder
Qingsong Zhu, PhD: COO
Alex Aliper, PhD: Director of Drug Discovery

Funding To Date:

$10M (Venture) in Feb, 2017 from Mann BioInvest and group of investors
Undisclosed amount (Seed) in Nov, 2015 from Deep Knowledge Ventures
Undisclosed amount (Seed) in Apr, 2014 from Deep Knowledge Ventures

Juvenescence AI

Juvenescence AI is a joint venture project between Juvenescence and Insilco Medicine. The company acts both as a drug development pharma and as an artificial intelligence company. The main focus of the company is to develop novel anti-aging treatments using machine learning technology. The company is planning on using AI technology patented by Insilico Medicine in order to gain an edge over its main competitors. The current goal of the company is to build an end-to-end cycle of drug development with a clinical proof-of-concept. The company officials claim that the AI technology will be able to streamline the most time- and money-consuming portions of the drug developing cycle: clinical trials. The company was founded in July 2017 and is currently in its early stage of development.
https://www.juvenescence.ltd

Leadership:

o Jim Mellon: Chairman
o Alexander Zhavoronkov, PhD: Principal

Management team:

Gregory Bailey, M.D: CEO

Funding To Date:

Jan 8, 2018 - $12.3M

Juventas Therapeutics

Juventas Therapeutics is a private clinical stage biotechnology company that is developing regenerative therapies to treat life-threatening cardiovascular diseases. These novel nonviral gene therapies activate natural processes to repair the body. The company focuses on cardiovascular diseases with Peripheral Artery Disease and Heart Failure as the two main areas. The product candidate, JVS-100, is a non-viral gene therapy that expresses stromal cell-derived factor-1 (SDF-1), a naturally occurring signaling protein that has been shown to recruit the body's own stem cells and promote tissue repair in a broad range of disease states. Multiple independent laboratories have demonstrated in peer-reviewed publications that extending or reestablishing SDF-1 expression, localized to a site of acute or chronic tissue damage, induces multiple changes that preserve or recover organ function.
http://juventasinc.com

Leadership:

Board of Directors:
George Arida: Chairman
Rahul Aras, PhD
James C. Boland
Suzette Dutch
George Mateyo
Roger Newton, PhD
Marc Penn, M.D., PhD
Matthew Pollman, M.D.
Linda Tufts

Management team:

Rahul Aras, PhD: Co-Founder, President and Chief Executive Officer
Marc Penn, M.D., PhD: Co-Founder, Chief Medical Officer
Joseph Pastore, PhD: Senior Vice President, Clinical Product Development

Funding To Date:

$41M in 4 rounds from 11 investors
$13.5M (Series B) in May, 2015 from; Green Cross, POSCO Venture capital $5M (Venture) in Nov, 2013
$22.2M (Series B) in Jul, 2012 from; New Science Ventures, Triathlon Medical Venture Partners, Early Stage Partners, North Coast Angel Fund, Fletcher Spaght Ventures, Reservoir Venture Partners, Takeda Ventures, Venture Investors 3
$300K (Seed) in Sep, 2008 from JumpStart Inc.

Kailos Genetics

Kailos Genetics a personalized medicine information company that offers a full-panel genetic testing kit, PGxComplete, that tests the patient's response to 20 distinct classes of medications in order to reveal how patients respond to 50 types of medications, including cancer therapies, HIV/AIDs medications, opioids, antidepressants and others. This kit costs $99 which is a lot cheaper compared to many of its competitors. This allows patients and their physicians to choose the medications and the doses that correspond best with the patient's data obtained from the kit. Kailos Genetics in partnership with HudsonAlpha Institute for Biotechnology and Redstone Federal Credit Union (RFCU) set up the Information is Power program, offering free of charge genetic testing in Northern Alabama. Beginning on October 29, 2016 the program will provide free genetic testing for all 30-year-old women and men in the counties of Madison, Jackson, Limestone, Marshall and Morgan, regardless of family history. The free/discounted tests will be available on the Kailos website for one full year, until October 28, 2017.

https://www.kailosgenetics.com

Leadership:

Brian Pollock: President & Chief Executive Officer
Troy Moore: Chief Scientific Officer
Michael J. Walters: Chief Strategy Officer

Management team:

Cheri Walker, Ph.D. - CHIEF FINANCIAL OFFICER

Funding To Date:

$1.9M in December 2011 in 1 round from 1 Investor

Leadhexa Biotechnologies

Leadhexa Biotechnologies Inc.
Reducing Reactive Oxygen Species in the Mitochondria

Leadhexa Biotechnologies, Inc. is a Delaware corporation whose founders have discovered a unique version of the enzyme Manganese SuperOxide Dismutase (MnSOD) which has the ability to enter cells and mitochondria, where it demonstrates efficacy in numerous preclinical models including actinic keratosis, tumor suppression, radiation protection, protection of kidney damage due to cyclosporine or contrast dye, liver cirrhosis and liver ischemia-reperfusion injury. Leadhexa is an early-stage startup incubated at QB3 in San Francisco and is actively seeking venture investment in order to start advancing its molecules towards clinical trials.
http://leadhexa.com

Leadership:

Roberto Mancini: MD
Francesco Saverio Ambesi-Impiombato. Co-founder. Professor of General Pathology at the University of Udine, Italy.
Mario M. Rosati. Attorney. Partner at WSGR, Palo Alto, CA.

Management team:

Jaime Bosch - Professor of Medicine and Chief of Hepatology Section at the IMD, Hospital Clinic, University of Barcelona, Spain.
Jean Rommelaere - Head of the Division Tumor Virology at the German Cancer Research Center (DKFZ), Heidelberg, Germany.

LifeGen Technologies

LifeGen Technologies, a genomics private company, discovers ways to slow down age-related gene expression. The company widely implements DNA microarrays to measure gene activity in mammalian tissues. LifeGen scientists have published an article named 'Gene Expression Profile of Aging and Its Retardation by Caloric Restriction' in Science, which has led to the current commonplace usage of low-caloric diets in anti-aging practices. LifeGen provides various corporate-level services; a majority of them revolves around the company's large database on gene expression alterations associated with aging.
http://www.lifegentech.com

Management team:

Mr. Richard Weindruch Ph.D.: Co-Founder and Director
Mr. Tomas A. Prolla Ph.D.: Co-Founder and Chief Scientific Officer
Dr. Jamie L. Barger Ph.D.: Chief Operating Officer

Funding To Date:

$11.7M (Acquisition) in December, 2011 from Nu Skin Enterprises

Longevity Biotech

Longevity Biotech was founded in 2010 in Philadelphia. It is a developer of a new class of therapeutics via artificial protein technology. Longevity Biotech focuses on pharmaceutical preparation. Its Hybridtides are targeted biologic-like molecules which are highly-resistant to breakdown by natural digestive enzymes and tunable to very stable molecular structures. Longevity Biotech currently has multiple products in its pipeline, three of which are in preclinical stages. Those are aimed at inflammation, diabetes and a fusion inhibitor. Two undisclosed projects are in initial stages and are aimed to treat cancer and problems with cholesterol.
http://longevitybiotech.com

Leadership:

Scott Shandler, PhD, MBA: Founder & CEO
Samuel Gellman, PhD: Founder & Head of Peptide Chemistry

Management team:

Scott Shandler
Samuel Gellman
Uma Sinha

Funding To Date:
January 2, 2018 - Longevity Biotech awarded $225K Phase I SBIR Contract From NHLBI/NIH to Develop 5A apoA-I Mimetic Peptide for Treatment of Severe Asthma.
$350K (Grant) in Apr, 2012 from Thiel Foundation
$170K (Debt Financing) in Apr, 2011

MacuCLEAR

MacuCLEAR's Co-founder, Senior Advisor, and inventor, has developed a pipeline of compounds for treating various diseases of the eye. The lead compound MC-1101, is a 505 b 2, repurposed compound, formerly used as an anti-hypertensive drug. Its vasodilation, anti-inflammatory, and antioxidation combined properties proved effective in modulating choroidal blood flow in human clinical trials. Macu CLEAR's pipeline includes a total of at least 12 separate compounds of various types that are intended to be second generation dry AMD compounds, and in some cases treat other retinal diseases such as diabetic retinopathy and diabetic macular edema. Ten of these proprietary compounds are new chemical entities.
https://macuclear.com

Leadership:

Board of Directors:
B.B. Tuley
Brett Cornwell
Fred Cole Jr.
George Chiou

Management Team:

B.B. Tuley: Chief Executive Officer & Board Member
George Chiou: Chief Scientific Officer & Board Member

Funding To Date:

$1M in 1 round from undisclosed investor(s)
$1M (Venture) in Jan, 2012

Mesoblast

Mesoblast has leveraged its proprietary technology platform, which is based on specialized cells known as mesenchymal lineage adult stem cells, to establish a broad portfolio of late stage product candidates. Mesoblast's allogeneic or 'off-the-shelf' cell product candidates target significantly advanced stages of diseases where there are highly unmet medical needs, including cardiovascular conditions, orthopedic disorders, immunologic and inflammatory disorders, and oncology and hematology conditions. Mesoblast's leading compounds include MPC-150-IM for congestive heart failure, MPC-06-ID for chronic lower back pain due to moderate degenerative disc disease. The company's technology platform is based on mesenchymal lineage adult stem cells (MLCs). Mesoblast's 'off-the-shelf' products are allogeneic — meaning cells from one donor may be used in many different recipients without the need for matching.
http://www.mesoblast.com

Leadership:

Board of Directors:
Brian Jamieson, FCA: Non-Executive Chairman
William M. Burns, BA: Non-Executive Director
Silviu Itescu: MBBS, FRACP: Chief Executive Officer (Executive Director)
Donal O'Dwyer, BE, MBA: Non-Executive Director
Eric Rose, MD: Non-Executive Director
Michael Spooner, BCom, ACA: Non Executive Director
Ben-Zion Weiner, BSc, MSc, PhD: Non Executive Director
Charlie Harrison: BA, LLB (Hons): Company Secretary

Funding To Date:

$6.2M in 1 round from 1 investor
$6.2M (Venture) in May, 2016 from Australian Government for Research and Development.

Management Team:

Silviu Itescu: CEO
Paul Hodgkinson: CFO
Roger D. Brown: Spinal Orthopedic Disorders
Lee Golden, MD: Cardiovascular Diseases
Peter Howard: Corporate Executive & General Counsel
John McMannis, PhD: Manufacturing
Julie Meldrum: Global Corporate Communications
Michael Schuster, MBA: Investors Relations
Karen Segal, PhD: Diabetes & Metabolic Disorders
Paul Simmons, PhD: Research & New Product Develpment
Donna Skerrett, MD: CMO
Geraldine Storton, MBA: Head of Regulatory Affairs & Quality Management Eric Strati, MBA: Commercial

Metabomed LTD

Metabomed LTD is a drug discovery company in the field of cancer metabolism with a proprietary target identification platform based on computational biology and metabolomics. Metabomed focuses on the discovery of drugs that inhibit targets that form a synthetic lethal gene pair with metabolic genes inactivated in cancer cells. Metabomed operates out of MS Ventures Bioincubator in Yavne, Israel.
https://www.metabomed.com

Leadership:

Board of Directors:
Llka Wicke

Management Team:

Simone Botti: Chief Executive Officer
Orly Guralnik: Chief Financial Officer
Eyal Gottlieb: Co-Founder
Eytan Ruppin: Co-Founder
Tomer Shlomi: Co-Founder
Omri Erez : Vice President, Biology
Philippe Nakache: Vice President, Chemistry

Funding To Date:

$18M in 1 round from 5 investors
$18M (Series A) in Apr, 2016 from; Arkin Holdings, Boehringer Ingelheim Venture Fund, Merck Ventures, Pfizer, Pontifax Funds

Mitobridge

Mitobridge is discovering and developing small molecule therapeutics that improve mitochondrial functions. Building upon the emerging scientific findings linking mitochondrial dysfunction with disease pathologies, the Company is progressing innovative approaches to the treatment of diseases with high unmet medical need. Their strategy is to establish proof of concept in rare diseases and then expand into more common diseases. Mitobridge has assembled a strong team with expertise in advancing ground-breaking therapeutics into the clinic. Their scientific founders and advisors include leaders in mitochondrial biology, metabolism and aging with experience in translating novel discoveries into next generation medicines. The Company was founded in October of 2013 with financing from MPM Capital, Longwood Fund and Astellas Pharma and a shared vision for the promise of mitochondrial-targeted therapeutics.
http://www.mitobridge.com

Leadership:

Mike Patane: President

Management Team:

Kazumi Shiosaki: President, Chief Executive Officer
Lisa Paborsky: Senior Vice President
George Mulligan: Vice President of Translational Medicine
Effie Tozzo: Vice President, Transitional Biology
David Cordo: Chief Financial Officer

Funding To Date:

Funding Received: $45M
Last Round: $45M

Mitotech

Mitotech is a single-molecule biopharmaceutical company based in Luxembourg. The company researches therapies for a wide range of age-related diseases. Mitotech's technology is based on the properties of SkQ1. SkQ1 (also known as 'Skulachev ion') is a mitochondrial-targeting antioxidant. By reducing the active oxygen in the cell SkQ1 prevents apoptosis and protects a cell from age-related changes. The company currently has 6 products in their pipeline. They are divided into two product families: Visomitin and Plastomitin. Visomitin is a family of eye drop drugs designed for treatment of various ocular diseases. Visomitin is currently sold as a dry eye syndrome drug in Russia and is undergoing Phase III trials in the US. Visomitin is expected to become a viable treatment for uveitis and dry AMD, as Mitotech has launched Phase II trials aiming to use Visomitin specifically for those pathologies. Pastomitin is a pill variant of Visomitin. This drug family started Phase I clinical trials as multiple sclerosis, acute kidney injury, and Barth syndrome medication. Mitotech also produces MitoVitan, the SkQ1 serum designed as a skin geroprotector. Unlike Visomitin and Pastomitin, MitoVitan is distributed not as a drug, but as a cosmetic product. The company scheduled to reveal their new product in September 2017.
https://www.mitotechpharma.com

Management Team:

Natalia Perekhvatova, MS, MBA: CEO
Lawrence Friedhoff, MD, PhD, FACP: CCO
Maxim Skulachev, PhD: CSO
Anton Petrov, PhD, MBA: COO

Navitor Pharmaceuticals

Navitor Pharmaceuticals is a biopharmaceutical company that focuses on regulating complex metabolic pathways. Navitor's goal is to address chronic changes in biochemical processes. To achieve this, they use mechanistic target of rapamycin complex (or mTORC for short) as a central part of their therapies. mTORC (presented in two variations: mTORC1 and mTORC2) is a protein complex that acts as a switch in multiple pathways. While most companies in the industry concentrate on creating drugs that turn down mTORC expression levels, Navitor takes a more complex approach. By recognizing that any imbalance in expression leads to pathologies, Navitor develops therapies that can restore natural mTORC1 expression levels to treat different diseases. The company's anti-aging research lies in the field of immunosenescence. Pharmacologically reducing the activity of mTORC1 in elderly human subjects has been demonstrated to improve their immune response to a viral vaccine through the suppression of immunosenescence, which increases with age. From an investment perspective, Navitor is one of the most successful longevity companies, being able to get funding from numerous investors.
http://www.navitorpharma.com

Leadership:

Board of Directors:
Barry Burgdorf: Chief Operating Officer, Remeditex Ventures, LLC
Alan Crane: Co-founder and Chairman of the Board of Navitor
Jean-François Formela, MD: Partner, Atlas Venture
Paul Friedman, MD: Independent Director
Brian Gallagher, PhD: Partner, SR One
David M. Madden: Independent Director
Marian Nakada, PhD: Vice President, Venture Investments, Johnson & Johnson Innovation–JJDC, Inc.
Vinzenz Ploerer: President & CEO, Brace Pharma Capital, LLC
George Vlasuk, PhD: President and Chief Executive Officer of Navitor

Management team:

George P. Vlasuk, PhD: President and Chief Executive Officer
Rick Lundberg: Vice President of Business, Operations and Finance
Eddine Saiah, PhD: Vice President of Drug Discovery

Funding To Date:

$56.5M in 2 Rounds from 8 Investors
$33M (Series B) in Dec, 2015 from 7 investors (Atlas Venture, Johnson & Johnson Innovation , Polaris Partners, Remeditex Ventures, Sanofi-Genzyme, BioVentures and SR One)
$23.5M (Series A) in June, 2014 from 4 investors (Atlas Venture, Johnson & Johnson Development Corporation, Polaris Partners and SR One)

Nemaura

A private specialist biotech company, Nemaura Pharma offers accurate, easy to use, controllable and minimally invasive skin-based advanced drug delivery systems. Nemaura Technologie can lead to significantly improved healthcare and patient management by increasing the effectiveness and safety of therapeutic drugs, while also reducing complications due to patient error or non-compliance.

http://www.nemaura.co.uk/our-team/

Leadership:	**Management team:**
Steve Metcalf - Director of Operations David Scott - Director of Commercial Development and Licensing	Dr Faz Chowdhury - CEO Kathryn Farrar - Director of Finance Dr Werner Wessling - Director of Strategic Alliances
Funding To Date: Feb 7, 2017 - $5M	IPO Date: Apr 24, 2017

NovaDip Biosciences

NovaDip Biosciences is developing hard and soft tissue reconstruction products using patient specific adipose stem cells. Their first focus is not only treating patients with bone diseases and defects, but expanding into skin regeneration as well. They use synthetic biomimetic ECM constructs seeded with adipose stem cells to their bone replacement product. They have completed two proof-of-concept studies for their mainstay product (NVD-001) on pigs and have received positive clinical data from 15 patients treated in Europe. Their second product, NVD-002, has been used on 7 patients thus far.
http://www.novadip.com

Leadership:

Jean-François Pollet: CEO & Co-founder
Denis Dufrane: CSO & Co-founder
Beatrice De Vos: CMO

Management team:

Virginie Cartage - Head of Finance and Administration
Roland Gordon-Beresford - Chief RA/IP Officer
Nicolas Theys - Chief Operating Officer

Funding To Date:

$31.46M in 1 round from 5 investors
$31.46M Series A in September 2015: Intergrale Advisors, New Science Ventures, Ninelinvest, S.R.I.W., Vives Fund

NuSirt Biopharma

NuSirt Biopharma is an operator of a biopharmaceutical company developing drugs to treat diabetes and other metabolic disorders. The company's technology platform enables the use of natural compounds to create a synergy with known pharmaceuticals to prevent and treat chronic diseases resulting from over-nutrition and aging.
http://nusirt.com

Leadership:

Board of Directors:
Brian Laden
Joseph Cook Jr.
Michael Zemel
Vaughn Bryson
William Guttman

Management Team:

Joseph Cook Jr.: Executive Chairman & President
Barbara Cannon: Chief Operating Officer
Michael Zemel: Founder, Board Member & Chief Science Officer

Funding To Date:

$13.98M in 5 rounds from 5 investors
$6M (Series C) in May, 2015 from; Hatteras venture partners, Mountain Group Capital, TriStar Technology Ventures, Tennessee Community Ventures
$1.8M (Series B) in Jun, 2014 from Mountain Group Capital
$3.5M (Series A) in Mar, 2014 from; Mountain Group Capital, Tennessee Community Ventures
$2.08M (Seed) in Sep, 2012 from Tennessee Community Ventures
$600K (Seed) in Jun, 2012 from; Tennessee Community Ventures, Mountain Group Capital

Oisin Biotechnologies

Oisin Biotechnologies is a research and development biotech company, whose main aim is senescent cell clearance. While its main competitors — UNITY Biotechnology — uses small molecule drugs to kill senescent cells, Oisin has a different approach. The company is developing transient gene therapy to target different age-related types of cells, particularly p16-expressing cells which were proven to shorten healthy lifespan. The main benefit of using gene therapy compared to small molecule drugs is the ability to fine-tune it for each potential target. Oisin is currently starting large-scale trials to ensure their therapy reaches market as soon as possible. In March 2018 Oisin Biotechnologies launched their first subsidiary, Oisin Oncology, focused on combating multiple cancers, and raised an undisclosed amount in seed funding.
https://www.oisinbio.com

Leadership:

Gary Hudson - Ceo

Management Team:

Stephen Hilbert
Matthew Scholz

Investors:

Gary Hudson, Matthew Scholz, Kizoo Technology Capital GmbH

Nox Technologies

Mission Statement:
Firmly grounded in nearly a decade of discovery research prior to its founding, NOX Technologies Inc. has the potential to develop the first universal test for early detection of most, if not all, forms of human cancer from serum or urine samples. The test utilizes cancer-specific isoforms to a single protein marker, tNOX, that initially will help oncologists monitor therapy and detect and diagnose the cancers sooner. The immediate goal is a tNOX-based monoclonal antibody array that will not only detect cancer early (Stage 1) but discriminate among 30+ major forms of human cancer. Also envisioned is deployment of the cancer specific tNOX protein as an immunotherapeutic and chemotherapeutic target.

Summary
Nox Technologies is a provider of biotechnology and biodiagnostic services. The company is engaged in the identification, characterization and detection of cell surface proteins related to aging. The company was acquired by Nu Skin Enterprises (NYSE:NUS) for $12.5 million on December 18, 2012.
http://noxtechnology.com

Leadership:

Jeremiah Lam: Co-Founder
Manfred Lee: Co-Founder
Zen Zhenxin Lee: Co-Founder
Dalston Pung: CEO/Co-Founder
Dion Pung: Co-Founder

Funding To Date:
$125K Seed, in July 2014
Angel at a $500k Valuation

Orig3n

Founded in 2014, Orig3n focuses on the development of personal iPSC biobanking and the creation of the world's largest iPSC cell bank with enough cell lines from different individuals to create an HLA-matched line for the majority of patients. They aim to create the world's largest and most robust source of iPSCs for personalized stem cell therapies. They also offer genetic testing services and are working on providing iPSC disease models for use in the academia and industry.
https://orig3n.com

Leadership:

Robin Y. Smith: CEO
Kate Blanchard: COO
Marcie Glicksman, PhD: Chief Scientific Officer
Michael Fang, MD: Chief Medical Officer

Funding To Date:

$15.6M in 2 Rounds from 8 Investors
$12.5M Series A in December 2015: Hatteras Ventures, Syno Capital, DEFTA Partners, Harris & Harris Group, KTB-KORUS Fund, LabCorp, Mountains Group Capital
$3.1M Venture in February 2015: Harris
& Harris Group, Hatteras Venture Partners, KTB Ventures, Mountains Group Capital

Osiris Therapeutics

Osiris Therapeutics, Inc. is a cellular and regenerative medicine company. Osiris is focused on researching, developing and marketing products in the wound, orthopedic, and sports medicine markets. Osiris operates through the Biosurgery business segment, which focuses on products for wound care, orthopedics, and sports medicine to harness the ability of cells and novel constructs to promote the body's natural healing. The Company's products include Grafix, Stravix, TruSkin, Cartiform and BIO4. The Company produces and distributes Grafix for acute and chronic wounds; Stravix for tendon repair; TruSkin for wound closure; Cartiform, a viable cartilage mesh for cartilage repair, and BIO4 for bone growth. All of these products are cryopreserved and stored in special freezers at -80 degrees Celsius. Osiris continues to advance its research and development of biotechnology by focusing on improvement in regenerative medicine, including bioengineering, stem cell research and viable tissue based products. The company's BioSmart cryopreservation process retains the native characteristics and inherent functionality of tissue. Its BioSmart process includes preservation of the three dimensional (3D) matrix, endogenous growth factors, and tissue-resident cells.
http://www.osiris.com

Leadership:

Board of Directors:
Peter Friedli: Chairman
Yves Huwyler: Director
Jay M. Moyes: Director
Hans Klingemann, MD, PhD: Director
Thomas M. Brandt: Director

Management Team:

David A. Dresner: Interim President and CEO
Gregory Ivan Law: CFO
Alla Danilkovitch, PhD: CSO
Adrian P. Mollo: General Counsel

Funding To Date:

$15M in in 1 round from 1 investor
$15M (Post IPO) in Apr, 2014 from Mesoblast

Number of Clinical/Preclinical Trials: 4/2
Revenue 2015/2014 - $50 /$90 million

OxStem

OxStem is a spin-off from the University of Oxford, founded in 2013. OxStem is a developer of cell programming therapies and envisions its unique approach to regenerative medicine to do the following: deliver small molecule therapeutics that activate repair mechanisms that already exist within the body; exploit a deep understanding of the chemical underpinnings of stem and progenitor cell function and differentiation; generate a collection of drug candidates to awaken endogenous cells to repair tissues affected by disease or injury. OxStem, acting as a parent holding company, will spin-out and fund the development over time of a series of daughter companies. Each daughter company (or "Stem") will be focused on a large unmet therapeutic need within different organ systems (e.g. Dementia / Alzheimer's in the CNS, or Macular Degeneration within the Eye). Oxstem will license its intellectual property ("IP") as well as fund each daughter company. At the appropriate point in time this may involve a partnership for each Stem with pharmaceutical/ biotechnology companies seeking new drug pipelines. OxStem will hold a controlling interest with a clear exit strategy for each Stem: either through acquisition by a large pharmaceutical company with an interest in the particular disease area or through an IPO. As each therapeutic research program progresses beyond the proof-of-concept stage, an application specific subsidiary is created. At present, OxStem is targeting 7 therapies (see below).
http://www.oxstem.co.uk

Leadership:

Dr Michael Stein: Chairman and CEO
Raymond Spencer: CFO
Professor Steve Davies Waynflete Professor of Chemistry: CSO

Management Team:

Raymond Spencer - Chief Financial Officer
Dr Carolyn Porter - Chief Business Officer

Funding To Date:

$24.38M in 1 round from 1 investor
$24.38M Seed in May 2016: Human Longevity Inc.

PHIGENIX

Headquartered in Atlanta, Georgia, PHIGENIX, Inc. will leverage licensed patented technology to establish a strong first-mover advantage in Personalized Medicine and forge a lasting leadership position in the rapidly evolving cancer diagnostic and therapeutics industry. The PHIGENIX technology platform involves detecting and targeting the PAX2 and EN2 oncogenes for cancer diagnosis and treatment. PHIGENIX is currently developing diagnostic tests which may detect prostate abnormalities at the pre-malignant state years before the onset of cancer. Their therapeutics in development involve blocking the expression of cancer causing proteins and the subsequent re-expression of a naturally occurring component of the immune system to fight cancer. They are also developing novel drugs, antibodies and antibody-drug conjugates to deactivate the cancer-causing protein for cancer treatment and/or prevention. PHIGENIX is developing a diagnostic kit which determines the levels of a key oncogene that is known to regulate drug response in breast cancer, which may assist physicians in determining treatment regime. With this diagnostic test, breast cancer patients are likely to benefit more from a particular therapy can be identified, and other patients for whom alternative therapies (e.g. hormonal manipulation) may work, can be selected.
https://www.phigenix.com

Leadership:

Carlton D. Donald, Ph.D: Founder & President/Ceo
Mr. Michael C. Shores, Director

Mr. Robert Knowles, Director

Mrs. Wennifer H. Donald, Director, Coo

Management Team:

Dr. J. Page Brown - Head Of Research And Development

Funding To Date:

$4.56M in 2 Rounds (Undisclosed Investors)
$842.4K 2 Rounds (Undisclosed Investors)
$3.72M (Venture) in August 2014

Pluristem Therapeutics

Pluristem Therapeutics Inc. is an Israel – based biotechnology company that is developing off-the shelf cell therapies for a variety of human diseases. Pluristem's cell products are derived from human placentas, traditionally left to be medical waste following childbirth. Pluristem then expands these placental-derived cells with the use of a unique, proprietary, three-dimensional technology platform that ensures the efficient, controlled, mass production of the Company's cell therapy products, termed PLacental eXpanded cells. PLX cells act by secreting therapeutic chemokines, cytokines and growth factors produced as an inflammatory response. Pluristem's clinical development strategy focuses on two products: PLX-PAD in Critical Limb Ischemia to receive approval in U.S., Europe, and Japan; PLX-R18 for Acute Radiation Syndrome. The company's strategy assumes collaborations with pharmaceutical companies, while maintaining IP and manufacturing rights throughout the process. Pluristem helf a $15M IPO in 2017.
http://www.pluristem.com

Leadership:

Board of Directors:
Zami Aberman: Chairman
Yaky Yanay
Mark Germain
Hava Klemperer Meretzki
Doron Shorrer
Isaac Braun
Israel Ben Yoram
Nachum Rosman
Moria Kwiat

Funding Received: $24.67M
Last Round: $3.3M

Management Team:

Zami Aberman: CEO
Yaky Yanay: President and COO
Efrat Livne-Hadass: VP Human Resources
Hillit Mannor Shachar, M.D.: VP Business Development
Erez Egozi: VP Finance
Esther Lukasiewicz Hagai, M.D., PhD: VP Clinical & Medical Affairs
Sagi Moran, M.B.A.: VP Operations
Orly Amiran: VP Quality Assurance
Racheli Ofir, PhD, MA. Law: VP Research & Intellectual Property
Lior Raviv: Director of Development
Karine Kleinhaus, M.D., M.P.H.: Divisional VP, North America

PO Date Apr 1, 2003
Revenue 2015/2014 - $0.37/$0.67

Population Bio

Founded in 2006, Population Bio (PB) discovers causative genetic biomarkers to: develop and market DNA-based diagnostic tests for pre-symptomatic early detection of disease; enable pharmaceutical companies to develop companion diagnostics and novel targeted drugs with greater efficacy and safety; transform how physicians diagnose and manage disease in their patients. Their core technology rationally interprets the vast spectrum of variation in human genomes to uncover the genetic components of complex diseases such as Autism, Parkinson's, Alzheimer's, and Endometriosis. Population Bio, the CNV company, discovers disease genes via its CNV Beacon® method to accelerate the delivery of precision medicine diagnostic and therapeutic products to enable safe, low-cost, and more effective healthcare for patients. Population Bio has developed an advanced chromosomal microarray analysis (CMA) platform that increases the diagnostic yield of CMAs from the current 15% of standard CMA to 30-50%. They achieve this by using higher-resolution microarrays, novel analysis methods, and proprietary copy number variant (CNV) data obtained from normal subjects (i.e. healthy controls) which efficiently distinguishes benign variants from pathological ones. Population Bio utilizes this platform to identify CNVs of smaller size and in genomic regions not surveyed by standard CMAs, and can identify CNVs in genes with known disease associations. They can also identify CNVs that cannot be identified via exome sequencing, or that cannot be rationally or usefully interpreted when identified via whole-genome sequencing. Population Bio use their CNV Beacon® technology to substantially reduce the "genome search space" in order to identify CNVs associated with disease risk with greater confidence and at reduced cost compared to standard methods.
https://www.populationbio.com

Leadership:

Jim Chinitz, Founder: Chairman & Chief Executive Officer
Eli Hatchwell, MD PhD: Founder & Chief Scientific Officer
Peggy S. Eis, PhD: Founder & Chief Technology Officer

Management Team:

Edward B. Smith - Lead Director
Eli Hatchwell, MD PhD - Co-Founder & Chief Scientific Officer
Peggy S. Eis, PhD - Co-Founder & Chief Technology Officer

Funding To Date:

$5.36M Series A in August 2011 from 1 Investor (Undisclosed)

Prana Biotechnology

Prana Biotechnology is developing first-in-class therapies to treat neurodegenerative disease. The company's lead drug candidate: PBT2: is being developed for the treatment of Alzheimer's and Huntington's diseases. The Company is targeting lodgement of a New Drug Application for Huntington's disease in 2017 pending positive trial results. Prana Biotechnology also has advanced a drug candidate for Parkinson's disease and other movement disorders (PBT434) and brain cancer (PBT519), which are in preclinical toxicology testing. Development for PBT434 has received funding from the Michael J. Fox Foundation and Parkinson's UK. The company has a library of more than 1000 Metal Protein Attenuating Compounds (MPACs), which may support new therapies for neurodegenerative disease and other highly prevalent conditions in the future. Other potential applications for this platform technology include specific cancers. Prana Biotechnology has a robust history of academic collaborations with institutions such as The University of Melbourne, Massachusetts General Hospital, Boston MA, University of California, San Francisco, CA, and University College London among others.
http://pranabio.com

Leadership:

Lawrence Gozlan: Non-Executive Director
Brian Derek Metzler: Non-Executive Director
Geoffrey Paul Kempler: Executive Chairman, Chief Executive Officer
Peter Marks
George William MiHALE, PhD
Prof. Ira Shoulson: Non-Executive Director

Funding To Date:

N/A in 2 Rounds (Undisclosed Investors)

IPO / Stock: 2000 / ASX: PBT; 2002 / NASDAQ:PRAN
Revenue 2015/2014: $6.5 M/$8.2 M
Number of Clinical/Preclinical Trials: 2/2

Proteome Sciences

Proteome Sciences plc is a Leader in Applied Proteomics and Peptidomics.Proteome Sciences plc deliver content for Precision Medicine through services, biomarkers and reagents. Proteome Sciences plc use high sensitivity proprietary technologies to detect biomarkers across major human diseases in areas of significant unmet need where biomarkers have the potential to transform disease management and treatment for the first time at the level of the individual. Proteome Sciences plc proteomics expertise provides complementary and enabling content and insight for our strategic partners to develop more effective, time and cost-efficient healthcare solutions.

http://www.progenitorlabs.com

Leadership:

Jeremy Haigh - Chief Executive Officer and Executive Director
Dr. Ian Pike - Chief Scientific Officer and Executive Director
Dr. Josef Schwarz - Chief Compliance Officer

Management Team:

Richard Dennis - Chief Commercial Officer

Revenue 2015 /2016 - $2.72/$2.30 million

Proteostasis Therapeutics

Proteostasis Therapeutics is based in Cambridge, Massachusetts. The company pursues a novel approach to therapeutic intervention based upon an understanding of the Proteostasis Network. Advances in ability to characterize and pharmacologically control the Proteostasis Network create new opportunities for ameliorating diseases in a number of therapeutic areas. Proteostasis Therapeutics has assembled a DiseaseRelevant Translation, DRT™ platform that combines genomics, proteomics, and functional assays with medicinal chemistry and systems biology to convert emerging knowledge of the Proteostasis Network (PN) and its function to discover novel therapeutics for diseases with huge unmet patient needs. Proteostasis has a number of candidates in development currently for cystic fibrosis (CF) and Chronic Obstructive Pulmonary Disease (COPD). Proteostasis is also collaborating on two other project with Astellas Pharma (Protein Conformational disease) and Biogen (Neurodegeneration).
http://www.proteostasis.com

Leadership:

Board of Directors:
Christopher Mirabelli, PhD: Chairman of the Board
Meenu Chhabra
M. James Barrett, Ph.D
Franklin Berger
Helen M. Boudreau
Jeffery W. Kelly, PhD
Christopher T. Walsh, PhD
Conor Walshe

Management Team:

Meenu Chhabra: President and Chief Executive Officer
Po-Shun Lee, M.D.: Executive Vice President, Chief Medical Officer
Ben Munoz, PhD: Senior Vice President, Drug Discovery
Janet L. Smart, J.D., PhD: Vice President, Intellectual Property

Funding To Date:
Funding Received: $160.64M
Last Round: $50M

IPO / Stock: Feb 11, 2016 NASDAQ:PTI
Revenue 2015/2014: $4.3 M/$5.2 M
Number of Clinical/Preclinical Trials: 0/2

PureTech Health

PureTech Health was largely transformed since its inception. Once a venture company, PureTech Health had assembled their own drug pipeline from previously funded biotech companies. Recently, the company has entered the anti-aging market with resTORbio. resTORbio is a drug platform that addresses immunosenescence. resTORbio's chemical function is to inhibit mTORC1, which has shown to have a positive effect on lifespan in multiple species ranging from yeast to human. The company is right now in the middle of Phase II trial; resTORbio is expected to finish it by 2018.
http://puretechhealth.com

Leadership:

Board of Directors:
Robert Horvitz, PhD: Board Advisor & Scientific Advisory Board Chair
Joi Ito: Chairman of the Board of Directors
Raju Kucherlapati, PhD: Independent Non-Executive Director, Scientific Advisory Board Member
John LaMattina, PhD: Independent Non-Executive Director
Robert Langer, ScD: Co-Founder & Non-Executive Director, Scientific Advisory Board Member
Marjorie Scardino: Senior Independent Director
Ben Shapiro, MD: Co-Founder & Non-Executive Director
Christopher Viehbacher: Independent Non-Executive Director

Management Team:

Joseph Bolen, PhD: Chief Scientific Officer
Bharatt Chowrira, PhD, JD: President and Chief of Business and Strategy Eric Elenko, PhD: Chief of Research and Strategy
Michael MacLean: Chief Financial Officer
Stephen Muniz: Chief Operating Officer
Atul Pande, MD: Chief Medical Officer
David Steinberg: Chief Innovation Officer
Daphne Zohar: Co-Founder & Chief Executive Officer

Funding To Date:

Jan 9, 2015 - $50M

IPO Date Jun 26, 2015
Revenue:2015/2014 - $11.83/$2.22 millions

RETROTOPE

RETROTOPE is a clinical stage biopharmaceutical company created with the goal to prevent age-related cellular damage and restore mitochondrial health. Mitochondrial health is crucial in general anti-aging practices as oxidation damage can lead to various diseases, including Parkinson's disease, Alzheimer's disease, diabetic retinopathy, and other mitochondrial myopathies. In order to develop viable therapies, RETROTOPE is using isotopically stabilized PUFAs, a unique drug discovery platform. They are based on essential nutrient fats which have no pharmacological effect in the natural form, but, in the deuterated form, are sensitive and specific drugs with highly non-linear reduction of lipid peroxidation damage. RETROTOPE is collaborating with scientists and laboratories around the globe in most stages of their research. RT001, RETROTOPE's first drug candidate, controls metabolic processes associated with the oxidative stress conditions. RT001 is a highly-stabilized version of the cardiolipin forming fat, linoleic acid. RT001 had finished Phase I/II clinical trials in September 2016. The company was testing it in Friedreich's ataxia (FA), an untreated fatal orphan disease. A drug is expected to be able to treat a wide range of age-related diseases, as well as have the general effect of mitochondrial oxidative stress. RETROTOPE has presented first human data on efficacy of RT001.
https://www.retrotope.com

Leadership:

Board of Directors:
Harry J. Saal, Ph.D.: Chairman
Charles R. Cantor, Ph.D.: Founder and Chairman of SAB
Robert J. Molinari, Ph.D.: Founder and CEO
Mikhail S. Shchepinov, Ph.D.: Founder and CSO
Ernst-Günter Afting, Ph.D., M.D.: Director
Timur Artemev: Director
Peter G. Milner, M.D.: Director
Lex H.T. Van der Ploeg, Ph.D.: Director

Management Team:

Robert J. Molinari, Ph.D.: Founder and CEO; Director
Mikhail S. Shchepinov, Ph.D: Founder and CSO; Director
Curtis Scribner, M.D., M.B.A.: CMO
Linda Rubinstein: Consulting CFO
Judy Magruder: VP, Drug Discovery Operations
Bruce Girton: Director, Analytical & CMC
Frederic Heerinckx: Senior Director, Clinical Operations
Sue Schlesinger: CMC Consultant

Funding To Date:

$14, 53M in 2 Rounds from 2 Investors
$14.53M (Venture) in March, 2016 (Timur Artemiev)
Undisclosed amount (Series B) in Oct, 2014 (Green Park & Golf Ventures)

Quark Pharmaceuticals

Quark Pharmaceuticals (formerly known as Quark Biotech) is a late-stage biopharmaceutical company. The company develops treatments for the variety of age-related diseases. Their research focuses on utilizing small interfering RNA (siRNA), a short biomolecule class that can be delivered to the desired cell in order to turn down, essentially, any gene. The main problem with siRNA-based therapy is delivery, as it may be highly inaccurate. Quark addresses this issue by implementing proprietary siRNA compounds that can be delivered precisely to the desired target. Quark's pipeline consists of multiple drug candidates for diseases ranging from balance disorders to cancer. Two of company's candidates are undergoing Phase III trials and were granted Orphan designation: QPI-1002, which treats Delayed Graft Function (DGF); and QPI-1007, a drug for Non Arteritic Ischemic Optic Neuropathy (NAION). Besides them, Quark has 16 other therapeutics in various stages of development.
http://quarkpharma.com

Management Team:

Daniel Zurr, Ph.D.: Chairman of the Board of Directors and Chief Executive Officer
Tomer Natan, LLM, BB, CPA: Chief Financial Officer
Rami Skaliter, Ph.D.: Chief Operating Officer
Shai Erlich, Ph.D.: President US Operations and Chief Medical Officer
Elena Feinstein, MD, Ph.D.: Chief Scientific Officer
Juliana Friedmann, M.Sc.: Senior Vice President of Strategy and Planning

Funding To Date:

$61.4M in 5 rounds from 2 investors
$10M (Venture) in Jun, 2010 (investors undisclosed)
$27M (Venture) in Jul, 2008 from 1 investor (SBI Asset Management)
$13.9M (Series H) in Apr, 2008 from 2 investors (SBI Asset Management and Tako Ventures)
$10.5M (Series G) in Jan, 2006 from 1 investor (Tako Ventures)

Quincy Bioscience

Quincy Bioscience is a biotechnology company based in Madison, Wisconsin, that focuses on the discovery, development and commercialization of novel technologies to support cognitive function and other normal health challenges associated with aging. Quincy Bioscience is set apart by its cutting-edge applications of apoaequorin which is breaking new ground with Apoaequorin, originally discovered in jellyfish, now patented by Quincy Bioscience for use in a variety of products to support cognitive function. Apoaequorin is manufactured in a cGMP compliant facility. In 1962, the discovery and development of apoaequorin gave various scientists great acclaim. Quincy Bioscience is building on this work through its novel use of Apoaequorin. Apoaequorin achieved self-affirmed GRAS status (generally recognized as safe) after an independent panel of expert scientists concluded that apoaequorin is safe for use in food products. Prevagen® is the company's flagship consumer brand containing apoaequorin. A landmark double blind and placebo-controlled trial demonstrated Prevagen has a strong relationship with improvements on quantitative measures of cognitive function, specifically verbal learning. Prevagen is now the best-selling brain health supplement in chain pharmacies across America according to Nielsen data (2016).
http://www.quincybioscience.com

Leadership:

Michael Beaman: Chief Executive Officer & Chairman
Mark Underwood: President & Co-Founder
Keith Thomsen: Chief Financial Officer
Nathan Beaman: Director, Financial Planning
Dan Moran: Director, Manufacturing Science
James Moyer: Co-Founder

Management Team:

Tom Dvorak: Vice President of Sales & Marketing

Funding To Date:
Funding Received: $8.42M
Last Round: $240K

Rapamycin Holdings

Based in San Antonio, Texas, Rapamycin Holdings Inc. (RHI) is developing and commercializing a patented oral formulation of Rapamycin for the prevention of cancer progression and recurrence. The patented oral formulation offers improved pharmacodynamics over generic Rapamycin including; better shelf life stability, increased bioavailability, and more predictable blood levels. This formulation, eRapa™, was originally developed for use in aging studies at the Barshop Institute for Longevity and Aging Studies at the University of Texas Health Science Center at San Antonio (UTHSCSA), and is the only pharmaceutical agent tested thus far to demonstrate significantly increased healthspan and lifespan in rodent models. RHI began operations in late 2012 and has a portfolio covering four issued patents, 7 UTHSCSA patents pending, and 3 RHI patents pending for the use of Rapamycin and/or our patented formulation of rapamycin to address large market opportunities in dementia, cancer, autoimmune disease and post-surgical adhesions. These patents cover the novel formulation as a composition of matter, the manufacturing process for the formulation, and a variety of method of use patents covering unique dosing and treatment regimens in multiple target disease indications.
http://rapamycinholdings.com

Leadership:

George Fillis: Founder and President
Randy Goldsmith: CEO

Management Team:

Dan Hargrove, Jd, Llm – President And Chief Executive Officer
Randy Goldsmith, Phd – Founder And Director
Mark Horsey, Mba – Chief Financial Officer, Secretary And Treasurer
George Peoples, Md – Chief Medical Officer
Leon W. Levan, Phd – Chemistry Manufacturing And Controls
Ian Thompson Jr., Md – Principle Investigator Prostate Cancer Trials
Robert Svatek, Md – Principle Investigator Bladder Cancer Trials
Charles Cantrell J.D., B.S.N.

Funding To Date:

Funding Received: $3.93M
Last Round: $3.93M

ReThink

ReThink offers a distinct algorithm based on evolutionary genomics (Phylogenetic Profiling) and innovative bioinformatics for drug repurposing. ReThink discovers new indications for drugs in the market and under clinical development, as well as, shelved drugs which failed for efficacy reasons in clinical trials. ReThink's breakthrough approach goes beyond the boundaries of published data, dramatically expanding the spectrum of connections between drugs and diseases that allow them to generate novel and highly accurate findings. ReThink is currently pursuing partnership and collaboration pharma, medical institutions and rare disease foundations to create value by enhancing the potential, clinical and commercial success of repurposing options for existing assets. ReThink's core technology is a unique proprietary algorithm based on evolutionary genomics and innovative bioinformatics. Using the algorithm, ReThink is able to reveal new Gene-Disease-Drug interactions. ReThink offers a faster, broader and more accurate approach to reveal additional new targets for a drug by inferring interactions between the known targets of a therapeutic agent to additional genes that are associated with other diseases. The algorithm was developed over 5 years of extensive research conducted at MGH and Harvard Medical School. The findings have been published in journals such as Nature, Cell, and Molecular Systems Biology.
http://www.rethinkpharmaceuticals.com/

Leadership:

Etty Amir: Co-Founder & Chief Executive Officer
Guy Seemann: Co-Founder & Chief Operating Officer
Ofer Tabach: Co-Founder & Director, Business Development
Yuval Tabach: Co-Founder & Chief Scientist

Management Team:

Ehud Schreiber, PhD
Matan Rappoport, PhD MBA

Revance Therapeutics

Revance Therapeutics, Inc., a biopharmaceutical company that engages in developing and commercializing products and treatments in dermatology and aesthetic medicines. Its products include RT001, a physician-applied topical botulinum toxin type A (BoNT-A) for cosmetic, hyperhidrosis, and dermatologic indications. The company was formerly known as Essentia Biosystems, Inc. Revance Therapeutics, Inc. was founded in 2002 and is based in Mountain View, California. Currently, Revance is advancing investigational product candidate RT002. In clinical trials, with investigational product candidate (RT002), daxibotulinumtoxinA has shown potential of becoming the first long-lasting injectable formulation of botulinum toxin type A. The anticipated approval of RT002 injectable would represent the first major innovation to hit the neurotoxin market in 30 years. Revance Therapeutics held an $75M IPO on February 6, 2014.
http://www.revance.com

Leadership:

Board of Directors:
Bob Byrnes
Vicente Trelles
Daniel Browne

Management Team:

Lauren Silvernail: Chief Financial Officer
Jacob Waugh: Co-Founder & Chief Scientific Officer
Azhar Ghani: Executive, Strategy & Finance

Funding To Date:
Funding Received: $333.98M
Last Round: $96M
IPO: $75M

Revenue 2015/2014 - $300,000/$300,000 millions

BiomX

BiomX is a microbiome drug discovery company developing customized phage therapies that seek and destroy harmful bacteria in chronic diseases such as inflammatory bowel disease (IBD) and cancer. We discover and validate proprietary bacterial targets and customize our natural and engineered phage compositions against these targets. The Company's platforms use computational and synthetic biology and cutting-edge research from Profs. Rotem Sorek, Ph.D., Eran Elinav, M.D., Ph.D., and Eran Segal, Ph.D., of The Weizmann Institute of Science; and Professor Timothy K. Lu, M.D., Ph.D., of The Massachusetts Institute of Technology. Investors in the Company include OrbiMed Israel Incubator LP, Johnson & Johnson Development Corporation Inc., Takeda Ventures, Inc., Seventure Partners, Mirae Asset, and SBI.

http://www.biomx.com/

Leadership:
Board of Directors:

Karen Hong, Ph.D
Erez Chimovits
Zeev Zehavi
Henk Brulleman
Prof. Rotem Sorek
Prof. Eran Elinav
Prof. Timothy K. Lu
Prof. Richard A. Flavell, Ph.D
Michael Koeris, Ph.D

Management Team:

Jonathan Solomon - CEO and Board Member
Naomi B. Zak, PhD. - President & COO
Assaf Oron - CBO
Sigal Fattal - CFO

Funding To Date:

Funding Received: $24M
$24M May 15, 2017
Lead Investors: Takeda Ventures; OrbiMed; Johnson & Johnson Innovation

Samumed

Samumed is San Diego-based regenerative medicine company. It develops therapies that promote tissue regeneration. Conventional therapies implement stem cells, but this approach has some disadvantages, such as oncological risks. Samumed uses biochemical approach instead. The company creates drugs that affect Wnt pathway. Wnt pathway has been extensively studied over the last three decades and also has been implicated in many diseases, primarily in oncology and various degenerative conditions. Currently, Samumed's pipeline consists of various Wnt-associated drugs that are aimed to treat various age-related diseases, including osteoarthritis, androgenetic alopecia, and Alzheimer's disease. However, the management team and investors of Samumed are having firm belief that further examination of Wnt pathway can lead to important discoveries in anti-ageing.
https://www.samumed.com/default.aspx

Leadership:
Board of Directors:

Osman Kibar, Ph.D. : Chief Executive Officer, Founder
Cevdet Samikoglu: Chief Financial Officer
Yusuf Yazici, M.D.: Chief Medical Officer
Arman Oruc: Chief Legal Officer
Erich Horsley: Chief Business Officer
Blake Mobley, Ph.D.: Chief Information Officer
Philippe Marchand, Ph.D.: Chief Operating Officer

Management Team:

Todd Smith - Data Management

Funding To Date:

$300M at a$12B valuation from 5 investors (California Institute for Regenerative Medicine, IKEA Group, Trevor Neilson, Vickers Financial Group and Vickers Venture Partners)

Semma Therapeutics

Semma Therapeutics is leading the commercialization of the work of Doug Melton's Lab at the Harvard Stem Cell Institute, which pioneered the generation of functional insulin-producing beta cells directionally differentiated from human embryonic stem cells (hESCs). Unlike their predecessors, Semma Therapeutics beta cells have been shown to be functional and insulin-responsive immediately following transplantation, and have been shown to effectively manage diabetes in multiple animal models of the disease. The company aims to create a workable cure for Type-1 diabetes, a mission that was inspired when the children of the company's co-founder, Doug Melton, were diagnosed with the disease 19 years ago. They are currently focusing on developing an encapsulating device so that their proprietary stem cell derived beta cells can be transplanted while being protected from the patient's immune system, which is where their Series A funding is being directed.
http://www.semma-tx.com

Leadership:

Doug Melton, PhD: Founder
Robert Millman, JD: CEO
Moses Goddard, MD: CMO
Felicia Pagliuca, PhD: Scientific Co-Founder, Vice President of Cell Biology Research and Development

Funding To Date:

Funding Received: $99M
$49M in 1 Round & 1 Grant from 5 Investors
$5M Grant in September 2016: California Institute of Regenerative Medicine (CIRM)
$44M Series A in March 2015: ARCH Venture Partners, F-Prime Capital Partners, Medtronic, MPM Capital
$114M Series B in November 2017: Eight Roads Ventures, Cowen Healthcare Investments, MPM Capital, F-Prime Capital Partners, ARCH Venture Partners, Novartis, Medtronic, JDRF T1D Fund, ORI Healthcare Fund, Wu Capital, 6 Dimensions Capital and SinoPharm Capital

Signum Biosciences

Signum Biosciences is a small molecule biopharmaceutical company that develops preventive care therapeutics for various diseases. The company's main research focus is neurodegenerative pathologies, as well as Alzheimer's and Parkinson's diseases. To combat them Signum uses Signal Transduction Modulation (STM) platform which allows to platform to modulate signal transduction imbalances. The company implements systems biology approach to drug development. Another distinct feature of Signum is usage of the pharmaceutical development cycle for consumer care products, including complex clinical trial system and having science articles published concerning the efficacy of their products. The company holds intellectual property on EHT, a naturally-occurring molecule that keeps neuron health in an optimal functional state. Another anti-aging drug created by Signum is SIG-1273: a molecule that blocks chronic inflammation processes. SIG-1191 is another Signum's patented longevity medicine. It utilizes Aquaporin 3 (AQP3) to increase hydration in the base layer of skin. Other products include Arazine, a drug that keeps UV rays from penetrating the skin; and SIG-990 that reduces the inflammation signals and responds to these external triggers for reducing the redness and inflammatory lesions associated with rosacea. Signum is actively cooperating with various biotech and pharmaceutical companies, as well as research institutes. The company states that they ''believe that the best way to move forward, to advance our own scientific platform and the work that comes from it, is through partnerships with leading researchers and institution''.
https://www.signumbiosciences.com

Leadership:
Board of Directors:

Jeffry Stock, PhD: Chairman
Maxwell Stock: President and CEO
Gregory Stock, PhD: Board Member
Stephen Modzelewski: Board Member
Yoichi Kambara: Board Member

Management team:

Maxwell Stock: President & CEO
Eduardo Perez, PhD: Chief Scientific Officer
Michael Voronkov, PhD: Vice President of Medicinal Chemistry
Jose Fernandez, PhD: Director of Research & Development
Masanori Tamura: Director of Product Development
Antonino Chetta: Director of Communications

Funding To Date:

$5.6M in 2 Rounds (investors undisclosed)
$1.6M (Grant) in November, 2013
$4M (Venture) in July, 2011

Silene Biotech

Silene Biotech is a developer of stem cell generation and cell preservation technology designed to prevent the degeneration and mutation of adult cells. The company's stem cell generation and cell preservation technology specializes in collecting adult cells, processing and growing the cells, cryopreserving them to prevent aging, and also converting a small percentage of them into induced pluripotent stem cells, enabling medical professionals to regenerate the body, model hereditary diseases, and screen drugs for efficacy. Silene Biotech is collecting and storing cells now, so customers can use them years or decades down the line. Instead of collecting urine samples, which the start-up did in their beta trial, it is now partnering with Bloodworks Northwest to collect samples of customer's blood. The sample will then be processed by Silene and stored in a facility. The service costs $299 for the initial processing and first year of storage, and $50 per year after that. Customers can access their cells at any time, retrieving them to be used in medical procedures. The cells are anonymized during processing to protect patient confidentiality. Customers also retain the right to have their cells destroyed at any time. Potential uses for these cells include growing tissue to repair organs, using lab-grown tissue to test patients for drug resistance, and even growing entire organs for patients who need transplants. In the first clinical trial that these cells were studied in, researchers took skin cells from a patient with vision loss and converted them into lab-grown stem cells. The cells were then grown into retinal cells and implanted in the patient's eye, effectively halting her vision loss.
https://www.silenebiotech.com

Leadership:

Board of Directors:
Alex Jiao
Jenna Strully

Management team:

Alex Jiao: Chief Executive Officer
Jenna Strully: Co-Founder and Board Member
Edward Whalen: Co-Founder
Robert Thomas: Co-Founder

Funding To Date:

Funding Received: $260K
Last Round: $200K

Sierra Sciences

Sierra Sciences is an anti-aging company located in Reno, USA. Sierra was created with a goal to reverse the aging process. In 1997 Bill Andrews, CEO of Sierra Sciences discovered human telomerase reverse transcriptase (hTERT): a telomerase enzyme component that, when expressed, can restore telomere length. Telomere shortening is considered one of the main aging mechanisms. Expressed hTERT is proven to lead to immortalization in cell cultures and is expected to revert aging process in organisms. The company states that expression of telomerase can be advantageous in various situations: from treating wounds to fighting cardiovascular diseases and AIDS. Sierra acts as a subsidiary of Defytime, the biotech company from New Zealand. Sierra has made several successful researches on hTERT, gradually moving towards successful implementation of telomere therapy.
https://www.sierrasci.com

Leadership:

Jonathan Greenwood: Director of Business Development
Lancer Brown: M.S. Program Director of Screening
Bill Andrews, Ph. D.: President & CEO
Lonnie Klaich: Vice President of Finance & Administration
Laura A. Briggs: Ph.D. Vice President of Research and Discovery

Management team:

Lancer Brown: M.S. Program Director of Screening
Sal Cumella: M.D. Medical Liason
Federico Gaeta, Ph.D.

SIWA Therapeutics

SIWA Therapeutics is a privately held preclinical stage biotechnology company that has a monoclonal antibody that targets and destroys senescent cells. Their current therapeutic focus is on certain rare and fast track diseases, including cancer metastasis and muscle wasting diseases, such as muscular dystrophy. Beyond these indications, senescent cells are causally implicated in a wide variety of diseases including: neurodegenerative diseases, autoimmune conditions, and infectious diseases. SIWA's lead product, SIWA 318, targets a naturally-occurring extracellular marker, which was identified by SIWA and is specific to senescent cells. SIWA is currently optimizing SIWA 318 for the treatment of the rare and fast track diseases aforementioned. However, SIWA 318 also has the potential to address several other conditions where senescent cells are causally implicated. SIWA's preclinical research to date has been performed using the murine version of 318. Since SIWA is in the process of optimizing SIWA 318, they are beginning to pursue initiation of clinical trials.
https://siwatherapeutics.com/home/

Leadership:

Alex Kormushoff: Executive Chairman
Lewis Gruber: Founder, CEO and Chief Scientific Officer
Misty Gruber: Founder, General Counsel and CFO

Funding To Date:

May 22, 2017 $1.6M

Funding Received: $400K

TauRx Therapeutics

TauRx Therapeutics was established in Singapore in 2002 with the aim of developing new treatments and diagnostics for a range of neurodegenerative diseases based on an entirely new approach of targeting aggregates of abnormal fibres of Tau protein that form inside nerve cells in the brain. The company's lead proprietary compound, LMTX®, has recently completed Phase 3 clinical trials to evaluate its safety and efficacy in the treatment of Alzheimer's disease and behavioural-variant frontotemporal dementia. Those results are currently being analyzed. The TauRx team have since discovered that LMTX™ could also have beneficial effects in several other neurodegenerative diseases associated with Tau pathology, as well as, other protein aggregation disorders including Parkinson's, Huntington's and Frontotemporal Dementia (Pick's Disease). Several other compounds are in the early-stage development for the treatment of neurodegenerative diseases caused by protein aggregation.
http://taurx.com

Leadership:

Board of Directors:
George Chia
Kong Han Tan
Paul Cheng
Stephen Logan
Sushilan Vasoo
Tan Sri Lim Kok Thay
Tay Choon

Management Team:

Claude Wischik: Co-Founder, Chief Executive Officer
Timothy Earle: Chief Operating Officer
Seng Way: Managing Director
Charles Harrington: Chief Scientific Officer
Jiri Hardlund: Chief Medical Officer

Funding To Date: Nov 20, 2012-$112M

Funding Received: $277.33M

Last Round: $135M

UNITY Biotechnology

UNITY Biotechnology is the R&D biopharmaceutical company that strives to halt and revert the ageing process and treat age-related diseases by designing senolytic medicines. Senolytic medicines are small molecule drugs that target specifically senescent cells, leaving healthy ones untouched. Their pipeline includes treatments for the vast range of illnesses. Senolytic medicines for inflammatory and ophthalmic diseases have already entered pre-clinical trials and are expected to start Phase I trials in the next few years. UNITY has drawn attention to itself in late 2016, when the company had raised more than $100 million in Series B Financing from some renowned investors, including Amazon CEO Jeff Bezos. Additionally, on April 6, 2018, they filed with the SEC for an $85 million IPO, and are preparing to enter into Phase 1 trials for their lead senolytic candidates, UBX0101 and UBX1967. Listed bookrunners for their IPO include Goldman Sachs, Morgan Stanley, Citigroup and Mizuho Securities.
https://unitybiotechnology.com

Leadership:

Board of Directors:
Keith R. Leonard Jr., M.S., M.B.A.: Chief Executive Officer
Nathaniel David, Ph.D: President
Robert T. Nelsen: Co-founder and Managing Director
Kristina Burow: Managing Director
Camille Samuels: Partner

Management Team:

Keith R. Leonard Jr., M.S., M.B.A.: Chief Executive Officer
Nathaniel David, Ph.D: President
Jamie Dananberg, M.D.: Chief Medical Officer
Dan Marguess, D. Phil: Chief Scientific Officer
Keith L. Klein: General Counsel
John Smither: Chief Financial Officer
Susan Lundeen: VP of People

Funding To Date:

$118.79M in 4 Rounds from 6 Investors
$116M (Series B) in October, 2016 from 6 investors (ARCH Venture Partners, Baillie Gifford, Jeff Bezos, Mayo Clinic and WuXi AppTec)
$2.04M (Venture) in July, 2013 (investors undisclosed)
$250k (Venture) in May, 2009 (investors undisclosed)
$500k (Venture) in May, 2009 (investors undisclosed)

Universal Cells

Universal Cells focus on developing off-the-shelf HLA-engineered stem cells that can be used as a universal cell therapy platform for any patient, without rejection. They eliminate the expression of patient specific HLA proteins via gene editing and rather express specific non-polymorphic HLA molecules in order to equip cells with the class I signals necessary to prevent their destruction by patients' natural killer (NK) cells. They also introduce suicide genes into the cells as a safety switch. Universal Cells' technology is based upon IP developed at University of Washington, and focuses on methods of genome editing in human stem cells via homologous recombination with recombinant adeno associated virus (rAAV) vector. Their main technology involves the genetic elimination of HLA class I and/ or HLA class II expression in human stem cells and their derivatives. However, their portfolio also covers the knock-in of specific single chain HLA molecules that can be reintroduced into otherwise HLA-negative cells in order to avoid missing self-responses and/or present customized peptide antigens that can be built into such constructs. Universal Cells was awarded a Direct to Phase II SBIR grant from the NIH in 2015 and has obtained promising proof-of-concept results from in vitro studies, with preclinical studies using animal models ongoing.
http://www.universalcells.com

Leadership:

Claudia Mitchell, PhD, MBA: CEO
David Russell, MD, PhD: CSO
Gregory Block, PhD: VP of Business Development

Management Team:

Melissa A.- Project Manager

Funding To Date:

$300K Seed, in July 2014 (Investors Undisclosed)

Vault

Vault provides patients with a system to securely, reliably and efficiently collect and store their individual adult stem cells and tissue for future use in age-reversal and disease treatments. Through strategic alliances with dental, plastic, and cosmetic surgeons, as well as, other medical professionals, a network of knowledgeable champions are reliably collecting and sharing information needed for client and public education.
www.vaultstemcell.com

Leadership:

Adam Houtman: Co-Founder & Chief Executive Officer
Jase Wrigley: Co-Founder

Management Team:

Charles Handschin
Director of Business Development

Funding To Date:

Funding Received: $200K
Last Round: $200K

Vericel Corporation

Vericel Corporation, formerly Aastrom Biosciences Inc., incorporated in1989, is a commercial-stage biopharmaceutical company dedicated to the identification, development and commercialization of therapies that enable the body to repair and regenerate damaged tissues and organs to restore normal structure and function. Vericel operates through the research, product development, manufacture, and distribution of patient-specific, expanded cellular therapies for use in the treatment of specific diseases. Vericel markets two autologous cell therapy products in the United States: Carticel (autologous cultured chondrocytes), an autologous chondrocyte implant for the treatment of cartilage defects in the knee, and Epicel (cultured epidermal autografts), a permanent skin replacement for the treatment of patients with deep-dermal or full-thickness burns approximately 30% of total body surface area. Vericel is currently developing MACI, a third-generation autologous chondrocyte implant for the treatment of cartilage defects in the knee, and ixmyelocel-T, a patient-specific multicellular therapy for the treatment of advanced heart failure due to ischemic dilated cardiomyopathy (DCM). Vericel has a cell manufacturing facility in Cambridge, Massachusetts, which is used for United States manufacturing of Epicel, as well as, the manufacturing and distribution of Carticel.
https://vcel.com

Leadership:

Dominick Colangelo: President & CEO
Daniel Orlando: Chief Operating Officer
Gerard Michel: Chief Financial Officer & Vice President of Corporate Development

Management Team:

David Recker, MD: Chief Medical Officer
Jacquelyn Fahey Sandell: Vice President and General Counsel
Heidi Hassen Sr. Director: Human Resources

Funding To Date:

Funding Received: $61M
Last Round: $40M

IPO / Stock: Feb 4, 1997 / NASDAQ:VCEL
Revenue 2015/2014: 51.17/ $28.80 M
Number of Clinical/Preclinical Trials: 2/0

Veritas Genetics

Veritas Genetics was founded in 2014 by Harvard Medical School genetics professor, George Church. Whole genome sequencing screens every gene in an individual's DNA to get information on genetic risks for scores of clinically relevant conditions. The screenings are available from several companies and academic centers at a cost of several thousand dollars. Veritas recently launched what it claimed was the first US consumer product for $999, including screening, analysis, and genetic counseling. Consumers sign up on the company's website but are asked to get approval from their physicians. Currently, customers pay for the test out of pocket, though Veritas thinks health insurers will eventually reimburse members. In addition to whole genome sequencing, Veritas markets tests for breast, ovarian, and other cancers, as well as, tests for expectant mothers and newborns to determine risks for hereditary diseases.
https://www.veritasgenetics.com

Leadership:

George Church, PhD: Founder, SAB Chairman
Mirza Cifric: Founder and Chief Executive Officer
Preston Estep III, PhD: Founder and Chief Scientific Officer
Jonathan Zhao, PhD: Founder and Managing Director, Asia
Douglas F Flood: Chief Commercial Officer and General Counsel
Tim Smith: Chief Operating Officer
Rodrigo Martinez, Chief Marketing and Design Officer
Dana Robin Semmel: MD, Lab Director
Birgitte Simen, PhD: VP Product Development
Diego Martinez, PhD: Head of Bioinformatics

Funding To Date:

$4.56M in 2 Rounds from 3 Investors
$30M Series B in October 2016: Trustbridge Partners (Lead Investor), Lilly Asia Ventures, Jiangsu Simcere Pharmaceuticals
$12M Series A in June 2015: Lilly Asia Ventures

Visgeneer

Visgeneer is a biotech company located in Hsinchu, Taiwan. Visgeneer aims to develop and produce biomedical products associated with human diseases (cancer, cardiovascular disease, diabetes and gout etc.), as well as, skin aging. Visgeneer has generated a bioinformatic database associated with cancer and is currently using this database as a source to develop highly sensitive and specific molecular diagnosing products. They also plan on developing antibodies in association with pharmaceutical processes for disease treatments. Visgeneer has already produced a fast, low sample volume and portable biosensor for monitoring blood glucose level and is now planning to develop a multifunctional monitoring system for measuring levels of blood pressure, cholesterol, and uric acid as well. They are also pursuing the development of a non-invasive blood glucose monitoring system. Some of Visgeneer's current products include high-quality skin care products, which are produced using a combination of nano tech water and several functional animal and plant extracts.
http://www.visioneer.com/en/us/

Leadership:

Dr. Ken-Shwo Dai: CEO, President & Board

Management Team:

Alice Kung

IPO / Stock: ROCO: 4197

Youth Laboratories

Youth Laboratories is a spin-off company of Insilico Medicine. The company operates in the field of image recognition, a section of machine learning that focuses on processing data from visual sources. Youth Laboratories implements these algorithms in order to extract valuable data from selfmade photographs, selfies. The company's mission is to extend human longevity, fight aging, and develop treatments that will help people stay young and healthy for as long as possible. Through its lifespan, the company has created two distinct projects: RYNKL and Beauty AI. RYNKL is the earliest of the two. Made in 2015, RYNKL is an app that can detect wrinkles, one of the main visual marks of aging. The program was created in order to track the progress of the anti-aging treatments and compare their efficiencies. The RYNKL has contributed to other Insilico Medicine projects, such as Young.AI. Beauty.AI is a contest that is made in order to test AI systems' capabilities in evaluating the physical attractiveness of people. People send in their selfies to be judged by a Robot Jury, a conglomerate of multiple algorithms made by contributors from around the world. After its launch in 2016, this is the second year for the contest to be held.
http://ylabs.ai

Leadership:	**Management Team:**
Alex Zhavoronkov, Founder	Alexey Shevtsov Nastya Georgievskaya Konstantin Kiselev Alex Zhavoronkov

Top 10
Publicly Traded Companies with a Role in the Longevity Industry

Company:	BioTime, Inc.
Market Cap:	$385.33M
Company Description/ Role in Longevity:	BioTime's "strategy is to be the leader in the development of pluripotent stem cell-based technologies and to apply those new technologies in the treatment of degenerative diseases that afflict large numbers of people worldwide." BioTime currently has therapies in development for HIV Related Lipoatrophy, Macular Degeneration, Leukemia (AML), Spinal Cord Injury, NSC Lung Cancer, and Orthopedics. BioTime also has diagnostics in development for Lung Cancer, Breast Cancer, and Bladder Cancer.
website	http://www.biotimeinc.com/

Source: http://www.biotimeinc.com/company/

Company:	Novartis
Market Cap:	$202.023B
Company Description/ Role in Longevity:	Novartis is a global healthcare company based in Switzerland that provides solutions to address the evolving needs of patients worldwide. Rapamycin is a member of the mTOR inhibitors class of drugs that has been a promising target in a number of age-related diseases including Alzheimer's disease, heart disease, and cancer. A Novartis study released in December 2014 evaluated rapamycin (RAD001) in elderly patients and reported positive results for the drug. RAD001 has since developed into a drug called Everolimus (trade name Afinitor) and in February, 2016, the U. S. Food and Drug Administration approved Everolimus for "the treatment of adult patients with progressive, well-differentiated non-functional, neuroendocrine tumors (NET) of gastrointestinal (GI) or lung origin with unresectable, locally advanced or metastatic disease."
website	https://www.novartis.com/

Source:https://www.fda.gov/Drugs/InformationOnDrugs/ApprovedDrugs/ucm488028.htm

Company:	GlaxoSmithKline 
Market Cap:	80.506B
Company Description/ Role in Longevity:	GlaxoSmithKline is a science-led global healthcare company that has “three world-leading businesses that research, develop and manufacture innovative pharmaceutical medicines, vaccines and consumer healthcare products.” In 2008, GSK bought Sirtris Pharmaceuticals for $720M. Sirtris was a company that had an initial product called SRT501, which was a formulation of resveratrol. Five years post-purchase, in 2013, GSK shut down Sirtris. The last report on GSK’s pursuit in sirtuins came in 2015. As of 2015, GSK had a 12-employee sirtuin development performance unit. The head of the unit, Jim Ellis, “says that they have positive clinical results with one of the Sirtris molecules in psoriasis, but that they are looking for molecules with better properties to take forward in psoriasis and other inflammatory disorders. In other words, they are starting over.”
website	https://www.gsk.com/

Source: http://www.gsk.com/en-gb/about-us/
http://www.nature.com/nbt/journal/v33/n1/box/nbt.3108_BX3.html

Company:	UniQure
Market Cap:	$139.80M
Company Description/ Role in Longevity:	uniQure is delivering on the promise of gene therapy using single treatments with potentially curative results. uniQure has developed a modular platform to rapidly bring new disease modifying therapies to patients with severe genetic diseases. The company is advancing a focused pipeline of innovative gene therapies and has established clinical proof-of-concept in its lead indication, hemophilia B, and preclinical proof-of-concept in Huntington's disease. Its pipeline of adeno-associated virus (AAV)-based gene therapies is developed both internally and through multiple collaborations using its innovative modular technology platform, including proprietary commercial-grade industry-leading manufacturing capabilities in two geographical locations. Through collaborations and a strategic partnership with Bristol-Myers Squibb to develop gene therapies for cardiovascular diseases, uniQure has made the next step towards developing gene therapies targeting chronic and degenerative diseases that affect larger populations.
website	http://www.uniqure.com/about/company-profile.php

Company:	Genentech
Market Cap:	$211.45B
Company Description/ Role in Longevity:	Genentech is a leading biotechnology company that discovers, develops, manufactures, and commercializes medicines to treat patients with serious or life-threatening medical conditions. Genentech is among the world's leading biotech companies, with multiple products on the market and a promising development pipeline. Genentech has a number of products on the market and currently in development that each aim to treat different age-related diseases, such as cancer, asthma, Alzheimer's, and type 2 diabetes.
website	https://www.gene.com/about-us

Company:	REGENXBIO, Inc.
Market Cap:	$447.54M
Company Description/ Role in Longevity:	REGENXBIO is a leading biotechnology company focused on the development, commercialization, and licensing of recombinant adenoassociated virus (AAV) gene therapy. Its NAV Technology Platform, a proprietary AAV gene delivery platform, consists of exclusive rights to more than 100 novel AAV vectors, including AAV7, AAV8, AAV9, and AAVrh10. The company's mission is to transform the lives of patients suffering from severe diseases with significant unmet medical needs by developing and commercializing in vivo gene therapy products based on its NAV Technology Platform. It seeks to accomplish this mission through the combination of internal development efforts and the efforts of third-party licensees (NAV Technology Licensees). REGENXBIO's most advanced internally developed candidates include programs for the treatment of two severe and rare genetic diseases, homozygous familial hypercholesterolemia (HoFH) and Mucopolysaccharidosis Type I (MPS I). In addition, the company has a preclinical program for wet age-related macular degeneration (wet AMD) as well as two additional research programs. REGENXBIO plans to build internal gene therapy franchises in the metabolic, neurodegenerative, and retinal therapeutic areas, and develop multiple product candidates in these and other areas.
website	http://www.regenxbio.com/

Company:	Editas Medicine
Market Cap:	$862.52M
Company Description/Role in Longevity:	Editas Medicine is building the leading genome editing company dedicated to treating patients with genetically defined diseases. Editas' current pipeline includes a number of projects related to age related diseases, including engineered T cells for cancer treatment, as well as addressing Alpha-1 Antitrypsin Deficiency for genetic and infectious diseases of the liver.
website	http://www.editasmedicine.com/company-overview

Company:	Proteostasis Therapeutics
Market Cap:	$360.97M
Company Description/Role in Longevity:	The Proteostasis Network (PN) ensures that every protein within a cell will reach its final destination correctly folded with appropriate function or be degraded and cleared to prevent damage. Disease, genetic mutations, environmental factors, and aging can cause the PN to become imbalanced, which can lead to a decrease in protein quality control contributing to diseases categorized as loss-of-function or gain-of-toxic function disorders. Loss-of-function diseases, such as cystic fibrosis, are often caused by inherited mutations resulting in inefficient folding and excessive degradation. Gain-of-toxic-function disorders, which include Alzheimer's, Huntington's, and Parkinson's diseases, appear to arise from aggregation-associated toxicity. Proteostasis Therapeutics is developing novel therapeutics designed to pharmacologically control or rebalance the PN, either by restoring its normal state or enhancing the capacity of the compromised PN to create a therapeutic state sufficient to control or delay progression of disease.
Website	http://www.proteostasis.com/technology/proteostasis-network/

Company:	Prana Biotechnology
Market Cap:	$20.91M
Company Description/ Role in Longevity:	Prana Biotechnology is developing first-in-class therapies to treat neurodegenerative disease. The company's lead drug candidate, PBT2, is being developed for the treatment of Alzheimer's and Huntington's diseases. The company is targeting lodgment of a New Drug Application for Huntington's disease in 2016/2017 pending positive trial results. Prana Biotechnology also has advanced drug candidates for Parkinson's disease, other movement disorders (PBT434), and brain cancer (PBT519), which are in preclinical toxicology testing. Development of PBT434 has received funding from the Michael J. Fox Foundation and Parkinson's UK. The company has a library of more than 1000 Metal Protein Attenuating Compounds (MPACs) that may support new therapies for neurodegenerative disease and other highly prevalent conditions. Other potential applications for this platform technology include specific cancers.
website	http://pranabio.com/about

Company:	Biotie Therapies
Market Cap:	335.48M
Company Description/Role in Longevity:	Biotie is a biopharmaceutical company focused on products for neurodegenerative and psychiatric disorders. Biotie's development has delivered Selincro (nalmefene) for alcohol dependence, which received European marketing authorization in 2013 and is currently being rolled out across Europe by partner H. Lundbeck A/S. The current development products include tozadenant for Parkinson's disease, which is in Phase 3 development, and two additional compounds which are in Phase 2 development for cognitive disorders including Parkinson's disease dementia, and primary sclerosing cholangitis (PSC), a rare fibrotic disease of the liver. Biotie is a subsidiary of Acorda Therapeutics, Inc. ("Acorda") and its shares, excluding of those owned by Acorda, are currently subject to a redemption process in accordance with the Finnish Companies Act. Botie therapies was recently acquired by Acorda in January 2018 for $363 million.
website	http://www.biotie.com/about-us

Company:	AstraZeneca 
Market Cap:	$74.27B
Company Description/ Role in Longevity:	AstraZeneca is a global science-led biopharmaceutical business focusing on the following: Cardiovascular and Metabolic Diseases; Oncology; Respiratory Diseases, Inflammation and Autoimmunity; Infection and Neuroscience. Human Longevity, Inc. (HLI) announced in April, 2016 a 10 year deal with AstraZeneca to sequence and analyze up to 500,000 DNA samples from AstraZeneca's clinical trials. The genomic insights from the collaboration will be added to the HLI KnowledgebaseTM, building upon what is already the most comprehensive database of its kind.
website	http://www.humanlongevity.com/human-longevity-inc-announces-10-year-deal-with-astrazeneca-tosequence-and-analyze-patient-samples-from-astrazeneca-clinical-trials/

Company:	Illumina
Market Cap:	$23.41B
Company Description/ Role in Longevity:	Illumina sequencing and array technologies fuel advancements in life science research, translational and consumer genomics, and molecular diagnostics. Illumina has invested a total of $300M in Human Longevity Inc. and was the lead investor for the Series B round at $220M.
website	https://www.illumina.com

Company:	AbbVie
Market Cap:	$99.9B
Company Description/ Role in Longevity:	AbbVie is a pharmaceutical company that discovers, develops and markets both biopharmaceuticals and small molecule drugs. In 2014, AbbVie partnered with Calico. The partnership would allow Calico to create a leading R&D facility in the San Francisco Bay Area focused on aging and age-related diseases, including neurodegeneration and cancer. Furthermore, AbbVie and Calico could then co-invest up to $1.5 billion, utilizing Calico's discovery and early development capabilities and AbbVie's broad research, development, and commercial expertise to advance innovative new therapies.
website	https://www.calicolabs.com/news/2014/09/03/

Company:	EMD Millipore (the life sciences business of Merck KgaA)
Market Cap:	$13.34B
Company Description/ Role in Longevity:	In late 2015, EMD Millipore joined forces with Sigma-Aldrich. The combined organization, which operates as MilliporeSigma in the United States and Canada, is the life science business of Merck KGaA, Darmstadt, Germany, and a global leader in the $125 billion life science industry. In 2015, EMD Millipore published a brochure titled “Hallmarks of Aging, Solutions for Life Science Research.” This brochure goes through each hallmark of aging outlined in Lopez-Otin’s 2013 paper, and presents different research tools in EMD Millipore’s product line that can be implemented to further research each of these respective hallmarks.
website	http://www.emdmillipore.com/US/en/about-us/FYib.qB.IAYAAAE_0T93.L6m,nav

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http://www.cell.com/abstract/S0092-8674(13)00645-4

Leading Individual Longevity Investors

Jim Mellon

Jim Mellon is a serial entrepreneur and author of bestselling books “Wake Up!”, “Cracking the Code”, and “Fast Forward”. He has built a worldwide business empire consisting of a variety of businesses, from hotel chains, banks, natural resources to online gaming.

His new book “Juvenescence”, presents the profit opportunities in the nascent longevity industry. Jim has remained amongst the top 10% in the Sunday Times Rich List for a number of years. He holds a master’s degree in Politics, Philosophy and Economics from Oxford University.

In 2017 he was a main investor in “A” finance round held by Insilico Medicine, a big data analytics company applying AI and deep learning techniques to drug discovery, biomarker development, and aging research.

Jim is co-chairman, founder and director of Mann BioInvest, a leading U.K. venture capital firm specializing in the life science sector and investing in various disruptive life science ventures.

JUVENESCENCE

mann BIOINVEST

INSILICO MEDICINE

Dmitry Kaminskiy

Dmitry Kaminskiy is the Founding Partner of Deep Knowledge Life Sciences, which is specifically focused on disruptive geroscience and preventive medicine startups aiming to extend healthy longevity with cutting-edge biomedical and AI technologies.

Dmitry Kaminskiy is a frequent speaker on the topics of AI and Longevity. During the last few years he spoke 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.

One of Dmitry’s major interests is anti-aging and healthy longevity, which he has engaged in business, research, and public activities. He is the Managing Trustee of the Biogerontology Research Foundation, a leading UK think tank supporting the development of geroscience and healthy longevity. Dmitry’s announcement of a $1 million USD prize for the first person to reach their 123rd birthday was covered by Forbes, as well as other top business media outlets.

Deep Knowledge Life Sciences has been the lead investor in a number of promising geroscience companies, including Insilico Medicine, a pioneer in applying AI and deep learning to age-related biomarker and drug discovery (and the consortium of companies around Insilico, including Youth Laboratories and Longensis), and five other companies in the fields of Geroscience, NeuroTech, Preventive Medicine, and Longevity focused Mobile Apps.

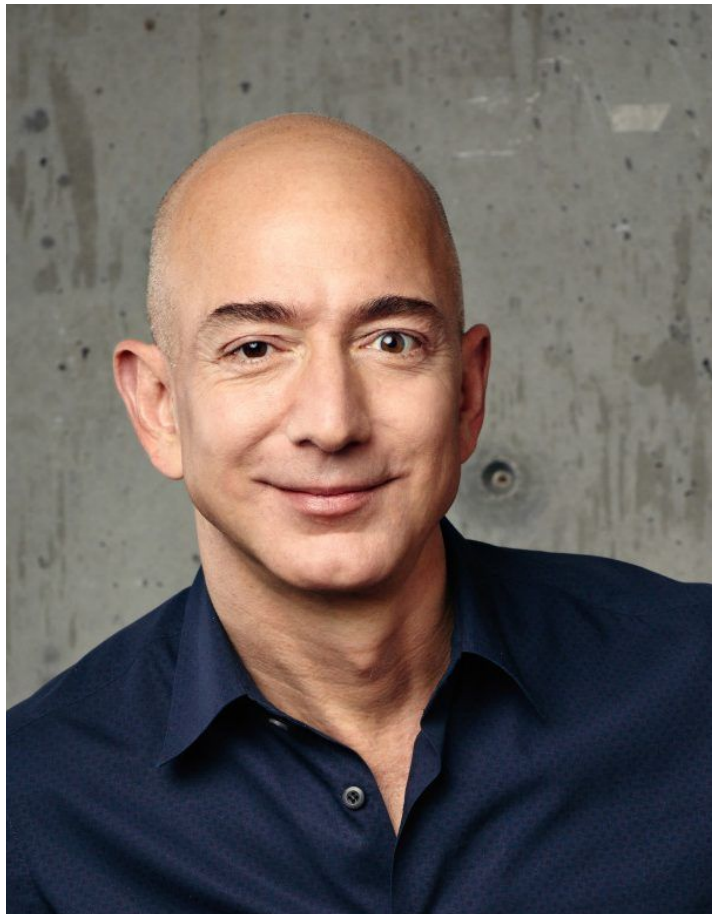
DEEP KNOWLEDGE
LIFE SCIENCES

AGING
ANALYTICS
AGENCY
Invest for life

Biogerontology
Research Foundation
Prevent. Restore. Preserve.

INSILICO MEDICINE

Jeff Bezos



Jeff Bezos is an American engineer, technology and retail entrepreneur, investor and philanthropist who is best known as the founder, chairman, and chief executive officer of Amazon. com, which is the world's largest online shopping retailer. The company began as an Internet merchant of books and expanded to a wide variety of products and services, most recently video and audio streaming. Bezos' other diversified business interests include aerospace and media. He is the founder and manufacturer of Blue Origin (founded in 2000) with test flights to space beginning in 2015 and plans for commercial suborbital human spaceflight beginning in 2018. In 2013 Bezos purchased The Washington Post newspaper. A number of other business investments are managed through Bezos Expeditions. With an estimated net worth of US$78.4 billion as of March 2017, Bezos is currently the third-richest person in the world, just behind Bill Gates and Amancio Ortega in first and second places, and just ahead of Warren Buffett in fourth place. His rise to this position occurred after Amazon registered a 67% jump in share price.

More recently, he was one of the lead investors in Unity Biotechnology, a company dedicated to lengthening the human healthspan by selectively clearing senescent cells from the body.

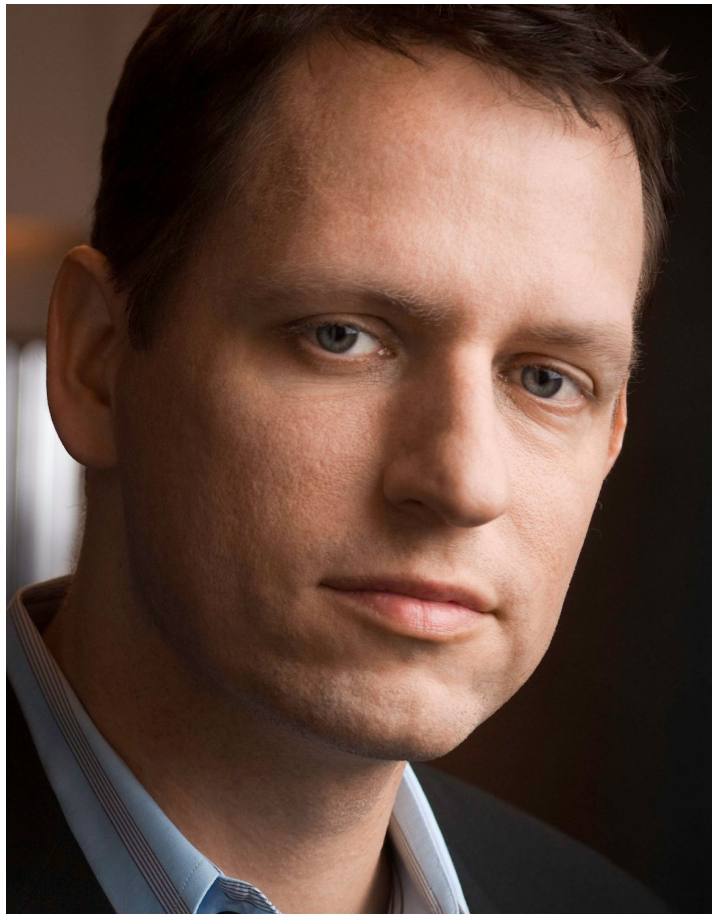
BLUE ORIGIN

UNITY BIOTECHNOLOGY

Peter Thiel

Peter Thiel is an American businessman, philanthropist, political activist, and author. The PayPal cofounder and Facebook's first professional investor was ranked No. 4 on the Forbes Midas List of 2014, with a net worth of $2.2 billion, and No. 246 on the Forbes 400 in 2016, with a net worth of $2.7 billion. Through the Thiel Foundation he governs the grant-making bodies Breakout Labs and Thiel Fellowship, and supports life extension, seasteading, and other cutting-edge technologies.

In September 2006, Thiel announced that he would donate $3.5 million to foster anti-aging research through the Methuselah Mouse Prize foundation, saying the following about his donation: "Rapid advances in biological science foretell of a treasure trove of discoveries this century, including dramatically improved health and longevity for all. I'm backing Dr. de Grey, because I believe that his revolutionary approach to aging research will accelerate this process, allowing many people alive today to enjoy radically longer and healthier lives for themselves and their loved ones." Thiel has expressed his support of longevity research publicly many times, and his venture firm, Breakout Labs, has invested in Longevity Biotech, a company developing novel therapeutics based on a unique and metabolically stable platform technology called Hybridtides. Hybridtides have very stable structures that are able to mimic information-rich surfaces displayed by natural proteins or peptides without the need for surface modifications. The company is developing this platform technology in order to treat age-related disease.



LONGEVITY BIOTECH™

METHUSELAH FOUNDATION
extending healthy human life

Bryan Johnson

Bryan Johnson is an American entrepreneur and venture capitalist. He is the founder and CEO of Kernel, a company developing a neuroprosthetic device to improve brain function, and the OS Fund, a $100 million fund that invests in science and technology startups that promise to radically improve the quality of life. He was also the founder, chairman, and CEO of Braintree, an online payment system. Braintree was acquired by eBay for $800 million in 2013.

Through the OS fund, he invested a large sum in Human Longevity Inc. and currently sits on their board of directors. Human Longevity Inc. is a San Diego-based venture launched by Craig Venter and Peter Diamandis in 2013 with the goal of building the world's most comprehensive database on human genotypes and phenotypes, and then subject it to machine learning so that it can help develop novel drugs to treat age-related disease. HLI gathered $80M USD during its Series A round in 2014 and $220M USD in Series B in 2016. It has made deals with drug companies Celgene and AstraZeneca to collaborate in its research.

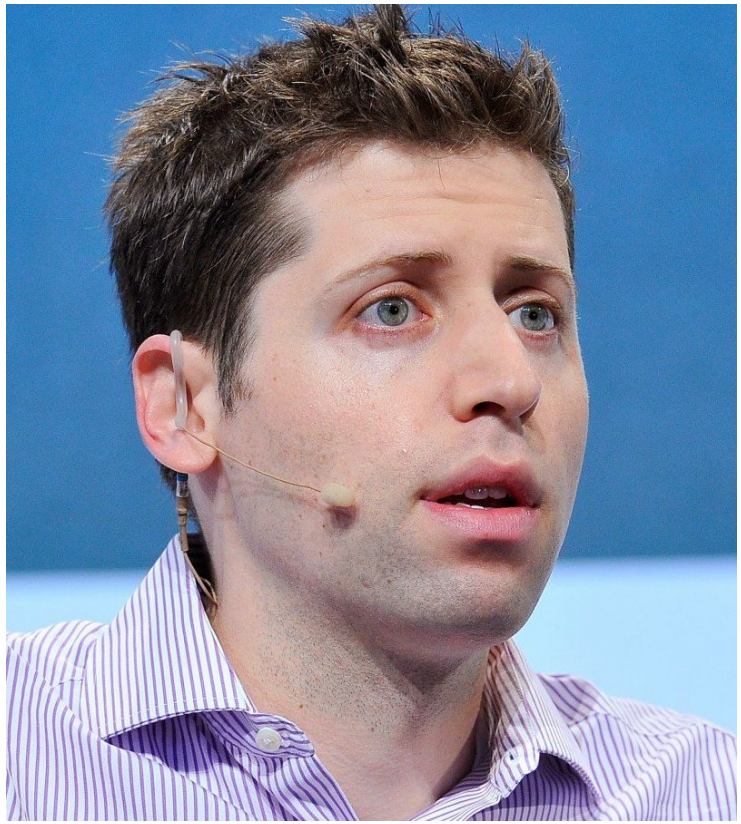
kernel

OS FUND

HUMAN LONGEVITY, INC.

Sam Altman

Sam Altman is a Silicon Valley-based investor and president of Y Combinator, a disruptive tech incubator and accelerator that in January of 2018 released a call for companies focused on extending healthspan and healthy longevity to join their accelerator and incubator program, offering from 500k - $1M USD in exchange for 10-20% equity, scaling linearly.



While Y combinator has not publicly disclosed their longevity-related investments as of now, qw can expect that Y Combinator, and Altman himself, will be recognized as one of the most prominent Longevity investors one year from now.

The fact that highly reputable investors and accelerators like Sam Altman and Y Combinator are entering into the Longevity industry in earnest gives substantial validation to this reports prediction, that it will become one of the most disruptive, impactful and lucrative sectors in biomedicine and healthcare to date.

Y Combinator

Finian Tan

Finian Tan is Managing Partner of Vickers Venture Partners, the lead investor (alongside several other co-investors) in Samumed's largest funding round to date, which yielded the company $300M in funding at a $12B valuation.

The company creates drugs that affect the Wnt pathway, which has been extensively studied over the last three decades and also has been implicated in many diseases, primarily in oncology and various degenerative conditions.

While Vickers Venture Partners ha syet to publicly disclose investments in other Longevity-related companies, having been the lead investor in one of the largest funding rounds for a Longevity company in the history of the industry makes Finian one of the most prominent Longevity investors to date.

VICKERS VENTURE PARTNERS

samumed