# A Brief Overview of Funding in the Field of Consciousness

Appendix Sherry Consulting June 15, 2020

Sherry \* Consulting

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Corporate Movements
People

David Chalmers through Tim Chang are mentioned in the order in which they appear in the report. Patricia Albere through Jamie Wheal are listed in alphabetical order by last name.

- 1. David Chalmers
- 2. Dawid Potgieter
- 3. Bruce Fetzer
- 4. Jeff Tollaksen
- 5. Elizabeth Koch
- 6. Nicco Reggente
- 7. Marcello Massimini
- 8. Melanie Boly
- 9. Christof Koch
- 10. Jason Yotopoulos
- 11. David Dominik
- 12. Bo Shao
- 13. Scott Kriens
- 14. Peggy Dulany
- 15. Melissa Durda
- 16. Jeffrey Walker
- 17. Charlie Hartwell
- 18. Mina Lee
- 19. Aneel Chima
- 20. Gary Schwartz
- 21. Paul Tudor Jones
- 22. David Germano
- 23. Richard Davidson
- 24. Anil Seth
- 25. Antonio Damasio
- 26. Judson Brewer
- 27. Michael Pollan
- 28. Tim Chang

- 29. Patricia Albere
- 30. Thomas Bjorkman
- 31. Nichol Bradford
- 32. Eric Brooks
- 33. Owsley Brown III
- 34. Chip Conley
- 35. Joe Dispenza
- 36. Stuart Hameroff
- 37. Rick Hanson
- 38. Khaliya Aga Khan
- 39. Jack Kornfield
- 40. Joseph LeDoux
- 41. Michael McCullough
- 42. Bill Melton
- 43. Martin Monti
- 44. Jim Pitofsky
- 45. Ian Robertson
- 46. Daniel Schmachtenberger
- 47. Dan Siegel
- 48. Mikey Siegel
- 49. Jamie Wheal

# I. Current Conferences & Events Timeline

Details about large conferences and events hosted by organizations we profiled are aggregated below. The table provides a high-level overview, and additional information on each event is provided following the table. All events are subject to change with the evolving COVID-19 situation. Please check the respective websites for the most up-to-date information.

Conference	Date & Location	Status
The Science of Consciousness Conference	April 13-18, 2020; Tucson, Arizona	Tentatively rescheduled for December 12-19, 2020
The Association for the Scientific Study of Consciousness Conference	June 15-18, 2020; Tel Aviv, Israel	Postponed until 2021, likely to be June
Awakened Futures Summit 2020 (sponsored by Consciousness Hacking)	Currently May 1-3, 2020	Will be held online
Neuromatch Conference	Currently May 25-27, 2020	Will be held online
Global Purpose Movement (GPM) Events	April-September, 2020	Upcoming series moved online; future events currently remain in-person
Purpose Earth (hosted by GPM)	September 12, 2020; New York City, New York	No announced changes
MAPS events	April-September, 2020	Near-term events moved online; June-September events currently planned as in-person events
Interdisciplinary Conference on Psychedelic Research (hosted by MAPS)	September 24-26, 2020; Haarlem, The Netherlands	No announced changes
Fetzer Institute Retreat Centers: Gilchrist and Seasons	April-November, 2020	All events through July 14 have been canceled; no announced changes to events beyond that
Synergos Global Philanthropists Circle (GPC)	April-November, 2020	April-June events moved online or postponed indefinitely; no announced changes after that

Contemplative Research Conference (hosted by Mind & Life)	November 5-8, 2020; Madison, Wisconsin	No announced changes, conference planners monitoring the situation
TransTech Conference	November 13-14, 2020; Palo Alto, California	No announced changes
BrainMind gatherings	2020-2021; various locations	No specific dates or registration details available
Metascience Symposium	Previously held in September, 2019	No future conference plans have yet been announced
International Conference of Neuroscience and Free Will	Previously held in summer 2017 and March 2019	No announcements yet of plans for a third conference
Plugged In Conference (hosted by the Mind Science Foundation)	Previously held in 2017	No announcements yet of plans for another conference

<u>The Science of Consciousness Conference</u> hosted by the University of Arizona Center for Consciousness Studies was originally scheduled for April 2020 in Tucson, Arizona and has been postponed. The organizers are considering rescheduling to December 2020 in Tucson, though this has not been confirmed. They are attempting to replicate the program as much as possibly by re-inviting the same presenters and encouraging the registered attendees to attend on the new dates.

The Association for the Scientific Study of Consciousness had planned to host a conference in June 2020 in Tel Aviv. However, due to the COVID-19 situation, the conference was <u>postponed</u> until 2021, likely to occur at a similar time of the year. The <u>23rd annual conference</u>, held in June 2019, was hosted at Western University in London Ontario, Canada. Western University has established itself as a player in Cognitive Neuroscience with the establishment of its <u>Brain and</u> <u>Mind Institute</u> (BMI) in 2011.

Consciousness Hacking is hosting its <u>Awakened Futures Summit 2020</u> online, creating a <u>participatory experience</u> with UnPanels, speaker-led breakouts, and virtual connection experiments ("Zoom hacking"). The summit is scheduled for May 1st, 2nd, and 3rd. They also hosted an <u>Awakened Futures Speaker Spotlight</u> on April 21st, where eight speakers from the Awakened Futures Summit interviewed each other in rapid fire succession. Charlie Hartwell and Tim Chang are two of the eight confirmed speakers.

<u>The Neuromatch conference</u> will be occurring online May 25-27, 2020. The main talks will be on Crowdcast, parallel talks will be on Zoom, and discussion channels will be held on Google Docs. There is the opportunity to be "mind matched" algorithmically with six other participants based on research interests, and there will also be a "grouped mind" session during the conference, where participants will be matched with like-minded scientists and researchers for a one hour group discussion during the conference. The conference was started by <u>the Kording</u>

Lab, which focuses on causality and machine learning, machine learning and deep learning for neuroscience, neuroscience for deep learning, and machine learning for movement/meta-science, along with the Goodman lab at Imperial College London, and Titipat Achakulvisut, a PhD student at the University of Pennsylvania.

<u>The Global Purpose Movement (GPM)</u> is "a nonprofit working to nurture a worldwide culture aligned with humanity's highest purpose." It connects a global community of purpose seekers, change-makers and social entrepreneurs through events, workshops, retreats, and online courses. GPM has several <u>upcoming events</u>, including online series and webinars. <u>Purpose Earth</u>, a signature event, is an experience summit and benefit concert that is planned for September 2020 at the United Palace in New York City. Ticket sales and proceeds from this event will go toward Global Purpose Grants, a \$50,000 fund supporting projects aimed at raising community consciousness, environmentalism or democracy-building efforts.

MAPS has a full <u>calendar of upcoming events</u> scheduled. The events in the near future are mostly scheduled for online formats, but some events, including workshops and retreats in June and September 2020 are still currently being planned as in-person events. Additionally, no changes have yet been made to the <u>Interdisciplinary Conference on Psychedelic Research 2020</u>, currently being planned to take place in Haarlem, The Netherlands. This is the fourth edition of this conference and is "an academic conference focused on high quality scientific and scholarly research into psychedelics."

The Fetzer Institute has two retreat centers - Seasons and GilChrist. Seasons has no events posted on its website. GilChrist has canceled six upcoming events scheduled between April 2020 and July 14, 2020. These events will not be offered at a later date this year, but the same or similar events will be offered next year. GilChrist has not yet announced any changes to its 11 events between July 15 and November 15, 2020. However, these events are subject to changes or cancellations.

The <u>Synergos Global Philanthropists Circle</u> has moved all of their gatherings to a virtual format and plans to continue online gatherings and learnings even after physical distancing becomes less necessary following the COVID-19 crisis in order to enrich their revived in-person programming. The four events in March were postponed until further notice, two events in April were held virtually, and the in-person events in June have been postponed indefinitely. They have not announced any changes to the events in September, October, and November 2020, but they are subject to change and may move online as necessary/possible.

The Mind & Life Institute hosts an <u>International Symposium for Contemplative Research</u> every other year, and most recently in 2018. In November 2020, Mind & Life is hosting the <u>Contemplative Research Conference</u>, focusing on the state of the field, including discoveries, opportunities, and challenges. Additionally, there are two preconference events offered, including a pre-conference for those in the education field and a day-long compassion training based on the Compassion Cultivation Training designed at Stanford by Thupten Jinpa. As of April, no COVID-19-related changes have been made, though conference planners are continuing to monitor the situation.

The <u>TransTech Conference</u>, focused on "Building the Future of Human Possibility" is currently scheduled for mid-November, 2020 in Palo Alto, CA. <u>Tickets</u> are currently available, and no changes have yet been announced. Generally, the Transformative Tech Lab has been hosting frequent live online events and fireside chats. These events are announced on their <u>Twitter page</u>.

BrainMind will be hosting a series of <u>gatherings</u> in the upcoming few years to bring together neuroscience institutions, researchers, entrepreneurs, and investors. Currently, they have planned the following gatherings: Cambridge, Massachusetts in 2020; Asilomar, California in 2021; Bellagio, Italy in 2021; and Oxford, England in 2021. These gatherings do not currently have specific dates or registration details. Additionally, they will be hosting focused gatherings in Stanford, San Francisco, Boston, New York City, Los Angeles, and Seattle as well as special events and dinners.

Though not particularly focused on consciousness, the <u>Metascience 2019 Symposium</u> at Stanford University was held early in September and brought together researchers from many fields. Two researchers associated with the field of consciousness in attendance were <u>Walter Veit</u>, studying the Metascience of Consciousness at Carnegie Mellon University with support from the Templeton World Charity Foundation, and <u>Jonathan Schooler</u>, a Professor at the University of California at Santa Barbara studying consciousness, memory, creativity, problem-solving, decision-making, and the relationship between language and thought. No future conferences have yet been announced.

The International Conference of Neuroscience and Free Will was first held in the summer of 2017 at the Sigtuna Foundation in Sweden. The second conference was held at Chapman University at the new Institute for Interdisciplinary Brain and Behavioral Sciences in March 2019 with the support of the Fetzer Franklin Fund. No announcement has been made yet about a third conference.

In 2017, the Mind Science Foundation sponsored the <u>Plugged In Conference</u>, promoting discussion on the latest research on the intersection of technology and human consciousness. Speaker topics ranged from neuroscience to neuroprosthetics to the future of consciousness. No plans have been made for another conference.

Other conferences that came up while researching these conferences and events are listed below. The <u>Scientific & Medical Network</u> held a conference in <u>November 2019</u> on "Evolving Consciousness: Spiritual Experience in a Secular Age" with the Fetzer Institute. Other upcoming events are listed for May-October 2020 on this <u>events page</u>. Additionally, <u>The Conference for</u> <u>Consciousness and Evolution (TCCHE)</u> is still planning to host its <u>2020 conference</u> in August in London.

# II. The Funding Landscape

## The Foundation and Private Philanthropy Landscape

#### Legacy Foundations

#### **The Fetzer Institute**

<u>The Fetzer Institute</u> (the "Institute") is a private foundation based in Kalamazoo, Michigan, with a mission to help build the spiritual foundation for a loving world. The Institute was founded by John E. Fetzer (1901-1991), an American broadcast pioneer and owner of the Detroit Tigers Major League Baseball team. He established the Institute as a five-hundred-year organization on the belief that efforts to address humanity's greatest challenges must go beyond examining social, political, and economic causes to address their psychological and spiritual roots.

The Institute has distinguished itself for its visionary programming and for being a catalyst of new ideas and fields of inquiry. In the 1990s, the Institute influenced the development of the field of mind-body health by supporting programming such as the Emmy award-winning PBS Series, *Healing and the Mind* with Bill Moyers, and Jon Kabat-Zinn's pioneering work on mindfulness-based stress reduction at the University of Massachusetts Medical School.

The Institute's subsequent focus on the integration of the inner life of mind and spirit with the outer life of service and action included support for Daniel Goleman's seminal work on emotional intelligence and the establishment of the field of social and emotional learning; and helped establish Parker Palmer's Center for Courage and Renewal.

For more than a decade after 9/11, the Institute anchored its efforts in fostering awareness of the power of love and forgiveness, investing in national media campaigns and contributing to a now-burgeoning field of forgiveness research. During this time, the Institute also helped the World Health Organization develop culturally relevant quality-of-life measures that included spirituality.

Throughout its history, a hallmark of the Institute is the work it convenes at Seasons, its oncampus retreat center. With its pristine beauty, Seasons offers opportunities for inward reflection and outward engagement, allowing participants to find the shared meaning critical to the Institute's community and work. Seasons has hosted Nobel Laureates, Pulitzer Prize winners, and Supreme Court nominees, as well as thousands of accomplished teachers; healers; scientists; scholars; agents of cultural change; and leaders of public life from government, business, nonprofit, and philanthropic sectors.

More recently, the Institute adopted its current mission statement, a bold new Theory of Change, and a long-term goal: to help catalyze and support a broad-scale, spiritually grounded transformation from an ego-centered way of being grounded in separation and fear to an all-centered way of being grounded in wholeness and love. With investments and collaborators in areas such as democracy, faith and spirituality, education, and media, the Institute supports work that will enable a critical mass of persons around the world to embrace love as the guiding

principle and animating force for living in sacred relationship with Spirit, self, others, and the natural world. Examples of recent funding for science-related projects are shown in the following table.

Entity	Funding Amount (\$)	Purpose
Center for Compassion and Altruism Research and Education (CCARE)	100,000	To hold its first International Science of Compassion Conference in Belfast, Ireland and a citywide Compassion Festival promoting science and interfaith dialogue in March 2020. The main goal of the conference is to stress the centrality of compassion to the faith traditions through science and draw attention to how negative narratives perpetuate fear by pointing out the ways compassion serves as an antidote. It is also intended to demonstrate how one's reward and pleasure centers in the brain are activated and that human physiology works at its best if one acts compassionately.
Dr. Clifford Saron of the Center for Mind and Brain (CMB) at the University of California, Davis	198,000	To explore the specific pathways that improve compassionate social engagement in the presence of suffering by comparing the differences between Compassion Cultivation Training (CCT) and Mindfulness Based Stress Reduction (MBSR) and their consequences on social and interpersonal interactions.
Professor Uri Maoz at Chapman University	1,560,214	To test (I) whether human intentions are causally efficacious for our decisions and behavior; (2) what is the specific role of consciousness when intentions guide behavior; and (3) what, if any, is the difference between conscious control in deliberate versus arbitrary decisions.
Healthy Minds Innovations, Inc.	1,595,000	To develop an app and a companion website to deliver training in scientifically informed contemplative practices that enhance enduring well- being, which are designed to be incorporated into daily routines. The theory guiding such interventions is an assumption that mental health and psychological flourishing can be achieved

		through long-term, self-guided training.
The Rector and Visitors of the University of Virginia	100,000	To explore, through the combined use of fMRI and biochemical assays, the relationship between neural connectivity and oxytocin upsurge; it analyses the links between oxytocin and brain function that impact sociality, genetically and epigenetically.
The Shamatha Project at the University of California, Davis*	121,800	The Shamatha Project is a longitudinal study of how intensive 3-month meditation training affects the development of inner qualities encouraging love and forgiveness in humans. The support will leverage final funding for the project and assist the team in one of Fetzer's major emphases: getting the results out.
The University of California, Davis	1,488,650	To study participants of a 3.5-month intensive Shamatha training period with psychological and neurological assessments over three periods, prior to beginning the training period, during the course of the retreat period and at the end of the training. In addition, there will be one follow up assessment for the retreat participants (but not the control group). The study will include 32 training participants and 32 wait-list control participants.

\*The Shamatha Project investigates the psychological and physiological processes underlying the mental and physical health benefits of meditation through a randomized, controlled study. Participants engaged in meditation retreats and received ongoing instruction from <u>B. Alan</u> <u>Wallace</u> of the <u>Santa Barbara Institute for Consciousness Studies</u>. Initial project results indicated increased attention, improved emotions and well-being, and improved health-related biomarkers. The researchers believe these positive changes in well-being are a direct result of increased meditation. The Project is led by <u>Clifford Saron</u>, a neuroscientist at the Center for Mind and Brain at UC Davis. He specializes in attention training and emotion regulation and, in his studies, applies electrophysiological and behavioral methods to study sensor and cognitive processes in humans. The UC Davis <u>Center for Mind and Brain (CMB)</u> is an interdisciplinary research center bringing together many departments to try to understand the human mind and its connections to the brain.

In 1992 Clifford Saron received funding from the Fetzer Institute to study Buddhist monks in Dharamsala with Alan Wallace and other researchers. Eleven years later, Wallace and Saron began discussing the idea behind the Shamatha Project. The project began in 2007 with <u>sponsorship</u> from Shambhala Mountain Center, the Mind and Life Institute, the Fetzer Institute,

and other organizations and individual donors. In <u>2012</u>, the John Templeton Foundation awarded a \$2.3 million grant to extend the Shamatha Project three years. A <u>majority of the funding</u> went to data analysis, specifically examining the effects of individual differences on study outcomes.

# **Fetzer Memorial Trust**

<u>The John E. Fetzer Memorial Trust</u> is guided by its mission to advance integrated, relational views of reality through exploring scientific frontiers and universal spiritual practices. Another key role of the trust encompasses researching and documenting John E. Fetzer's life and vision. Along with the Fetzer Institute, the Fetzer Memorial Trust endows and operates the Fetzer Franklin Fund to advance John E. Fetzer's integrative scientific vision in the 21st century.

The Trust is a private non-operating foundation and is registered as a non-profit in Michigan. Recently, in March 2019, the Fetzer Memorial Trust participated in the <u>funding</u> of the Institute for Interdisciplinary Brain and Behavioral Science (<u>The Brain Institute</u>) at Chapman University. Other funders included the John Templeton Foundation and the Fetzer Institute. Combined, the Fetzer Institute and the Fetzer Memorial Trust contributed \$1.7 million. The Institute, in conjunction with the Crean College of Health and Behavioral Sciences at Chapman University, held an <u>international conference</u> on the Neuroscience of Free Will to launch the project. 90 researchers from 40 universities were able to come together at this conference. Broadly, the Brain Institute at Chapman University "comprises a network of interdisciplinary researchers and specialists spanning the fields of psychology, psychiatry, neuroscience, neurology, anesthesiology, neurobiology, behavioral economics, computation and information processing in the brain, engineering, physics, anthropology, and cognitive science."

# **Fetzer Franklin Fund**

The mission of the <u>Fetzer Franklin Fund</u> is to explore the frontiers of scientific knowledge and to advance breakthroughs towards scientific views of reality that are integrated and relational. The Fund focuses on foundational questions at the frontiers of physics, biology, and consciousness research. Specifically, physics focuses on relational reality, consciousness focuses on agency and free will, and biology focuses on new visions of life.

Every other year, the Fund hosts a physics event around the world on emergent quantum mechanics, which invites the open exploration of the quantum state of reality. Other recent events include the <u>Metascience 2019 Symposium</u> at Stanford University, and the 2nd <u>International Conference on Neuroscience and Free Will</u> at Chapman University. The Fetzer Franklin Fund is also one of the sponsors of The Science of Consciousness conferences hosted by the University of Arizona's Center for Consciousness.

The 'Intelligence in the Physical World' program is part of a science strategic partnership between the Fetzer Franklin Fund and FQXi. The partnership funds work on Agency, Intelligence, and Consciousness. The most recent program was announced in 2019 and provided \$1.5 million across nine projects. An example of another current project supported by the Fetzer Franklin Fund is "Deciphering the Decline Effect – A Prospective Multi-Laboratory Replication Study", which studies new experimental effects in five separate laboratories. The project aims to develop a gold standard for replication protocol, and initial work was presented at the Metascience 2019 Symposium. Scientific publications from programs developed by Fetzer Franklin appear on its website at <u>www.fetzerfranklinfund.org</u>.

<u>The Alfred P. Sloan Foundation</u> was highlighted as a potentially important case study by Fetzer. Fetzer cited the creation of the science philanthropy alliance as a best practice example of pooling science funding talent to attract additional resources. See the <u>Science Philanthropy</u> <u>Alliance</u> for more information. The Foundation funds research and education in science, technology, engineering, mathematics, and economics. "Founded in 1934, the Foundation is a not-for-profit grantmaking institution that supports high quality, impartial scientific research; fosters a robust, diverse scientific workforce; strengthens public understanding and engagement with science; and promotes the health of the institutions of scientific endeavor." The Foundation strongly supports basic scientific research as a way to expand the frontiers of human knowledge.

The Foundation provides two-year research fellowships that honor outstanding early-career researchers in eight fields. More broadly, the Sloan Foundation's grantmaking <u>strategy</u> involves seeking proposals from individuals or teams with original initiatives that have a high expected return to society, are methodologically rigorous, and "for which funding from the private sector, government, or other foundations is not yet widely available." The grantmaking requirements emphasize clear, practical, and tangible outputs and outcomes. In addition to the Sloan Research Fellowships, the Foundation awards approximately 200 grants totaling about \$80 million per year.

#### The Templeton World Charity Foundation

<u>The Templeton World Charity Foundation</u> has five current initiatives, including Accelerating Research on Consciousness, Big Questions in Classrooms, Diverse Intelligences, Global Innovations for Character Development, and Power of Information. As part of the \$20 million portfolio for Accelerating Research on Consciousness, the Foundation is pursuing three primary aims: (1) to launch a pioneering grant-development mechanism that uses best-practices in open science to facilitate adversarial collaboration1; (2) to identify the most pressing empirical questions about consciousness and support innovative experiments to generate answers; and (3) to promote rigorous empirical engagement with deeper questions regarding consciousness, as a core aspect of human nature, among the wider scientific community.

It was established in 1996 in Nassau, The Bahamas to serve as a global philanthropic catalyst for discoveries relating to Big Questions of life and the universe, in areas of science, theology, philosophy, and human society. The Foundation hopes to provide scientific breakthroughs and practical tools relating to the search for meaning, purpose, and truth. Recognizing that there is not always agreement in this field, the Foundation promotes adversarial collaboration, open science, and rigorous engagement among leaders of opposing theories.

The Foundation has developed a specific Structured Adversarial Collaboration model, a unique six-stage grant-development mechanism. The steps include planning a workshop, hosting a

<sup>&</sup>lt;sup>1</sup> Adversarial collaboration is a form of scientific collaboration popularized by Nobel-winning psychologist and economist Daniel Kahneman, where scientists with opposing hypotheses work together, often with the goal of resolving the debate.

workshop, designing an experiment, requesting funding for an experiment, conducting the experiment, and publishing the findings. For example, <u>one recent project</u> focuses on adversarial collaboration within the accelerating research on consciousness initiative.

The table that follows lists the scientific theories currently on TWCF's radar, along with the names of current or former influential figures related to that theory. This resource provides a broad perspective of the field but is by no means an exhaustive list. Additionally, while some researchers agree with the accuracy of the table, others may disagree with the inclusion of certain theories and people or whether the categorization is correct. In short, there exist various interpretations of the table, but it provides a broad overview of some of the leading schools of thought in existence in the consciousness field.

Scientific theories on TWCF's radar	Key influencers
Attention Schema Theory	Michael Graziano Taylor Webb
Biological Theories	Antonio Damasio Ned Block Francis Crick
Decision to Engage Model	Michael Shadlen Roozbeh Kiani
First Order Theories	Victor Lamme Ned Block
Global Workspace Theory	Stanislas Dehaene Lionel Naccache Bernard Baars
Higher Order Theories	David Rosenthal Hakwan Lau Joe LeDoux Richard Brown
Information Closure Theory	Ryota Kanai Acer Chang
Integrated Information Theory	Giulio Tononi Christof Koch Melanie Boly
Orchestrated Objective Reduction	Roger Penrose Stuart Hameroff

Phenomenal Self Model	Thomas Metzinger
Predictive Coding Theory	Karl Friston Anil Seth Cyriel Pennartz
Projective Consciousness Model	Kenneth Williford Karl Friston David Rudrauf
Quantum Theories	Henry Stapp John von Neumann Roger Penrose Stuart Hameroff
Self Organizing Metarepresentational Account (SOMA)	Axel Cleeremans Dalila Achoui
The Entropic Brain Theory	Robin Carhart-Harris Robert Leech
Unlimited Associative Learning	Eva Jablonka Zohar Bronfman Simona Ginsburg

The <u>Center for Open Science</u> (CoS), promoted by TWC, has a primary mission to increase openness, integrity, and reproducibility of research. The Center provides research software tools, including the Open Science Framework (OSF); creates community action and culture change through education, training, and support; and encourages metascience research to improve efficiency and evaluate interventions. In June 2018, the Center received <u>three multi-year grants</u> from the John Templeton Foundation, Templeton Religion Trust, and Templeton World Charity Foundation to support 1) the development and improvement of the OSF; and 2) the evaluation of preregistration, a process where scholars commit to a research plan in advance, before data is gathered.

#### The John Templeton Foundation

<u>The John Templeton Foundation</u> serves as a philanthropic catalyst for discoveries relating to deep and perplexing questions facing humankind. It was established in 1987 by Sir John Templeton and supports research on subjects ranging from complexity, evolution, and emergence to creativity, forgiveness, and free will. The Foundation provides grants for both independent research and public engagement, which brings relevant findings to non-specialist audiences.

Since its inception, the Foundation has made 3,180 grants totaling \$1.5 billion (as of 12/31/18). The primary funding areas include science & the big questions, character virtue development,

individual freedom & free markets, exceptional cognitive talent & genius, genetics, and voluntary family planning. Recent featured grants include a \$350,000 grant to Tiffany Shlain with Let it Ripple, Inc. for her project "Character Day 2019: The Power of Unplugging"; a \$994,071 grant for Daniel McKaughan, Teresa Morgan, and Michael Pace of Boston College Trustees for their project "The Philosophy, Theology, and Psychology, of Christian Trust in God"; as well as several other notable recipients. Some of the Foundation's <u>recent partners</u> include The Pew Charitable Trusts, the Bezos Family Foundation, Synergos, Grantmakers for Thriving Youth, The Omidyar Group, and the Issachar Fund.

John Templeton also established the <u>Templeton Prize</u> in 1972 to identify "entrepreneurs of the spirit", those outstanding individuals who have devoted their talents to expanding our vision of human purpose and ultimate reality. The Prize honors a living person who has made an exceptional contribution to affirming life's spiritual dimension, whether through insight, discovery, or practical works. The prize winner is awarded £1,100,000 sterling. The most recent winner is Marcelo Gleiser, whose research, books, essays, conferences, and more have presented science as a spiritual quest to understand the origins of the universe and life on earth. Recent previous winners include: King Abdullah II of Jordan (2018) for his work in seeking religious harmony within Islam and between Islam and other religions as well as the protection of holy sites in Jerusalem; Alvin Plantinga (2017) for his philosophical work promoting theism, inspiring Buddhist, Jewish, and Muslim philosophers and professors worldwide; and Rabbi Lord Jonathan Sacks (2016) for his dedication to bringing spiritual insight to the public conversation through mass media, popular lectures, and books. The <u>full list of previous winners</u> can be seen on the Templeton Prize website.

The John Templeton Foundation also provided a <u>\$6.2 million seed grant</u> for the <u>Foundational</u> <u>Questions Institute (FQXi)</u>, which catalyzes, supports, and disseminates research on questions at the foundations of physics and cosmology, particularly new frontiers and innovative ideas integral to a deep understanding of reality, but unlikely to be supported by conventional funding sources. FQXi provides both large grants and mini grants to researchers and FQXi members, respectively. The large grants have provided \$7.4 million as research grants to theorists and experimenters. Recently, FQXi and the Fetzer Franklin Fund announced the 2020 large grant RFP as "Consciousness in the Physical World".

#### The Garrison Institute

<u>The Garrison Institute</u> is a non-profit, non-sectarian organization guided by their mission to apply the transformative power of contemplation to today's pressing social and environmental concerns, helping build a more compassionate, resilient future. The Institute develops and hosts retreats and symposia, produces research and publication, and provides a hub for ongoing learning networks. Since 2003, over 75,000 people have participated in retreats and programs hosted by the Garrison Institute.

Over the years, the Institute has created and supported several <u>Signature Programs</u>. In 2004, the Institute launched the Initiative on Contemplation and Education (ICE), which is now CARE for Teachers. Later that year, they launched the Hudson River Project to bring social science and the humanities to the table in discussions about environmental issues. The Hudson River Project is

now called Climate, Mind and Behavior (CMB). In 2005, they launched the Women's Wellness Project, a five-year pilot program conducting contemplative-based training for women working to end domestic violence, and it has transitioned to the current Contemplative-Based Resilience (CBR) program.

The Institute offers <u>programs and events</u> focusing on their primary initiatives, including "Care for the Caregiver", "Transformational and Contemplative Ecology", and "Transformational Leadership and Organizational Change". These programs work to incubate new fields, networks and programs that alleviate suffering, foster greater contemplation and compassion, and encourage the spiritual reinvigoration of society. The Institute also offers ongoing community programs such as meditation, tai chi, and a writer's circle.

# The Mind & Life Institute

<u>The Mind & Life Institute</u>'s mission is to bring science and contemplative wisdom together to illuminate shared humanity and inspire action, aiming to foster healthy human connections through grantmaking, convenings, and strategic partnerships. The Institute was started in 1987 by Tenzin Gyatso, Francisco Varela, and Adam Engle. In 2009, the Institute started the <u>Mind & Life Fellows Program</u>, a formal effort to mobilize and engage a global network of notable scientists, scholars, changemakers, and contemplative practitioners. The fellows can be research fellows, leadership fellows, or contemplative fellows.

The Mind & Life Institute has awarded <u>over \$5.2 million</u> to more than 260 projects in cognitive science, psychology, medicine, anthropology, religious studies, and education. The Institute provides Valera Grants for rigorous examinations of contemplative techniques with the ultimate goal of reducing human suffering and promoting human flourishing; the PEACE (Prosociality, Empathy, Altruism, Compassion, and Ethics) grants, funding projects advancing understanding of the mechanisms, implementation and outcomes of contemplative strategies to promote well-being and prosocial behavior in individuals and communities; and Think Tanks – intimate, two-to three-day self-organized gatherings designed to advance a particular project or problem within contemplative sciences.

Another primary focus of the Institute is their <u>annual conference</u> hosted by the Dalai Lama. The 33rd Conference was held in March 2018 and focused on "Reimagining Human Flourishing". The conference convened more than 200 academics, scientists, education specialists, and Buddhist scholars. The primary topics included education, childhood development, and education research. Mind & Life also sponsors other events such as the Contemplative Studies Symposium, a four-day gathering of thought leaders in neuroscience, psychology, clinical science, the humanities, philosophy, and education.

The Mind & Life Institute <u>researchers</u> have written more than 200 journal articles, chapters, and books; participated in more than 300 public talks; and been awarded more than \$62 million in follow-on funding. The Institute's impact has been recorded in several books, including Train Your Mind, Change Your Brain, Destructive Emotions, and The Dalai Lama at MIT.

#### **The Mind Science Foundation**

<u>The Mind Science Foundation</u> is a nonprofit with a mission to explore the vast potential of the human mind in a scientific manner, with a focus on human consciousness. The Foundation currently focuses on supporting the search for an answer to the puzzle of human consciousness by funding research and accessible educational programs, all with the goal of improving the human condition. Approaching these topics through a biological lens, the Mind Science Foundation specifically explores the consciousness continuum from coma to minimally conscious state.

Since its founding in 1958 by Thomas Slick, the Foundation has grown to include the <u>Tom Slick</u> <u>Research Awards in Consciousness</u>, <u>BrainStorm</u>, the <u>Distinguished Speaker Series</u>, and <u>Plugged</u> <u>In</u>. The Tom Slick Research Awards in Consciousness grants funds to researchers studying consciousness in a variety of fields. Past recipients include David Eagleman and Nao Tsuchiya in 2017, Ken Paller and Zoran Josipovic in 2016, and Alison Gopnik in 2015, all of whom were seeking some additional understanding of consciousness. For example, David Eagleman's project, titled "Understanding the natural variation in human minds", aimed to explore and characterize the range and variation of conscious and unconscious traits associated with decision making." The winners of the Tom Slick Research Awards are selected from BrainStorm, the Foundation's neuroscience pitch competition. First prize winners receive \$30,000, and runners up receive \$15,000.

The Foundation also runs its speaker series from September through May, providing lectures "exploring topics ranging from creative uses of conflict in our lives to new research breakthroughs for victims of stroke and traumatic brain injury", and more. Some previous speakers include Wendy Chung discussing autism, Ed Yong discussing the gut-brain connection, and more. The Foundation posts videos of many of the lectures online for everyone to enjoy and learn. Similarly, Plugged In is an international conference series that promotes discussion on the latest research at the intersection of technology and human consciousness, on topics ranging from neuroscience to brain-wearable devices and the future of consciousness. Gold Level sponsors of the Plugged In series include the Mays Family Foundation, McCombs Foundation, Lew & Laura Moorman Charitable Fund, Porsche of San Antonio, and Smothers Foundation.

# **The Simons Foundation**

<u>The Simons Foundation</u> is a private foundation established in 1994 by Jim and Marilyn Simons. The Foundation's mission is to advance the frontiers of research in mathematics and the basic science, supporting discovery-driven work in the pursuit of understanding the phenomena of the world. The Foundation supports research both by making grants to individual investigators and their projects through academic institutions. The grants fall into four program areas – mathematics and physical sciences, life sciences, autism research, and education & outreach. In 2016, the Foundation also launched the <u>Flatiron Institute</u>, a multidisciplinary academic research entity, allowing them to conduct scientific research in-house, supporting teams of top computational scientists.

In November 2016, Joseph J. Fins of Weill Cornell Medical College gave a <u>Simons Foundation</u> <u>lecture</u> on how progress in the neurosciences has revolutionized our understanding of disorders of consciousness. More recently, in September 2019, the Simons Foundation held a movie night for The Most Unknown, a documentary film exploring answers to some of humanity's biggest questions.

The Simons Foundation also supports the <u>Simons Collaboration on the Global Brain</u> (SCGB), which "aims to expand our understanding of the role of internal brain processes in the arc from sensation to action, thereby discovering the nature, role and mechanisms of the neural activity that produces cognition." The Collaboration typically hosts lectures, highlights important research, sponsors neuroscience courses, and supports a network of investigators.

#### Newer Entrants to the Field

#### The Tiny Blue Dot Foundation

<u>The Tiny Blue Dot Foundation</u>, founded by Elizabeth Koch and Alexander Bystritsky in 2015, is working to advance human understanding of the nature of consciousness by "developing and validating theoretically-motivated and clinically useful measures of consciousness."

The foundation has not publicly released much information on its size and grant recipients, but has four primary aims: (1) develop a system to measure both the presence of and an amount of consciousness, (2) understand which brain regions play a critical role in consciousness, (3) "estimate states of consciousness from the 'connectome' of the human brain" and infer for animals and computers, and (4) build a community of those debating, testing, and evaluating these ideas, academically, scientifically, and medically.

The foundation currently works with a <u>team of researchers</u> from The Allen Institute, University of Wisconsin-Madison, Massachusetts General Hospital, UCLA, Medical University of South Carolina, and University of Milan, and the Institute for Advanced Consciousness Studies.

Executive Director and co-founder <u>Alexander Bystritsky</u> is considered to be one of the leading experts in anxiety disorders and brain stimulation in the United States. He has been a member of the UCLA faculty since 1987, and currently serves as Professor Emeritus and Director Emeritus of the UCLA Anxiety Disorders Program.

Co-founder <u>Elizabeth Koch</u> is also the founder & CEO of Catapult, a publishing company focused on telling stories that foster empathy, and the founder of Unlikely Collaborators, a company creating interactive experiences, including conferences, meant to illuminate biases and unconscious beliefs and pave the way for deeper human connection. She is the daughter of Charles Koch.

#### **Emerald Gate Foundation**

<u>The Emerald Gate Foundation</u> is a not for profit enterprise focused on improvement of the human condition and expansion of the conscious mind through scientific discovery and empowerment at the individual and local community level. The Foundation's mission is to assist with human transformation, individually and socially, solving real world problems in a practical, applied fashion.

Emerald Gate aims to lead state of the art research (and commercialization, as necessary) of frontier/edge science in an integrated and relational way across consciousness, physics, and biology at Tier 1 research institutions globally. The team undertakes systematic, rigorous, and outcomes-focused fundamental and applied research, in a way that explores human consciousness as foundational and integrative to conventional materialist science. The primary focus is on science and applications arising from the understanding of the mechanisms by which conscious human intention interacts with various forms of subtle energy and biology to promote healing and well-being in biological systems, particularly but not limited to human beings.

One initial focus is on subtle energy, the putative invisible, self-organizing field of influence (energetic field of information) which guides the body's system/natural systems to balance. In various traditions it has been called elan vital, prana, qi, chi, vital force, or biofield. It is exhibited through experimental data which today is inexplicable based on the four known forces operating in the physical universe and is most frequently converted to observable via a transducer like a living system.

The \$100M+ Emerald Gate has a systems change approach to funding and leverages a Silicon Valley-style research and invention approach. In order to build and scale a new field of endeavor, Emerald Gate currently advances institutional research, sets rigorous research standards, and provides ecosystem level support. Future directions may include technology translation/IP licensing, commercial incubation, platform-level ecosystem support, venture capital funding, capital markets, or public relations/policy lobbying. Emerald Gate, along with The Walker Family Foundation, Tom Dingledine and several other collaborators recently completed a systems mapping and synthesis of the field of energy healing and biofield science. Their findings, detailed in the <u>Subtle Energy and Biofield Healing: Evidence, Practice and Future Directions</u>, include an estimated \$2 billion market, over 250 subtle energy technologies, hundreds of researchers, and thousands of publications.

Jason Yotopoulos is the CEO of Emerald Gate. He previously founded the <u>Merraki Institute</u>, which funded researchers in the field of consciousness to pursue groundbreaking technologies. Jason received his bachelor's degree in Industrial Engineering and his MBA from Stanford University.

#### Evolve

**Evolve** is the umbrella organization for Evolve Foundation, which makes philanthropic grants and pursues direct philanthropic initiatives, and Evolve Ventures, which invests in for-profit companies with social mission. Evolve's primary mission is to facilitate the evolution of human consciousness, and it operates globally with a particular focus on the United States and China. Evolve's work is rooted in a belief that there is a significant amount of internal suffering, and alleviation of internal suffering leads to other positive changes in people's consciousness that, in

turn, help with external suffering. Evolve also believes that inner work can help consciousness evolve to release internal suffering, leaving human beings to live lives full of love, joy, peace, and freedom.

Evolve is led by Bo Shao and Oleg Gorelik.

Portfolio companies of Evolve Ventures include Parent Lab, Fabriq, Insight Timer, 10% Happier, TruLuv and others. Evolve Ventures aims to be different from a venture capital fund in several ways. First, its primary goal is to maximize social good, not investment returns. Second, there are no external investors, which means that there will be no pressure to return capital in a fixed amount of time. And third, Evolve is particularly interested in unique companies that may not be able to get that capital from other sources.

Evolve Foundation supports organizations like Strong Minds, Ridhwan Foundation, Center for Humane Technology, Kedumah Institute, GRIP Training Institute and others.

More information can be found on Evolve web site: www.evolvevf.com

Evolve has a strong interest in working with other funders to share information, due diligence and insights, much like the Big Bang Philanthropy group does in the poverty alleviation space.<sup>2</sup>

# The 1440 Foundation

<u>The 1440 Foundation</u> was started by Scott and Joanie Kriens to support people and programs aimed at creating hope for living well each day. They focus on 1) cancer collaboration, with a specific focus on pancreatic cancer; 2) inner well-being; and 3) community building. The inspiration for the name 1440 came from the fact that there are 1440 minutes in each day – 1440 opportunities for everyone to be more aware and mindful of how we're spending our time.

Established in 2011 as a private foundation, the 1440 Foundation has granted more than \$20 million to more than 150 nonprofit organizations. In addition to financial backing, the foundation offers additional strategic resources including planning and organizational consulting, networking support, and in-kind grants at 1440 Multiversity. Some of their <u>grantees</u> include ClinWiki, Reciprocity Foundation, The Center for Mind-Body Medicine, among several others.

The Foundation offers specific <u>visions</u> for each of the focus areas. Regarding their cancer collaboration, the Foundation funds pancreatic research and collaboration efforts as well as the development of precision medicine. They aim to improve the patient experience and expand access to new drug and therapy trials. Regarding inner well-being, 1440 supports "organizations that advocate for mental self-care, licensed psychedelics, and other scientific disciplines to help people regain and maintain inner well-being. Lastly, regarding community building, 1440 supports nonprofit leaders in areas of high potential.

<sup>&</sup>lt;sup>2</sup> Big Bang Philanthropy is a group of funders broadly working to ameliorate the effects of poverty who share investment leads, insights, networks, and due-diligence processes. More information on Bing Bang can be found <u>here</u>.

In addition to the Foundation itself, there is also the <u>1440 Multiversity</u> – a California learning destination and wellness retreat. As a non-profit, the Multiversity fosters social, emotional, and relational learning through faculty-led programs, signature classes, retreats, and other events. One of the signature programs offered at the Multiversity is True North Leadership, a 5-day immersive learning program for high-level leaders, start-up entrepreneurs, and small executive teams.

# The Ekskäret Foundation

<u>The Ekskäret Foundation</u> aims to support individuals to "co-create a more conscious society" by increasing well-being for themselves, each other, and the planet. To do so, Ekskäret focuses on the creation of events and learning opportunities, both in person and online. Since its founding in 2009, the Foundation has created opportunities for exploratory meetings, dialogue, and lifelong transformative learning. The Foundation offers youth camps, workshops, programs, conferences, and work labs in personal development and social transformation.

Ekskäret has two primary venues for events, Learning Labs, and meetings: (1) a workshop facility at the island of Ekskäret (located in the Stockholm archipelago), translated literally as "island where the oak-trees grow" and (2) a coworking space Ekskäret Klustret in Stockholm. At the island of Ekskäret, the foundation hosts a variety of workshops and events, including Protus Camps, an annual youth camp for teenagers to explore existential questions that has taught over 700 students. Ekskäret has also organized and supported a series of conferences on topics ranging from social sustainability to wisdom.

Ekskaret supports or partners with several other networks, including Emerge Gatherings, a yearly event where the Emerge network can gather for exploration; K9, Stockholm, a real estate venture creating co-living and co-working spaces to support the development of a more conscious society, and others. The foundation also works with selected partners from the business, non-profit, and academic sectors.

#### Falkora

<u>Falkora</u> is a non-profit mental health initiative founded in 2013 by Princess Khaliya Aga Khan and her partner Thomas Ermacora. Falkora is working to expand the definitions of mental illness and identify and support new technologies with the ability to rapidly accelerate treatment of mental health disorders.

Falkora runs a <u>fellowship program</u> offering small grants to support individuals working in technology, innovation, research, and program design. One such fellow is science journalist Max Lugavere who is making a documentary "BREAD HEAD" about the relationship between brain disease and high carb diets. No other fellows are listed on the Falkora website.

Co-Founder Khaliya has publicly advocated for the legalization of MDMA and psilocybin to treat mental health disorders, publishing opinion pieces in The New York Times and Wired as well as speaking frequently at events and conferences. She has also publicly shared her own

private story of suffering from PTSD after being the victim of a violent kidnapping, finding antidepressants and therapy woefully ineffective in treating her PTSD. She states that she was only able to start to recover from her PTSD after taking psilocybin.

Khaliya has also <u>advocated</u> for modernizing the language commonly used in the field of mental health. For instance, she has recommended the use of the term "mental injury" rather than "mental illness," arguing that "injury" is more inclusive of the opportunity for recovery, and more inclusive of all of the different experiences and disorders that might affect an individual.

### The Tianqiao and Chrissy Chen Institute

The <u>Tianqiao and Chrissy Chen Institute (TCCI)</u> is a nonprofit institute founded by Tianqiao Chen and Chrissy Luo in 2016. TCCI aims to drive fundamental brain research in three key areas – brain discovery, brain treatment, and brain development – by promoting a holistic and interdisciplinary approach. TCCI partners with universities and research institutions to understand the human brain and how informational input translates into behavioral output. Specifically, the research is focused on understanding sensation-perception mechanisms and related systems of memory, attention, learning and expectations; and advancing discoveries and applications that minimize the negative and enhance the positive impact of perceptions.

The three key areas of brain research that TCCI focuses on include brain discovery, treatment, and development. Brain discovery research involves interdisciplinary work in the basic sciences to understand the brain at a fundamental level of individual neurons and synapses in order to ultimately deepen understanding of how the brain gathers, organizes and retains information as well as translates perceptions into thoughts, emotions, decisions, actions, and memories. Brain treatment focuses on translating understanding of brain mechanisms and processes into breakthroughs in the treatment of physical and psychological suffering, including mental disorders and neurodegenerative diseases. Lastly, brain development research aims to study the relationship and interaction between the brain and machine, neural interfaces that can augment human capabilities, and brain functioning leading to new insights in artificial intelligence.

In total, TCCI has given \$190.7 million to establish two academic centers at leading universities. TCCI made its first grant of <u>\$115 million</u> in 2016 to the California Institute of Technology (Caltech) for the creation of the Tianqiao and Chrissy Chen Institute for Neuroscience at Caltech. The Chen Institute at Caltech has six interdisciplinary research centers: the T&C Chen Brain-Machine Interface Center, the T&C Chen Center for Social and Decision Neuroscience, the T&C Chen Center for Systems Neuroscience, the Center for Molecular and Cellular Neuroscience, the Caltech Brain Imaging Center, and the Chen Center for Neuroscience Education. Each year, the Chen Institute provides research grant awards to professors and fellowship funding for graduate researchers.

In 2017, TCCI committed <u>\$75.7 million</u> to create a strategic partnership with Fudan Universityaffiliated Huashan Hospital and the Zhou Liangfu Medical Development Foundation, creating the Tianqiao and Chrissy Chen Institute for Translational Research based in Shanghai (TCCI China, including the Tianqiao and Chrissy Chen Institute for Brain Disease). In 2018, the Shanghai Mental Health Center joined the partnership. TCCI China focuses on brain disease research, strengthening translational research between clinical and fundamental research and fostering international collaboration.

#### The Weill Family Foundation and Neurohub

The <u>Weill Family Foundation (WFF)</u> is a private grantmaking foundation that was established in 1967 by Sanford and Joan Weill. The Weills were original signatories on the Giving Pledge, "a movement of philanthropists who commit to giving the majority of their wealth to philanthropy or charitable causes, either during their lifetimes or in their wills", which was created by Bill and Melinda Gates and Warren Buffett. The Weills pledged to give away all of their wealth aside from a small percentage allocated to their family. The Weills have been significantly involved in philanthropy over the last few decades and view investing in nonprofits as similar to buying stock in an organization.

In November 2019, the WFF committed <u>\$106 million</u> to create the "<u>Neurohub</u>", a research network that will encourage neuroscientists and researchers to collaborate and seek out new treatments for brain diseases. The Neurohub will unite the University of California, San Francisco (UCSF), UC Berkeley, and the University of Washington (UW). The Neurohub will provide funding for faculty, postdoctoral fellows and graduate students at these three institutions who are "working on cross-disciplinary projects, including for 'high-risk/high-reward' proposals 'that are particularly innovative and less likely to find support through conventional funding sources'. The WFF designated four priority areas or scientific 'pillars' that are important for answering questions about the brain and discovering new approaches to disease, including imaging, engineering, genomics and molecular therapeutics, and computation and data analytics.

The Neurohub builds on a <u>\$185 million gift</u> from the WFF in 2016 that launched the UCSF Weill Institute for Neurosciences, which was intended to unify scientists, physicians, and students in the search for new treatments for brain diseases. This donation resulted in the creation of a new neuroscience headquarters at UCSF's Mission Bay campus that houses laboratories and clinics and provides support for research projects related to treatments for neurological and psychiatric illnesses.

The Weill Neurohub will place an emphasis on technology enabling the discovery of disease mechanisms and development of novel treatments or early detection of neurologic diseases. Examples of interdisciplinary or <u>cross-institutional neuroscience projects</u> at the three partner institutions include "NextGen7T" MRI brain scanner technology, customized neurotherapies based on CRISPR, implants that decode brain signals for paralyzed patients, miniature devices providing therapeutic stimulation for spinal cord injuries, artificial intelligence detecting hemorrhages in whole-brain CT scans, and tablet-based applications for patient records.

### Funder Collaboratives, Collectives, and Other Funder Trends

#### **Synergos**

<u>Synergos</u>, founded in 1986 by <u>Peggy Dulany</u>, is working to solve poverty and inequality through facilitating and sustaining collaboration amongst businesses, governments, civil society, and marginalized communities. Synergos programs operate in over 15 countries and focus on alleviating poverty through work spanning agriculture and health to social connectedness and youth employment.

Synergos focuses on "bridging leadership" as a critical driver of success for both individuals and organizations. Synergos describes bridging leadership as a combination of "inner work to increase self-awareness, skills for social issue analysis such as systems thinking, and a high capacity for collaboration."

In 2001, Dulany co-founded Synergos' <u>Global Philanthropists Circle (GPC)</u> with her father, David Rockefeller, to foster collaboration amongst philanthropists to increase the impact of philanthropic giving. GPC now has over 100 member families (in total ~400 individuals) from 30 countries.

Synergos helps GPC members become more strategic and increase their impact by "connecting them to new ideas, resources, each other and the broader Synergos network. Synergos also supports GPC members in connecting to their own sense of purpose and well-being, to become more effective leaders, and bring their whole selves to their philanthropy so they can engage their full resources including influence, connections, empathy, skills, access and finance." In 2018, GPC held 26 events across four continents.

GPC affinity groups provide a forum for members to deep dive into specific topic areas with support from Synergos. One of these groups, the Spiritual Civilization Affinity Group, was born out of a belief shared amongst certain GPC members in the importance of increasing awareness of the ideals of a society that drive individuals to both help each other and work collectively towards a greater good. "The ideals of love, compassion, purpose, altruism, ethics and creativity were named as core to this and their own work, and the question was raised as to whether these ideals could be promoted more broadly to create what they term spiritual civilization."

The idea for the GPC Spiritual Affinity Group was discussed initially in 2012, and the group was officially created in 2015. Today, the group has over 100 members.

The Spiritual Affinity Group plans to deepen and grow a five-year long project on spiritual civilization in partnership with the John Templeton Foundation and the Fetzer Institute, aimed at understanding how funders can best promote the ideals of consciousness, altruism, and mindfulness in society, through their specific funding, their mindset about what and why they fund, and their own personal practices. The project has included a number of multi-day events and conferences.

The Spiritual Affinity Group is conducting an ongoing evaluation of the impact of the group on individuals, including creating a learning and evaluation framework, collecting baseline quantitative data on group members and continuing to survey over time, tracking shifts in outcomes, enabling conditions, and making recommendations. Data collected from 2015-2019 shows that the Spiritual Civilization group has helped its members "increase their self-awareness, deepen their spiritual practices, and co-create platforms/projects that spread the ideals of spiritual civilization."

As shared in the report, "The impact was seen at three integrated levels: As members become more self-aware and aligned with their inner calling (personal), they feel more confident to align their philanthropic activities with their spiritual ideals (organizational). They also develop deep relationships with others who are on a similar path. Together, they co-create platforms that expand the impact to larger society (societal).

Evaluation process also highlighted the enabling conditions necessary for making this impact. This included creating a safe-space for inner-work (personal), facilitating deep learning & intimacy (relational), co-sensing and reflecting on the whole (systemic). To create such a generative space, we need to engage committed members over a period of time in a facilitated learning journey."

The group has hosted a number of gatherings over the last few years, including a 2017 gathering of primarily American funders of mindfulness and spirituality in 2017, a gathering for European funders in 2019, and a planned gathering for Asian funders in 2020.

#### The Bridge Builders Collaborative

<u>The Bridge Builders Collaborative</u> is a group with the mission to fund and support the visions of social entrepreneurs who have scalable business models for applications, practices, products, and tools that build bridges for mind-training and its impact on their lives. The group seeks to demystify contemplative practices and illuminate their potential by offering applications and tools that build bridges for all to experiential discoveries about inner self and outer meaning and action.

Currently, the collaborative is involved with 15 companies, from wellness tools to brain-sensing technologies to e-learning technologies. For example, one of their portfolio companies, InteraXon, created <u>Muse</u>, a brain-sensing headband that detects and measures brain activity so users can understand and improve their minds over time. Other investments include PEAR Therapeutics, Insight Timer, Happify, and Headspace, among others.

The collaborative started as the vision of Scott Kriens, Jeff Walker, and Austin Hearst. Scott Beck joined the collaborative in 2013, Eric Brooks joined in 2016, Bo Shao joined in the fall of 2017. Maureen Pelton and John Cammack are also part of the collaborative. Charlie Hartwell currently serves as the Operating Partner of the Bridge Builders Collaborative. More information on the <u>members of the collaborative</u> can be found on the Bridge Builders website.

#### The Neurohacker Collective

<u>The Neurohacker Collective</u> was founded in 2015 with the mission of advancing human quality of life, guided by the belief that fully optimized human beings help create a better world. The Collective is a group of scientists, medical practitioners, biohackers, and health conscious creators sharing knowledge and techniques. They aim to both expand the collaborative nature of research for the benefit of all and create supplements to improve peak performance.

The Collective aims to create best in class well-being products by employing a unique methodology to R&D based on complex systems science, focusing on supporting the body's ability to self-regulate. The company began with a focus on psycho-affective products with the launch of their <u>Qualia nootropic line</u>. Nootropics are a group of drugs, supplements, and other substances that may improve cognitive function, and particularly executive functions, memory, creativity, or motivation in healthy individuals.

They offer three main categories of products – cognition, longevity, and energy. In addition to their products, the Collective also maintains a blog, publishes a monthly podcast, and publishes other media related to their mission. They also offer a foundational guide to neurohacking.

Recently, the Collective ran a <u>Wefunder campaign</u>, raising money at a \$60M valuation cap. According to the campaign, the Collective has proven to have a profitable subscription model with attractive margins, multi-channel sales opportunities, over \$20M in lifetime sales, and profitability in 2019. Additionally, they believe that there is a potential market of \$578B globally with 8.8% compound annual growth.

#### Philanthropic Contributions to Consciousness report by Mina Lee

Mina Lee, sponsored by Joe Hudson and the DBJ Foundation, conducted research into individual funders in the field of consciousness in late 2017 and 2018, speaking with 45 individuals, primarily based in the United States, with a handful in Europe and Asia. The research was presented at a gathering of funders of mindfulness and spirituality at 1440 Multiversity. A <u>full</u> <u>version</u> of their report is available online, and Lee's <u>other projects</u> can be found on her personal website.

Some of the key takeaways from the report include the following. Hudson and Lee found that 75% of the funders they spoke to were investing in projects that reflected their own personal spiritual journey, rather than taking a structured, systems-based approach or strategy. Most of these donors also struggled to quantitatively measure the impact of their work or articulate a larger strategic vision for their portfolio, though they agreed that both were important. Importantly, Lee also identified four main challenges to the field: 1) talent and governance - the ability to find leaders who can support business execution and spiritual content; 2) marketing and communications - telling stories and getting the word out about what work is being done; 3) lack of data and common metrics; and 4) leaders integrating their personal spiritual life with their professional life. Lastly, the report cites three potential lines of work to pursue as recommendations for next steps, including building an online resource hub, a learning network, or an action network for systems change.

# BrainMind

<u>BrainMind</u> is a platform and private community of top brain scientists, entrepreneurs, investors, philanthropists, and academic institutions collaborating to accelerate impactful innovation in brain science. Using new models for academic/public/private collaboration, BrainMind is creating a platform for bringing the best in brain science to humanity, with the focused application of substantial funding and entrepreneurial support.

BrainMind supports the full spectrum of idea formation across neuroscience and the study of the human mind, from basic science research to commercial ventures, with specific attention on ideas that are either critical to the advancement in our understanding of the brain or underfunded in relation to their importance. For example, they currently have <u>seven focus areas</u>, including prevention and wellness-focused innovation, research tools, mapping in the brain, large-scale data generation and sharing efforts, neuroscience-informed AI research, educational neuroscience, and high-risk/high-return ideas with high potential impact on public health.

BrainMind has hosted and will be hosting several <u>gatherings</u> intended to bring together institutions, researchers, entrepreneurs, and investors with the shared purpose of accelerating values-driven brain endeavors. In 2019, BrainMind hosted one summit in conjunction with MIT and another summit at Stanford, the latter of which was focused primarily on consciousness. They have plans to host more gatherings in Cambridge, Asilomar, Bellagio, and Oxford in the coming years. The event in Asilomar will focus on the ethics and regulation of biotechnology and brain science.

The organization was co-founded in 2018 by Michael McCullough, Diana Saville, and Calvin Nguyen, and they have a group of eight core advisors, including Reid Hoffman, Laura Roberts, and Bo Shao. The organization also works with faculty and program advisors across the country. BrainMind's supporters include Evolve Foundation, Greylock Partners, Felicis Ventures, The Tianqiao and Chrissy Chen Institute, Wilson Sonsini Goodrich & Rosati, and VeriTeam.

#### The Center for Transformative Technology

The Center for Transformative Technology hosts the annual <u>TransTech Conference</u>, which provides attendees with the opportunity to explore technology focused on mental health, emotional well-being, and human flourishing. It states that its primary mission is to permanently move a billion people into a state of well-being and flourishing by 2030. In existence since 2016, the conference focuses on the intersection of neuroscience, psychology, tech, entrepreneurship, and innovation; and it features exponential technologies like AR/VR, networks and sensors, biotech, neurofeedback, robotics, and more to build tech to enable human well-being at scale.

The 2019 Conference was broadly focused on four content areas: Bold Visions, Signal Insight TT Companies & Labs, TT Business Essentials, and TT Leadership Tools & Workshops. Some of the featured speakers for Bold Visions include Adam Gazzaley, Achin Bhowmik, and Jim Doty. Sponsors include the Deloitte Center for the Edge, evolve, evolution, Joy Ventures, Hope

Lab, Elevation Capital, Conscious Partners, and more. There were more than 60 exhibitors, experiences, and media partners.

The TransTech community (primarily organized on social media) highlights books, people, companies, events, and more that relate to the TransTech mission and vision. For example, the TransTech Facebook page recently covered Daniel Chao, co-founder and CEO of Halo Neuroscience; Tom Gruber of Cognixion; and Eugenia Kuyda of Luka.

# III. Academic Centers, Associations, and Journal

#### The Center for Consciousness Studies at the University of Arizona

The Center for Consciousness Studies (CCS) aims to "bring together the perspectives of philosophy, the cognitive sciences, neuroscience, the social sciences, medicine, the physical sciences, and the arts and humanities to move toward an integrated understanding of human consciousness." The CCS was formed in 1998 with a seed grant from the Fetzer Institute and primarily organizes biennial conferences. In addition to the conferences, the Center has supported research in consciousness studies, established a lecture series, hosts discussion forums and panels, and more.

<u>The Science of Consciousness (TSC)</u> is an interdisciplinary conference that addresses questions regarding consciousness, the brain, reality, and existence. It brings together more than 700 scientists, philosophers, educators, students, meditators, artists, and interested public from 50 countries. In 2020, the conference will run for six days and will include talk sessions, posters, exhibits, events, and entertainment.

Some of the sponsors for the 2020 conference include Fetzer-Franklin Memorial Trust, Jhong Family Foundation, the Alvin J. Clark Foundation, Dennis Balson, and Ronald Gruber. The primary organizer is Stuart Hameroff, the director of the center.

#### The Contemplative Sciences Center at the University of Virginia

<u>The Contemplative Sciences Center (CSC)</u> aims "to advance the study and application of human flourishing at all levels of education – K-12, undergraduate, graduate, professional and lifelong." The CSC believes that practical engagement at all social and institutional levels that is inclusive, equitable, and scale-appropriate as well as contemplation are key factors contributing to flourishing. It was launched in 2012 by a <u>\$12 million gift</u> from Sonia and Paul Jones to foster collaboration among the College, School of Medicine, School of Nursing, and Curry School of Education.

The CSC has <u>22 projects</u>, of which three are particularly notable. First, the <u>Compassionate</u> <u>Schools Project</u> aims to facilitate integrated development of mind and body, impacting academic performance, physical education, and character development for children in Louisville, Kentucky public schools. The project is a partnership between the University of Virginia and Jefferson County Public Schools, with support from Louisville Metro Government and philanthropic giving. Second, the <u>Dalai Lama Fellows</u> program "cultivates and supports a global movement of next generation leaders integrating contemplative work with social innovation to solve global challenges in locally adapted ways to promote human flourishing." Third, the <u>Student</u> <u>Flourishing Initiative</u> aims to "help students flourish by empowering them with knowledge and practices for navigating their lives in college and beyond", and the initiative is bringing together teachers, scientists, and scholars from the Pennsylvania State University, the University of Virginia, and the University of Wisconsin-Madison.

Additionally, the center hosts events, classes, workshops, and retreats and offers resources and community connections. <u>David Germano</u> is the current Executive Director of the CSC, and he is currently "focused on the exploration of contemplative ideas, values, and practices involving humanistic and scientific methodologies", and he co-leads the Student Flourishing Initiative.

# The Center for Healthy Minds at the University of Wisconsin-Madison

<u>The Center for Healthy Minds</u>, located at the University of Wisconsin-Madison, aims to cultivate well-being and relieve suffering through a scientific understanding of the mind. The center conducts rigorous neuroscientific research to answer the primary question: *What constitutes a healthy mind?* The research investigates emotions, contemplative practices, and qualities of mind across people of all backgrounds and ages. The Center believes their work can foster a kinder, wiser, and more compassionate world, where individual well-being can cascade to communities around the world.

The Center was <u>founded</u> and is currently led by Richard Davidson, a well-known researcher of emotions and the brain. The rest of the community comes from an interdisciplinary team of scientists, students, and research and administrative staff. <u>Healthy Minds Innovations</u> (HMI) is an affiliated nonprofit dedicated to supporting the primary mission of the Center - it takes the research discoveries from the Center and translates them into actionable tools that help people worldwide learn and build skills of well-being. Additionally, HMI publicizes the work of the Center through philanthropic activities, public speaking engagements, and special initiatives.

The Center receives almost half of its <u>support</u> from federal grants; a third from direct contributions; and the rest from endowment revenue, non-federal grants, and other sources. 75% of these funds go directly toward supporting the research conducted at the Center. Research progress can be tracked through the Center's impact reports listed on the <u>about page</u>. The <u>Winter</u> <u>2020 report</u> discussed balancing stress and performance, the effects of mindfulness training on the mental health of police officers, and a Q&A about stress hormones.

#### The Canadian Institute for Advanced Research

<u>CIFAR</u>, the Canadian Institute for Advanced Research, is a "global charitable organization that convenes extraordinary minds to address the most important questions facing science and humanity." Since its founding in 1982, CIFAR has <u>supported</u> 27 research programs, has worked with more than 400 researchers from over 130 institutions across 22 countries. Currently, CIFAR has an annual budget of \$41M. CIFAR <u>promotes</u> long-term interdisciplinary collaboration focused on complex global challenges. CIFAR also supports <u>fellows</u> - outstanding researchers

who are internationally recognized for conducting innovative studies leading to high-impact advances in their field.

The <u>CIFAR Azrieli Brain, Mind & Consciousness</u> program was founded in 2014 and currently has 20 members. It develops "a framework to help fellows from across disciplines understand how our brains give rise to consciousness and our unique perspective on the world around us." Supporters include the Azrieli Foundation, The Henry White Kinnear Foundation, Great-West Life, and others. Its co-directors are Anil Seth and Adrian Owen. The program currently has 18 fellows and eight global scholars from around the world.

<u>The Azrieli Foundation</u>'s vision is "to remember the past, heal the present and enhance the future of the Jewish people and all humanity." The Foundation supports <u>scientific research</u> in several areas including neuroscience and neurodevelopment. The Foundation also runs a fellowship program to support "those who will lead change with their creative thinking, cross-pollination of ideas and cutting-edge contributions to solve the world's most pressing issues." One of these fellowship programs is the CIFAR program in Brain, Mind, and Consciousness. The program was established with a <u>\$7.8 million</u> (\$10 million CAD) gift to "bring together leading researchers from around the world to explore the biological basis of human consciousness and its role in brain function and disorders."

# The Center for Consciousness Studies at the University of Southern California

The aim of the <u>USC Center for Consciousness Studies</u> is to map the brain's complex neural architecture to better understand perception, the formation of concepts, and the unified character of conscious experience. Current projects include exploring the role of feelings in the construction of subjectivity, investigating the neural basis of perspective as a contributor to subjectivity, attempting to construct conscious artifacts, and understanding the role of sensory integration in the construction of conscious experiences. The primary researchers in the USC Center include Antonio Damasio, Kingson Man, Max Henning, and Jonas Kaplan.

The Center is part of the larger <u>Brain and Creativity Institute</u>, where research projects focus broadly on the effects of music processing on the developing brain, studies on how the brain organizes narratives, and the investigation of feeling and consciousness in humans and machines. "Results from the Institute's ongoing work have applications in the diagnosis and treatment of neurological and psychiatric disorders, child development, and education. They are all relevant to the elucidation of the human condition."

# The Brain Institute at Chapman University

<u>The Institute for Interdisciplinary Brain and Behavioral Sciences</u>, also known as The Brain Institute, "comprises a network of interdisciplinary researchers and specialists spanning the fields of psychology, psychiatry, neuroscience, neurology, anesthesiology, neurobiology, behavioral economics, computation and information processing in the brain, engineering, physics, anthropology, and cognitive science." The Institute aims to unify research in the behavioral and brain sciences at the systems level, focusing on clinical applications, innovations with artificial intelligence, insights from neuropsychology, and philosophy of mind. Communication, criticism, and stimulation are important for pushing the Institute's research forward.

<u>Amir Raz</u>, Professor of Psychological and Brain Sciences, is the current Director of the Brain Institute. His research focuses on the cognitive neuroscience of attention, placebos, and altered planes of consciousness. Aaron Schurger, Assistant Professor, focuses his research on uncovering the distinction between conscious and non-conscious neural information processing. Uri Maoz, Assistant Professor, engages in research intersecting volition, decision-making, and moral choice. All three are associated with Chapman University. The Institute works with a number of other <u>staff members</u>, graduate students, and undergraduate researchers.

Recently, the Brain Institute joined a collaboration with 16 other top universities to work on the project "Consciousness and Free Will: A Joint Neuroscientific-Philosophical Investigation". Through this project, a group of 17 scholars, including neuroscientists and philosophers, will aim to understand how the human brain enables conscious, causal control of human decisions and actions.

#### Sackler Centre for Consciousness Science

<u>The Sackler Centre for Consciousness Science</u>, founded in 2010 by a donation from the Dr. Mortimer and Theresa Sackler Foundation, is located directly on the University of Sussex campus in Brighton, UK. Currently co-directed by <u>Anil Seth</u> and <u>Hugo Critchley</u>, the center aims to bring together many scientific approaches to understand the neural basis of conscious experience. Research at the center follows two main strands – basic science and clinical application. For the former, the research develops and tests new theories and models of neural mechanisms that actually account for fundamental properties of consciousness. The latter focuses on translating insights about the mechanisms of consciousness to the clinical domain, while clinical studies help stimulate new developments in basic science. Their clinical work focuses primarily on neuropsychiatric disorders such as anxiety, autism, and Tourette syndrome.

The Sackler Centre has six primary <u>research groups</u>: embodiment and self, theory and modelling, time perception, clinical consciousness science, perception and consciousness, and online studies. These groups represent the interdisciplinary nature of the center, which brings together researchers from psychology, psychiatry, computer science and artificial intelligence, neuroscience, and cognitive science. In 2012, the Centre hosted the 16th Annual Meeting of the Association for the Scientific Study of Consciousness (ASSC16).

#### The Association for the Scientific Study of Consciousness

<u>The Association for the Scientific Study of Consciousness (ASSC)</u> is "an academic society that promotes rigorous research and coordinates annual conferences directed toward understanding the nature, function, and underlying mechanisms of consciousness" and it "includes members working in the fields of cognitive science, medicine, neuroscience, philosophy, and other relevant disciplines in the sciences and humanities."

Founded in 1994, the Association has been holding annual global conferences since 1997, where anyone interested in consciousness can gather to hear talks, participate in breakout sessions, view current research at poster sessions, and listen to keynote speakers like Sid Kouider (2019) and Lisa Miracchi (2019). The ASSC also publishes their own <u>Neuroscience of Consciousness</u> <u>Journal</u>, "an open access journal for a dynamic, inter-disciplinary community of researchers interested in the neuroscience of consciousness."

Additionally, annually since 2004, the ASSC has been awarding researchers the <u>William James</u> <u>Prize</u> for an outstanding published contribution to the empirical or philosophical study of consciousness. Recent award winners include Vincent Taschereau-Dumouchel for his research "Towards an unconscious neural reinforcement intervention for common fears" (2019), Satohiro Tajima and colleagues for their research "Untangling brain-wide dynamics in consciousness by cross-embedding" (2016), and more.

The ASSC runs on a membership model, where interested parties can join on a one- or two-year basis as a student member, regular member, or full-voting member. Full-voting members also have the option of a lifetime membership. Membership applications are reviewed by the membership committee. The Association also operates with a conference committee, student committee, prize committee, and elections committee. The board currently consists of Patrick Haggard, a Professor of Cognitive Neuroscience at University College London; Susanna Siegel, a Professor of Philosophy at Harvard University; and Axel Cleeremans, a Professor of Cognitive Psychology and the head of the Consciousness, Cognition and Computation Group and Center for Research in Cognition and Neurosciences at Université Libre de Bruxelles, Belgium.

#### The Journal of Consciousness Studies

<u>The Journal of Consciousness Studies</u> is an interdisciplinary and peer-reviewed journal in the consciousness space. The journal answers questions such as: *How does the mind relate to the brain? Can computers ever be conscious? What do we mean by subjectivity and the self?* In its most recent issue, the Journal addressed key ideas such as the integrated information theory, phenomenological interpretations and investigations, Chalmers' meta-problem of consciousness, and Buddhist meditation. In order to appeal to a wide audience, the Journal accepts publications from many fields, including the sciences, humanities, philosophy, and religion, among others. It is currently edited by Professor Valerie Gray Hardcastle at the University of Cincinnati and is offered on an annual subscription basis.

In addition to the physical printed version of the journal, the community enjoys engaging in an email discussion group, the Journal of Consciousness Studies <u>online forum</u>, and blog. Full text versions of representative articles are included on this site as well as editorials and reviews from the Journal staff.

# The Brown University School of Public Health Study

In November 2019, researchers from the Brown University School of Public Health published an <u>article</u> in Plos One that suggests that an eight-week mindfulness-based program may be able to help those with high blood pressure lower it substantially and maintain that improvement for at

least a year. The study was funded by the <u>Science of Behavior Change at the National Institutes</u> <u>of Health</u>, whose goal is to provide the basis for an experimental medicine approach to behavior change that focuses on identifying and measuring the mechanisms that underlie behavioral patterns we are trying to change.

Compared to previous studies that have analyzed only general mindfulness programs, this study tested a mindfulness regimen designed specifically to reduce blood pressure. The program built on the <u>Mindfulness-Based Stress Reduction curriculum</u>, one of the most widely used programs. For two and a half hours per week for eight weeks, participants took a group class in which they learned mindfulness techniques related to a behavior that contributes to high blood-pressure, like inactivity or eating too much sugar and salt. By the end of the study, participants improved physical activity, diet, alcohol consumption, and stress levels.

However, the study highlights some of the primary problems with behavioral, and specifically mindfulness-based, studies. For example, it is difficult to construct a placebo, prescribe mindfulness doses, and measure actual mindful activities. Additionally, the participants were not necessarily representative of the overall population.

#### The Mindful Awareness Research Center at the University of California, Los Angeles

<u>The UCLA Mindful Awareness Research Center</u> (MARC) is guided by a mission to disseminate mindful awareness across the lifespan through education and research. It is a partner of the Norman Cousins Center for Psychoneuroimmunology within the Institute for Neuroscience and Human Behavior at UCLA. The MARC provides four main services: 1) offering classes and workshops on mindfulness skills for the general public; 2) fostering and publicizing research to support the scientific benefits of mindful awareness; 3) bringing mindfulness to professionals; and 4) offering mindfulness tools and classes to support mental health professionals.

The classes and events include options ranging from brief engagement sessions of about an hour to four-week workshops. The Center also provides a weekly podcast, free drop-in meditation, day-long retreats, summer academic programs, youth mindfulness programs, and intensive practice programs. Additionally, they offer a mindfulness app offering basic meditations, wellness meditations, informative videos, and weekly podcasts.

While most MARC programs are open to the public, the Center has also partnered with the UCLA <u>Healthy Campus Initiative</u> to deliver programming related to mindfulness, health, and mind-body wellness with a particular focus on UCLA students. Lastly, since 2011, the Center has offered a year-long training program in the art of facilitating mindfulness meditation. The program includes four 4-day in-person practicums as well as additional virtual meetings.

#### **The Stanford Flourishing Project**

<u>The Stanford Flourishing Project</u>, led by Aneel Chima, sits within the Health and Human Performance division of Stanford Medicine. The Health and Human Performance division "houses five academic programs that utilize an integrative model aimed at educating the whole person for life-long flourishing." Chima's academic work aims to answer the questions, "What is the future of human flourishing?" and "How do we better practice and teach human flourishing in a work where technology is everywhere, and the pace of culture feels ever-accelerating?" The Stanford Flourishing Project project has recently started a lecture series with leaders and change-makers discussing life lessons in the wake of the COVID pandemic.

# **IV. Notable Areas of Interest**

#### **Psychedelics**

# The Center for Psychedelic Research

In September 2019, Johns Hopkins Medicine announced the launch of the <u>Center for Psychedelic</u> and <u>Consciousness Research</u> with \$17 million in private funding. The Center is the first of its kind in the United States, and its operational expenses will be covered for the first five years by the <u>Steven & Alexandra Cohen Foundation</u> and four philanthropists: Tim Ferriss (author, podcast host, and technology investor, who personally contributed \$2 million and has become a vocal advocate of psychedelic research), Matt Mullenweg (co-founder of WordPress), Blake Mycoskie (founder of TOMS) and Craig Nerenberg (investor).

The Center will focus on researching how psychedelics affect individual behavior, brain functioning, learning and memory, as well as the brain's biology and mood. According to the center's website, "upcoming studies will determine the effectiveness of psilocybin as a new therapy for opioid addiction, Alzheimer's disease, post-traumatic stress disorder (PTSD), post-treatment Lyme disease syndrome (formerly known as chronic Lyme disease), anorexia nervosa and alcohol use in people with major depression." The initial funding supports a team of six neuroscientists, experimental psychologists and clinicians, as well as five postdoctoral students.

Johns Hopkins has played a critical role in sparking renewed interest in psychedelic research globally over the last fifteen years. In 2000, scientists at Johns Hopkins were the first in the United States to receive regulatory approval to re-initiate research with psychedelics in healthy volunteers who had never previously used a psychedelic; in 2006, researchers led by Robert Griffiths, who will now lead the center, published a landmark study that found that volunteers "rated the psilocybin experience as having substantial personal meaning and spiritual significance and attributed to the experience sustained positive changes in attitudes and behavior." Since then, Johns Hopkins researchers have published over 60 peer-reviewed studies demonstrating therapeutic benefits, as well as safety guidelines and best practices for psychedelic research.

#### The Multidisciplinary Association for Psychedelic Studies

<u>The Multidisciplinary Association for Psychedelic Studies (MAPS)</u> is a non-profit research organization working to raise awareness and understanding of psychedelic substances by helping scientists design, fund, and obtain regulatory approval in the United States and Europe for the use of psychedelics as therapeutic treatment. Founded by Rick Doblin in 1986, MAPS has disbursed over \$20 million since its inception.

While MAPS research initiatives span a wide variety of drugs and treatment areas, MAPS' top priority is to develop MDMA-assisted psychotherapy into a legal, FDA-approved treatment for PTSD. Studies funded by MAPS have shown that MDMA-assisted psychotherapy can support individuals overcoming PTSD caused by sexual assault, war, and other traumas.

In 2017, MAPS received FDA 'Breakthrough Therapy Designation' for MDMA-assisted psychotherapy for PTSD, meaning that the treatment may have a meaningful advantage over available medications for PTSD and leading to the fast-tracking of continued research. MAPS and the FDA are currently <u>collaborating</u> closely on Phase 3 clinical trials, with FDA approval for MDMA-assisted psychotherapy anticipated as an approved prescription treatment by 2021 or 2022.

MAPS also works to educate the public and health providers about the risks and benefits of psychedelics through newsletters, publications, educational events and conferences, in addition to supporting harm-reduction services targeting use of psychedelics outside supervised medical contexts.

# **The Auryn Project**

<u>The Auryn Project</u> is a non-profit incubator for organizations building equitable, affordable psychedelic medicine for all. The Auryn Project incubates organizations and engages in public outreach and advocacy. The team consists of five individuals associated with the movement toward psychedelics, including Liana Gillooly - the current Director of Development at MAPS - Tim Chang, and others. The Auryn Project also runs the <u>North Star Ethics Pledge</u>, "a commitment from newly forming and long established psychedelic organizations to act with intention, integrity, and reverence for these medicines and the rich history that they bring." Those who sign the Pledge will have access to the North Star Community, which will share access to gatherings and speaker series, donor and investor roundtables, seminars, open-source tools, and invitation to the North Star Conference.

#### **Corporate Movements**

**Search Inside Yourself**, originally created in 2007 for Google employees by Chade Meng-Tan (an early Google engineer) and established as an independent nonprofit in 2012, teaches mindfulness and emotional intelligence, supporting individuals on intrapersonal and interpersonal growth. Within Google it became a tremendously popular course; today, through the nonprofit, over 50,000 people in more than 50 countries have taken the Search Inside Yourself program.

Aetna, in collaboration with Duke University, Viniyoga Stress Reduction and Mindfulness at developed, launched, and evaluated two mindfulness programs in 2010 and found that participants showed significant improvement in both perceived stress levels and various heart rate measurements, and it now offers the program to hundreds of clients in addition to their own employees.

**Thrive Global**, founded by Arianna Huffington in 2016, works with individuals and corporations to reduce stress and combat burnout. Thrive focuses on storytelling to elevate the global conversation about well-being and performance, digital tools to help individuals track and sustain behavior change, and corporate partnerships to help companies better understand employee performance and the detrimental effects of burnout.

# V. People

Note: David Chalmers through Tim Chang are mentioned in the order in which they appear in the report. Patricia Albere through Jamie Wheal are listed in alphabetical order by last name.

## **David Chalmers**

David Chalmers is a well-known philosopher and thinker on consciousness. His 1996 book *The Conscious Mind* is credited with re-invigorating an interest in philosophy of mind and consciousness in the philosophy world. He formulated "the hard problem of consciousness," which is essentially the problem of understanding subjective experience; and he has worked significantly on "the extended mind", the idea that technology can literally become part of one's mind. Chalmers has a TED talk on how to explain consciousness and is currently working on a book about the impact of technology and artificial intelligence on how we think about consciousness and the human experience.

## **Dawid Potgieter**

<u>Dawid Potgieter</u> is a Senior Program Officer at the Templeton World Charity Foundation and is responsible for the <u>Accelerating Research on Consciousness initiative</u>. The Foundation committed \$20 million to the initiative to empirically investigate scientific theories of consciousness through adversarial collaboration and by promoting open-science practices. He also serves as the Head of Program Management and Continuous Improvement.

Dawid was one of the hosts of the <u>BrainMind Summit on Consciousness</u>, along with Heather Berlin and Michael McCullough. At the summit, he moderated a fireside chat with Heather, an Assistant Professor of Psychiatry and Neuroscience at the Icahn School of Medicine at Mount Sinai; and Anil Seth, a Professor of Cognitive and Computational Neuroscience at the University of Sussex, the Co-Director of the Sackler Centre for Consciousness Science, and the Co-Director of Leverhulme.

Dawid studied Biochemistry at the University of Oxford, where he also completed a D.Phil. in Neuroscience in the Department of Physiology, Anatomy, and Genetics. His research has been published in Proceedings of the National Academy of Sciences, Neurobiology of Disease, and Human Molecular Genetics. Dawid was also featured on "A Dying Podcast" hosted by Nils von Heijne.

#### **Bruce Fetzer**

Bruce Fetzer is President, CEO, and a trustee of the Fetzer Memorial Trust, a former trustee and treasurer of the Fetzer Institute, a former trustee and member of the Foundation Financial Officers Group (FFOG, an organization of the chief investment and finance officers of the largest 200 foundations in the world), and an advisor to other nonprofits. He has also been involved as a Council Board member and Investment Committee member for the Boy Scouts of America for the past 20 years. He received his Bachelor of Science degree in Chemical Engineering from North Carolina State University and his MBA from Western Michigan University.

## Jeff Tollaksen

<u>Jeff Tollaksen</u> is a professor of physics and is the Co-Director of the <u>Institute for Quantum</u> <u>Studies</u>. His research mainly focuses on physics and quantum mechanics - he has five grants for which he is the Principal Investigator and has contributed to dozens of other studies. Jeff participated in the interview series "<u>Physics of Consciousness</u>" on Closer to Truth, a broadcast and digital media non-profit organization. <u>Closer to Truth</u> interviews leading scientists and philosophers exploring the ideas of existence, cosmos, consciousness, meaning, the universe, and the search for ultimate reality and purpose.

#### **Elizabeth Koch**

<u>Elizabeth Koch</u> is the President and co-founder of the Tiny Blue Dot Foundation as well as cofounder and CEO of <u>Catapult</u>, a publishing company and writers' community that uses extraordinary storytelling as a means of catalyzing empathy. Additionally, she founded <u>Unlikely</u> <u>Collaborators</u>, a company creating interactive experiences, including conferences, meant to illuminate biases and unconscious beliefs and pave the way for deeper human connection. All of the organizations she has founded are designed to help people investigate the nature of conscious experience and ultimately release destructive stories unconsciously projected on oneself and others based on past experiences. Elizabeth received her Bachelor of Arts degree in English Literature from Princeton and an MFA in fiction from Syracuse University.

#### Nicco Reggente

<u>Nicco Reggente</u> is a Project Officer at the Tiny Blue Dot Foundation and a Principle Investigator at the Institute for Advanced Consciousness Studies. He is also the co-founder of a personalized medicine startup called <u>Strain Genie</u>. Nicco has received extensive academic funding, including the Graduate Research Fellowship award from the National Science Foundation (NSF), the support of UCLA's NIH-funded Neuroimaging Training Program, and support from DARPA for his primary research pursuits. His graduate research focused on using advanced neuroimaging tools and analyses to decode the neural mechanisms supporting enhanced mnemonic retrieval, intelligence, psychiatric disorders, and disorders of consciousness. Nicco has maintained a personal blog, <u>PhiloNeuro</u>, since 2012, where he posts his work, writings, and presentations.. He received his B.A. in Psychology and B.A. in Philosophy from New York University as well as his Ph.D. in Cognitive Neuroscience from UCLA.

#### **Marcello Massimini**

<u>Marcello Massimini</u> is a researcher in the Department of Biomedical Clinical Sciences at the University of Milan and a fellow of Azrieli Brain, Mind & Consciousness. His research focuses on understanding changes in thalamocortical networks when consciousness fades and recovers, such as during sleep/awakening. He demonstrated that consciousness is tied to the brain's capacity to integrate information, shedding light on the mechanisms of consciousness loss and recovery. He is also interested in the theoretical and philosophical implications of the neuroscience of consciousness. He has published five papers, most recently *Sizing Up Consciousness: Towards an Objective Measure of the Capacity for Experience* in 2018, and has received five awards.

#### **Melanie Boly**

<u>Melanie Boly</u>, an Assistant Professor at the University of Wisconsin, has previously collaborated with Marcello Massimini on projects related to the perturbational complexity index and many other consciousness-related studies. Generally, Boly is interested in combining neuroimaging techniques and the Integrated Information Theory of Consciousness to uncover neural mechanisms of the level and contents of consciousness in healthy subjects and neurological patients. One of the papers they recently collaborated on is *Integrated information theory: from consciousness to its physical substrate*, explaining several aspects of the relationship between consciousness and the brain.

#### **Christof Koch**

<u>Christof Koch</u> is currently the Chief Scientist of the MindScope Program, which seeks to understand how the brain's neural circuits produce vision. It is transitioning out of the <u>Allen</u> <u>Institute for Brain Science</u>, an organization committed to researching the unknowns of human biology – the brain, the human cell, and the immune system – all with the intention of progressing toward the founder's vision of improving health and lengthening life. He was previously a fellow in the Brain and Cognitive Sciences Department at MIT and a professor of Cognitive & Behavioral Biology at Caltech. Christof is particularly interested in neurons and the neuronal correlates of consciousness. In collaboration with Giulio Tononi, he co-developed the Integrated Information Theory of consciousness. Most recently, he published a book *The Feeling of Life Itself- Why Consciousness is Everywhere But Can't be Computed*. Some of the 10 year objectives for the MindScope Program (as of 2013) were to characterize single cell connections, observe large-scale cellular responses, model observed cellular dynamics at the cellular and behavioral level, and make their resources publicly available.

#### **Jason Yotopoulos**

<u>Jason Yotopoulos</u> is the CEO of Emerald Gate, the non-profit enterprise focused on human transformation through expansion of the conscious mind. He is currently orchestrating and implement a multi-year, comprehensive scientific research agenda at the intersection of consciousness, physics, and biology across Tier 1 research institutions globally. Jason is also the

founder and a board member of Mach49, a Silicon Valley-based growth incubator for global businesses. Jason previously was a venture capitalist for a decade and at SAP for a decade, most recently serving as Executive Vice President and Head of Global Research & Innovation at SAP. He received his Bachelor of Science in Engineering from Stanford University as well as his MBA from the Stanford University Graduate School of Business.

## **David Dominik**

David Dominik is a Managing Director of Golden Gate Capital and Chairman & Founder of the Emerald Gate Foundation. Prior to Golden Gate Capital, Mr. Dominik spent ten years as a managing director at Bain Capital, where he was responsible for managing Information Partners, a specialized fund within Bain Capital that focused on software, information services and transaction processing companies serving a broad range of end markets. He also built several scale companies in the semiconductor and electronics industries. Mr. Dominik has a JD from Harvard Law School (cum laude) and an AB from Harvard College (magna cum laude, Phi Beta Kappa).

## **Bo Shao**

Bo was born in China and won many national mathematics competitions in high school. He left China for Harvard College on a full scholarship, one of the first such scholarships granted to a student from mainland China. He studied physics and electrical engineering at Harvard, graduating summa cum laude.

After working for the Boston Consulting Group and getting an MBA at Harvard Business School, he went back to China and started EachNet, which became the dominant consumer e-commerce company in China under his leadership and was acquired by eBay in a landmark transaction in 2003.

At the age of 29, Bo retired, raised a family and travelled around the world for ten years. He also co-founded and was a managing partner of Matrix Partners China, which became the leading venture capital firm in China, with over \$4 billion under management. He is a significant investor and board member of multiple billion-dollar companies.

Having realized that material success doesn't buy happiness, let alone true joy or freedom, Bo has been on a path of introspection and growth, accompanied by his wife Jenny and our Co-founder Oleg.

## **Scott Kriens**

<u>Scott Kriens</u>, another member of the <u>Bridge Builders Collaborative</u>, is the chairman and former CEO of Juniper Networks, a company that develops and markets networking products and software-defined networking technology, which he co-founded in 1996. In 2000, he won the EY U.S. Entrepreneur of the Year Award, while he was with <u>Juniper Networks</u>. Prior to Juniper Networks, Scott received his bachelor's degree in Economics from California State University, East Bay.

In 2010, Scott and his wife Joanie launched <u>1440 Foundation</u>, whose mission is to serve champions committed to helping people grow in relationship, spirit, and wellness. 1440 Foundation focuses mainly on inner fitness – the awareness of the self inside that mind and body – and relational fitness – the life skills needed to build trusted relationships with others in authentic and meaningful ways. The Foundation supports people and programs aimed at developing greater awareness of ourselves and ourselves in relation to others. The 1440 Foundation currently supports 59 groups and organizations, including The Institute of Compassionate Awareness, Reciprocity Foundation, and the Center for Wellness and Achievement in Education, among many others.

In addition to the 1440 Foundation, Scott and Joanie created the <u>1440 Multiversity</u>, a nonprofit learning destination and retreat center that allows attendees to connect with themselves and others while discovering new approaches to living, loving, and working. The "multiversity is a place for holistic learning that engages the mind, body, and heart and shape's one's inner fitness." Attendees can choose a longer program or a shorter getaway, where they will be provided with farm-to-table food, wellness classes, and curated experiences.

## **Peggy Dulany**

<u>Peggy Dulany</u> is currently the Chair of Synergos, which she founded in 1986 to promote trust and collaboration among grassroots groups and government or business leaders and organizations - people who otherwise would not have access to each other, so that they can develop long-term relationships and forge new paths in overcoming poverty. In 2001, she cofounded the Synergos Global Philanthropists Circle to support philanthropic families in using this approach. She has sat on numerous nonprofit and corporate boards and currently runs two socially responsible businesses: a grass-fed beef and guest ranch in Montana as well as an ecotourism operation in Namibia. She is also currently the Chair of ProVentures, a business development company for

Peggy previously led a public high school program for drop-outs and consulted with both the United Nations and the Ford Foundation on health care and family planning as well as with the National Endowment for the Arts on nonprofit management and planning. She was Senior Vice President of the New York City Partnership, where she headed the Youth Employment, Education, and Community Affairs programs. Peggy graduated with honors from Radcliffe College and earned both a masters and a doctorate from the Harvard Graduate School of Education.

## Melissa Durda

<u>Melissa Durda</u> is a Senior Director of Philanthropy at Synergos, where she oversees the Philanthropy and Global Philanthropists Circle (GPC) programs. She also currently serves as a Board Trustee for Anglo-American University. Melissa previously created and managed a Philanthropy and Corporate Partnerships Program for Forum 2000 Foundation, where she worked with private philanthropists promoting human rights, civil society, and democracy. She has international nonprofit project management experience in several fields. She received her BA in International Relations from the University of Virginia and her MSc. in European Political Economy: Transition from the London School of Economics.

# Jeffrey Walker

Jeffrey Walker, another member of the Bridge Builders Collaborative, is Chairman of New Profit, a social change investment fund and is Vice Chair in the United Nations Envoy's Office focused on front line health. He also currently serves on the Boards of The University of Virginia, Berklee College of Music, Grammys Music Education Coalition, On Being (Krista Tippett's Enterprise), Just Capital, AMP for Health and University of Virginia's Undergraduate Business School, where he was President for ten years. Jeff was Chairman of The Council of Foundations at University of Virginia (UVA), serves on the Harvard Business School Dean's Board of Advisors and was on the Visiting Committee and is on the Advisory Boards of MIT Media Lab, Center for Contemplative Sciences at UVA (which he chairs) and the Harvard School of Public Health. He has been on numerous other for-profit and nonprofit boards.

Previously, Jeff was Executive-in-Residence at Harvard Business School, focusing on social enterprises and collaboration, and a Lecturer at the Kennedy School. At Harvard, he helped to develop a course in exponential fundraising for nonprofit. He served as the Chairman of Millennium Promise, with the United Nations and Columbia University, an incubator to eliminate extreme poverty, and was the Chairman of the Thomas Jefferson Foundation (Monticello), where he still serves as an Emeritus Trustee. Jeff Co-Founded and was Chairman of Npower, an organization that provides shared technology services to nonprofits.

Jeff co-authored the book, *The Generosity Network*, about new approaches to gather resources to address causes each of us are passionate about. He also received the John C. Whitehead Award for Social Enterprise from the Harvard Business School Club of New York City. He is currently teaching and researching the issue of systems entrepreneurship and systems change.

For twenty-five years Jeff was CEO and Co-Founder of CCMP Capital, the \$12 billion successor to JPMorgan Partners, JPMorgan Chase & Co's global private equity, Vice Chairman of JPMorgan Chase & Co. and Chairman of the JPMorgan Chase Foundation. He has an M.B.A. from Harvard Business School and a B.S. from the University of Virginia, is a Certified Management Accountant and a Certified Public Accountant.

## **Charlie Hartwell**

Charlie Hartwell is an operating partner at <u>The Bridge Builders Collaborative</u>. He is also currently on the board as an observer seven of Bridge Builders investments. Charlie, along with Maureen Pelton, co-founded the <u>Shiftlt Institute</u>, whose mission is to ignite consciousness, inspire human potential, and create paradigm shifts.

A Harvard Business School graduate, Charlie has led, founded, run, and worked in organizations in 14 different industries; served in various organizations including corporate, small business, start-up, and non-profit; and has held leadership roles such as President, Chairman, board member, founder, consultant, coach, and trustee. Prior to his role at Bridge Builders

Collaborative, he served as President of Ideas to Go, an innovation-consulting firm helping Fortune 500 companies on the front end of their innovation cycle. He has also had experience on Wall Street, in corporate marketing, and founding his own companies.

Charlie maintains a <u>Medium blog</u>, and as a global expert in the field Bridge Builders invests in, is a frequent speaker at conferences or on podcasts.

# Mina Lee

<u>Mina Lee</u> is a strategist, facilitator, and coach operating in the U.S. and China. Her work on the consciousness movement focuses on bridging China and the West as well as strengthening leaders and organizations within the ecosystem. Mina hosts leadership gatherings, consults with organizations, and performs ecosystem mapping. She partners with and supports wellbeing and technology companies, retreat centers, education platforms, and funds. Mina has spoken at and worked with companies at consciousness conferences such as <u>Consciousness Hacking</u> and <u>Global Purpose Movement</u>.

One of her big projects was a <u>mapping study</u> on the philanthropic contributions to consciousness, which was sponsored by <u>Joe Hudson</u> from the DBJ Foundation. The project was conducted in 2017 and 2018. From an original shortlist of 200, Mina was able to interview 45 people from all over the world about their contribution to consciousness projects. Her interviews focused on personal journeys, projects, and the ecosystem as a whole. Her seven key takeaways encompassed challenges, key questions in the field, next steps, and more.

## Aneel Chima

<u>Aneel Chima</u> is the Associate Director of the Division of Health and Human Performance and the Head of Wellness Education and the Flourishing Research Initiative (FRI) at Stanford University. His teaching and research aim to answer the questions, "What does it mean to flourish as human beings in an age of hyper-complexity?" and "What is the future of human flourishing as cultural and life rhythms increasingly accelerate?"

Aneel is also the co-founder and managing partner, along with Julie Forbes, of <u>AT THE CORE</u>, a consulting boutique specializing in facilitating transformative change through enhancing the emotional, social, and neurophysiological drivers of team and leadership thriving. They consult with teams, leaders, and organizations to optimize performance, develop talent, shape strategy, and more.

In addition to his professional experiences, Aneel has given talks at the University of Virginia Contemplative Sciences Center and at the California Institute of Integral Studies, along with Yingzhao Liu and Mikey Siegel. He is also leading the <u>"Living a Flourishing Life" workshop</u> along with Yingzhao Liu and was part of the "Exploring Purpose: A Panel on Purpose, Meaning, and Work" for the General Assembly. Additionally, he was featured on the <u>Meditate This!</u> podcast, providing "A Master Class in Human Flourishing".

Previously, Aneel was a professor at Palo Alto University, Associate Department Chair of Clinical Psychology at Sofia University USA, and Partner/Executive Development Consultant at Maximize Your Talent. He studied Consciousness Studies at the University of California, Santa Cruz and Clinical Psychology at the Institute of Transpersonal Psychology.

## **Gary Schwartz**

<u>Gary Schwartz</u> is a Professor of Psychology, Medicine, Neurology, Psychiatry, and Surgery at the University of Arizona, where he also acts as Director of the <u>Laboratory for Advances in</u> <u>Consciousness and Health (LACH)</u>. His research interests encompass "the overlapping areas of energy psychology and spiritual psychology for the purpose of increasing health and wellness and advancing the evolution of post-materialist psychology and science." He specifically focuses on the existence of the human soul and consciousness after death, the development of self-science methods for documenting complex synchronistic events in daily life, and mediums and energy healing.

LACH conducts research testing the hypothesis that a person's consciousness, personality, or identity survives that person's physical death. The laboratory supports the SOPHIA Research Program, which "investigates claims of communication processes involving various spiritual levels, from deceased individuals, through guides and angels, to purported communication with a higher power or divinity", and "its focus is on healing and life-enhancement."

Schwartz received almost \$2 million from the <u>National Center on Complementary and</u> <u>Integrative Health</u> of the National Institutes of Health for the creation of the Center for Frontier Medicine in Biofield Science at the University of Arizona. Operating from 2003-2007, this center conducted a series of experiments on the effects of Reiki, Johrei, and other energy healing techniques; and the findings were published in The Energy Healing Experiments: Science Reveals Our Natural Power to Heal.

Schwartz also founded the <u>Academy for Advances in Postmaterial Sciences</u> – a non-profit organization promoting open-minded, rigorous and evidence-based enquiry into postmaterialist consciousness research – and was the founding president of the Forever Family Foundation – a non-profit organization furthering the understanding of afterlife science while providing support and healing for people in grief.

In addition to more than 400 research articles, Schwartz has written several books, including The Afterlife Experiments: Breakthrough Scientific Evidence of Life after Death (2002) and The Sacred Promise: How Science is Discovering Spirit's Collaboration with Us in Our Daily Lives (2011). He received his PhD from Harvard University and was a professor of psychiatry and psychology at Yale University, where he was also the Director of the Yale Psychophysiology Center and Co-Director of the Yale Behavioral Medicine Clinic.

## **Paul Tudor Jones**

<u>Paul Tudor Jones</u> is a hedge fund manager, conservationist, and philanthropist. He established the Robin Hood Foundation in 1988 with the goal of alleviating problems caused by poverty in

New York City. In 2012, Paul and his wife, Sonia, gave \$12 million to the University of Virginia to establish the Contemplative Sciences Center. He believes that the pursuit of a higher purpose will lead to both personal growth and a more peaceful and just society overall.

## **David Germano**

David Germano runs the Contemplative Sciences Center at the University of Virginia (UVA) as well as the Student Flourishing Initiative, a partnership between UVA, the University of Wisconsin, and Pennsylvania State University. He has taught and researched Tibetan and Buddhist Studies at UVA since 1992. Germano has published numerous scientific articles and has been PI for fellowships, grants, and gifts from the Department of Education, National Endowment for the Humanities, US State Department, Luce Foundation, and Mellon Foundation, among others. He received a BA from the University of Notre Dame and a PhD from the University of Wisconsin-Madison, where he conducted research on Buddhist Studies and Tibetan Studies.

## **Richard Davidson**

<u>Richard Davidson</u> is a Professor of Psychology and Psychiatry at the University of Wisconsin-Madison, where he is also the Founder and Director of the Center for Healthy Minds. He also founded Healthy Minds Innovations, Inc., an external, affiliated nonprofit dedicated to supporting the mission of the Center for Healthy Minds. His research focuses on the neural bases of emotion and emotional style as well as methods to promote human flourishing, including meditation and related contemplative practices. Some of his research has also studied emotional disorders and expert meditation practitioners. Davidson has published numerous scientific papers, is the co-author of two books - *Altered Traits: Science Reveals How Meditation Changes Your Mind, Brain, and Body* (2017) and *The Emotional Life of Your Brain* (2012) - and has been featured in Time, NPR, and Harvard Business Review, among many other news outlets. He has received several awards, including the National Institute of Mental Health Research Scientists and the Distinguished Investigator Award from NARSAD, among several others. Davidson received his BS in Psychology from New York University and his Ph.D. in Psychology, Psychopathology, Psychophysiology from Harvard University.

# Anil Seth

<u>Anil Seth</u> is deeply involved in the consciousness world. He's a Professor of Cognitive and Computational Neuroscience at the University of Sussex; Co-Director of the Sackler Centre for Consciousness Science; Co-Director of the CIFAR Azrieli program on Brain, Mind, and Consciousness; Co-Director of the Leverhulme Doctoral Programme: From Sensation & Perception to Awareness; Editor-in-Chief of Neuroscience of Consciousness; and an Engagement Fellow of the Wellcome Trust. His research focuses on understanding the biological basis of the conscious experience by bringing together neuroscience, mathematics, computer science, psychology, philosophy, and psychiatry. Anil gave a <u>TED talk</u> in 2017, has been featured on the *Making Sense* podcast, and hosts a blog. He has also collaborated on many projects and has given several academic and public talks.

#### Antonio Damasio

<u>Antonio Damasio</u> is a Professor of Psychology, Philosophy, and Neurology at the University of Southern California, where he is also the David Dornsife Chair in Neuroscience. Additionally, he is an adjunct professor at the Salk Institute for Biological Studies and heads the Brain and Creativity Institute, which aims to "gather new knowledge about the human emotions, decisionmaking, memory, and communication, from a neurological perspective, and to apply this knowledge to the solution of problems in the biomedical and sociocultural arenas."

Damasio formulated the somatic marker hypothesis, which attempts to explain how the biological underpinnings of emotions are involved in positive, negative, and non-conscious decision-making. His research has shown that how the neural basis for feelings and emotions plays a central role in social cognition and decision making, and it has also influenced current understanding of neural systems, which underlie memory, language, and consciousness. As a clinician, he has studied and treated movement disorders and disorders of behavior and cognition. He is a member of the Institute of Medicine of the National Academy of Sciences and a Fellow of the American Academy of Arts and Sciences, the Bavarian Academy of Sciences, and the European Academy of Sciences and Arts.

In 2014, the Archives of Scientific Psychology named Damasio one of the 100 most eminent psychologists of the modern era, and the June-July issue of Sciences Humaines included him in a list of 50 key thinkers in the human sciences of the past two centuries. Damasio has also won several other awards, including the Pessoa Prize (1992) for a Portuguese person distinguishing themselves as a figure in scientific, artistic, or literary life; the Golden Brain Award (1995), an international neuroscience award from the Minerva Foundation; the Prince of Asturias Prize (2005) for notable achievements in the sciences; the Honda Prize (2010), awarded by the Honda Foundation to an individual who contributes new ideas leading the next generation in the field of ecotechnology; the Grawemeyer Award (2014), one of five awards given annually by the University of Louisville for individuals in education improving world order, music composition, religion, and psychology; and the Paul D. MacLean Award (2019) for outstanding neuroscience research in psychosomatic medicine. He also received the Beaumont Award in Medicine from the American Medical Association for young physicians who distinguish themselves in medical science, has received honorary degrees from several universities, and, as of 2017, serves on the Council of State of Portugal.

Damasio has given a <u>TED Talk</u> on "The quest to understand consciousness" and has been featured in Scientific American and several blogs. He has also authored numerous scientific articles and written multiple books, including The Strange Order of Things: Life, Feeling, and the Making of Cultures (2018), Self Comes to Mind: Constructing the Conscious Brain (2010), and more. He currently serves on the board of directors of the <u>Berggruen Institute</u>, a think tank developing ideas to shape political and social institutions, and he sits on the jury for the Berggruen Prize for Philosophy. Damasio studied medicine, did his neurological residency, and completed his doctorate at the University of Lisbon Medical School.

#### **Judson Brewer**

<u>Judson Brewer</u> is the Director of Research and Innovation at Brown University's <u>Mindfulness</u> <u>Center</u> and an associate professor of psychiatry at the School of Medicine. His research focuses on the intersection between mindfulness, emotion regulation, and behavior change. His lab links theoretical models to behavioral and neurobiological mechanisms of action using experience sampling, EEG, and fMRI methodologies. They have developed novel mindfulness programs for behavior change, including in-person and app-based treatments for smoking, emotional eating, and anxiety. Jud's work has been featured on his <u>TED talk</u>, podcasts, articles, youtube and <u>other</u> <u>research</u>. In 2017, he wrote a book titled *The Craving Mind: from cigarettes to smartphones to love, why we get hooked and how we can break bad habits*.

## **Michael Pollan**

<u>Michael Pollan</u> has been writing for many years about the places where nature and culture intersect. However, his <u>most recent book</u>, *How to Change Your Mind: What the New Science of Psychedelics Teaches Us About Consciousness, Dying, Addiction, Depression, and Depression,* explores brain science, the history of psychedelics, and human consciousness more generally. He discusses topics such as the "default mode network" (DMN) and his own experience with psychedelics.

## **Tim Chang**

<u>Tim Chang</u> is a venture capitalist with an interest in entrepreneurs who are looking to disrupt the worlds of commerce, health, and wellness by using data and personal storytelling to unleash the power of communities and networks. He is also interested in innovations on new platforms such as messaging, VR/AR, and smart devices. As a venture capitalist, he is currently a Partner at Mayfield Fund and has previously led investments at Norwest Venture Partners and Gabriel Venture Partners. In addition to his business experience, he is also personally a body- and consciousness-hacking enthusiast.

Tim is personally interested in and has "been an active investor in gamification and 'quantified self' startups, which use gaming features and measurement to encourage customer loyalty or healthy living habits. His investments in these areas include: Badgeville, HealthTap, Basis, and Lumos Labs." <u>Lumos Labs</u> created a simple online tool to allow anyone to train core cognitive abilities through the brain training program, Lumosity. Lumos Labs leads the Human Cognition Project, a collaborative effort to accelerate cognitive research. Through this project, Lumosity conducts cognitive training research and facilitates the research of independent scientists from over 40 universities.

Tim has been named twice on the Forbes Midas list of Top Tech Investors and received the Gamification Summit award for Special Achievement. Tim received his master's and bachelor's degrees in Electrical Engineering/System Engineering from the University of Michigan. Additionally, he graduated with an MBA with honors as an Arjay Miller Scholar from the Stanford Graduate School of Business.

## Note: all profiles that follow are listed in alphabetical order by last name

#### Patricia Albere

<u>Patricia Albere</u> is a contemporary spiritual teacher, author, and the founder of the Evolutionary Collective. She has worked to help thousands of people transform their lives and their consciousness. In 1971, Patricia was an original member of the est (Erhard Seminar Training) organization, which is currently known as Landmark Education. In 2007 she founded the Evolutionary Collective, a global organization providing opportunities for people to come together inside shared unity. She has written two books: *Evolutionary Relationships: Unleashing the Power of Mutual Awakening* and *Mutual Awakening: Opening Into a New Paradigm of Relatedness*.

#### **Thomas Bjorkman**

<u>Thomas Bjorkman</u> is a Swedish entrepreneur-turned-philanthropist who founded <u>The Ekskäret</u> <u>Foundation</u> in 2008. As an entrepreneur, Bjorkman started and led several companies in investment banking and property development, including Investment Banking Partners AB and EFG Investment Bank.

Bjorkman describes a perspective shift that led to his work now as an applied philosopher and social entrepreneur after he sold his banking business. He writes, "the main change was becoming more acutely conscious of what my own personal drivers are, and more conscious of the motivations and passions that I wanted to define the second half of my life. I am still animated by the entrepreneurial spirit but feel drawn to understanding the relationship between our inner worlds and the major social and ecological challenges of our time."

Bjorkman supports a number of other initiatives, including 29.org, open-source tech for personal growth, K9, conscious co-living and co-working properties, The Perspectiva Institute in London, and Rebel Wisdom, a media channel.

#### **Nichol Bradford**

<u>Nichol Bradford</u> is the CEO & Founder of the Willow Group and the Executive Director and cofounder of the Transformative Technology Lab, Conference, and TT200 List. She speaks regularly on transformation, exponential technology, and culture at conferences like Singularity University's Global Summit, Exponential Medicine, Katapult Future Fest, Wisdom 2.0, and more.

<u>The Willow Group</u> invests in businesses and commercializes technology products that significantly impact mental and emotional well-being, thus those companies that are aligned with the group's goal of bringing fundamental well-being to everyone. Willow also provides the Finders Course, a meditation and mind-training protocol involving weekly video modules, meditation techniques, and weekly group sessions.

Nichol is also a fellow of the British American Project, is a former team member of the Council on Foreign Relations, serves as a leader of Conscious Capital, and served on the board of the Brandon Marshall Foundation for Mental Health. The mission of the Brandon Marshall Foundation, which leads Project 375, is to unlock human potential through conversation, education, and inspiration.

Nichol has written several articles and given many talks on brain hacking and transformative tech. Nichol graduated from Singularity University GSP15, received her MBA in Strategy from Wharton School of Business, and received her BBA in Marketing from the University of Houston.

# **Owsley Brown III**

<u>Owsley Brown III</u> is a documentary filmmaker and social entrepreneur focusing on cultural, spiritual, and civic life; he made a documentary, "Night Waltz" on Paul Bowles, who was a composer, writer, and translator. He founded an event series "Festival of Faiths" in Louisville, is a founding board member of the Kentucky School of Art, and advises Mayor Greg Fischer on his compassion initiatives. Additionally, he serves on the advisory board of the Contemplative Sciences Center at the University of Virginia, from which he graduated in 1993 with a Bachelor of Arts in Cultural Anthropology.

# **Chip Conley**

<u>Chip Conley</u> founded Joe de Vivre Hospitality, a company overseeing the boutique hotel chain Joie de Vivre Hotels as well as a collection of restaurants, spas, and affiliate hotels, which he ran until 2010. In 2018 he started the "Modern Elder Academy," a mindfulness oriented week-long resort and retreat center in Baja for people over the age of 50. He has written four books, including one titled *Emotional Equations: Simple Truths for Creating Happiness and Success*, and he's on the board of the Esalen Institute, Glide Memorial Church, and Burning Man.

## Joe Dispenza

Joe Dispenza is a lecturer, researcher, consultant, author and educator who focuses on teaching people how they can rewire their brains and recondition their bodies to make enduring changes. Specifically, he is interested in exploring the intersection of neuroscience, epigenetics, and quantum physics to understand spontaneous remissions and the evolution of one's consciousness. He has researched the effects of meditation, including epigenetic testing; brain mapping with EEGs; and individual energy field testing with a gas discharge visualization (GDV) machine.

As an educator, Dispenza provides <u>online courses</u> and monthly live 20- to 30-minute lectures. He also leads three-day, five-day, and seven-day workshops and retreats in the U.S. and abroad. For example, in December 2019, he led a week-long Making Your Mind Matter Retreat in Sugar Beach, Costa Rica. He is also a faculty member at Quantum University, the Omega Institute for Holistic Studies, and Kripalu Center for Yoga and Health. He also serves on the research committee at Life University and is specifically a <u>Founding Fellow</u> of the University's Center for Compassion, Integrity, and Secular Ethics.

As a coach and consultant, he works with corporate clients interested in using neuroscientific principles to boost employees' creativity, innovation, and productivity. NeuroChangeSolutions is a team of certified consultants trained in Dispenza's work who provide coaching to individuals, teams, and organizations around the world. These consultants work with corporations, organizations, businesses, schools, hospitals, nonprofits, and government agencies. They follow the Change Your Mind...Create New Results program, which involves group activities, videos, skills practice, and direct application.

He has written four books, including Becoming Supernatural: How Common People Are Doing the Uncommon (2017); You Are the Placebo: Making Your Mind Matter (2014); Breaking the Habit of Being Yourself: How to Lose Your Mind and Create a New One (2012); and Evolve Your Brain: The Science of Changing Your Mind (2007). Additionally, he maintains an online blog discussing topics that relate to his interests in brain health and consciousness more briefly.

Dispenza also created the <u>Give to Give Foundation</u>, an independently run, non-profit organization that provides scholarships to those who want to experience Dispenza's work but do not have the means to do so. Dispenza received a B.S. from Evergreen State College and his Doctor of Chiropractic degree from Life University, where he graduated with honors. He received postgraduate training in neurology, neuroscience, brain function and chemistry, cellular biology, memory formation, and aging and longevity.

## **Stuart Hameroff**

<u>Stuart Hameroff</u> is a Professor of Anesthesiology and Psychology at the University of Arizona, and he serves as the Director of the Center for Consciousness Studies. His research focuses on the brain mechanisms of consciousness, memory, anesthetic action, quantum processing in microtubules, and clinical applications – transcranial ultrasound (TUS) for various brain disorders. He and Sir Roger Penrose first developed the quantum theory of consciousness (orchestrated objective reduction or 'Orch OR') based on microtubule quantum computing, which has been very controversial and widely criticized, though some recent evidence has been in favor of this theory. Stuart believes that there are "plausible scientific explanations for spirituality – inter-connectedness through entanglement, accessible Planck scale wisdom, and potential afterlife and reincarnation."

In 1994, Stuart, along with Al Kaszniak, Alwyn Scott, and David Chalmers, started the "Toward a Science of Consciousness" conference based in Tucson and now largely associated with the University of Arizona Center for Consciousness Studies, which he co-founded in 1998. Stuart has also collaborated with Jack Tuszynski from the University of Alberta and Travis Craddock from Nova Southeastern. In 2011, Stuart received the <u>Rustum Roy award</u> from the Chopra Foundation for his devotion to and passion for making discoveries in his field and his commitment to humanity.

Stuart has written or edited several books, including Consciousness: Integrating Eastern and Western Perspectives, Toward a Science of Consciousness, and more. He has also contributed to over a hundred scientific articles and book chapters, has lectured around the world, and appeared

in the film 'WhattheBleep?' as well as several TV shows about consciousness. He received his bachelor's degrees in Chemistry, Physics, and Mathematics from the University of Pittsburgh and his M.D. from Hahnemann Medical College.

## **Rick Hanson**

<u>Rick Hanson</u> is a psychologist, speaker, and writer who wrote the NYT best-selling book *Hardwiring Happiness: The New Brain Science of Contentment, Calm, and Confidence*. Over his career he has written and taught about the inner skills of personal well-being, psychological growth, and contemplative practice. He and Rick Mendius founded the Wellspring Institute for Neuroscience and Contemplative Wisdom, a nonprofit aiming to offer skillful means for changing the brain. Hanson hosts "The Being Well Podcast", writes a newsletter, maintains a blog, and provides online courses on well-being.

## Khaliya Aga Khan

Khaliya Aga Khan, also known as Princess Khaliya or Kristin J. White, is an advocate for mental health, currently working on transforming society's understanding of mental health issues and pushing for faster innovation in the field through her foundation, Falkora. The foundation, co-founded by Khaliya and her partner, Thomas Ermacora, vets and supports promising ideas and emerging talent that focus on technology solutions for brain health and mental well-being. It aims to provide small grant fellowships to support innovative thinkers in technology integration, innovation research, and program design and implementation. For example, Max Lugavere was provided a grant to create BREAD HEAD, a documentary studying the relationship between brain diseases and the high carb Western diet.

Khaliya serves on the World Economic Forum's Futures Council on the Future of Health and Healthcare and was on the Obama White House-sponsored 2016 United State of Women Summit. She is also on the leadership council for the 2017 Solve Global Challenge on Brain Health for the Massachusetts Institute of Technology and is the permanent curator-in-residence on brain health and neurotech for The Near Future Summit. She has received multiple awards, including the Middelthon-Candler Peace Prize in 2016 and the Clare Boothe Luce Award for International Service in 2017.

Khaliya sits on the advisory committee for the world's leading accelerator for neuroscience apps, <u>NeuroLaunch</u> and is on the advisory board of Nexus Youth Summit, which is a global initiative that works to pair young social entrepreneurs with communities and capital needed to scale their projects. She is also on the founding board of Venture for America, a nonprofit that pairs recent graduates with startups in economically depressed areas, and she is the director of partnerships for Guardian Circle, a personal security app.

Khaliya has given several talks, such as her Keynote presentation at the 1st International Forum on Women's Brains and Mental Health, and she has written op-ed articles that have appeared in The New York Times and Wired UK Magazine. She graduated with honors from New York University, where she studied International Politics, European Studies, and Computer Science, and she received a Master of Public Health from Columbia University's Mailman School of Public Health, where she focused on urbanism and community health.

## Jack Kornfield

Jack Kornfield is an American author, meditation teacher, and trained Buddhist monk. He has taught meditation worldwide since 1974. He is also a teacher in the vipassana movement in American Theravada Buddhism and was one of the key people to introduce Buddhist mindfulness practices to the West. In 1975, alongside Sharon Salzberg and Joseph Goldstein, he co-founded the Insight Meditation Society, a non-profit organization for the study of Buddhism in Massachusetts. Early in 1976, the Society opened its first retreat centers and has since offered Buddhist meditation retreats at this original location as well as the Forest Refuge. The Society created a correspondence course, which evolved into Insight Meditation: An In-Depth Correspondence Course, with audio and written work.

In 1987, the Kornfield, Salzberg, and Goldstein also opened the <u>Spirit Rock Meditation Center</u> in California. As another Buddhist meditation center, it is estimated to be visited by an estimated 40,000 people per year. The San Francisco Chronicle has called it one of "the Bay Area's best-known centers for Buddhist meditation." Kornfield himself has organized several teacher trainings and led international gatherings of Buddhist teachers including the Dalai Lama. He has also worked as a peacemaker and activist. He has written several books and holds frequent events, typically at his retreat centers. Additionally, he hosts the <u>Heart Wisdom Podcast</u> on the Be Here Now Network, a Network of Mindfulness & Spirituality Podcasts.

## Joseph LeDoux

Joseph LeDoux is the Henry and Lucy Moses Professor of Science at New York University (NYU) in the <u>Center for Neural Science</u>, and he directs the Emotional Brain Institute (EBI) of NYU and the Nathan Kline Institute. His research is focused on understanding how the brain learns and stores information about danger. His lab has "mapped pathways through which sensory stimuli enter and flow through the brain during learning" using Pavlovian threat (fear) conditioning in rats. Some of the key questions the LeDoux lab is continuing to study are: to what extent can threat memories be changed through experience? And what are the mechanisms through which conscious emotional feelings, as opposed to behavioral or autonomic responses, come about? The role of fear in humans, the subjective feeling experienced when one is in danger, is key to understanding the answers to these questions.

Outside of the LeDoux lab, <u>The Emotional Brain Institute of NYU</u> is working "to understand emotions and their impact on mind and behavior, to use emotion to bridge between scientific and other academic disciplines, and to enhance public understanding of emotions and the brain", and it is a joint initiative between NYU and New York State. EBI members come from NYU, NYU Medical Center, and the Nathan Kline Institute for Psychiatric Research (NKI). The NKI investigates the causes, treatment, prevention, and rehabilitation of severe and persistent mental illnesses. Research done at NKI covers the areas of schizophrenia and major mood disorders, dementia, therapeutic drugs, and the application of technology to mental health services. LeDoux has published four books, including The Emotional Brain (1998), Synaptic Self: How Our Brains Become Who We Are (2003), Anxious: Using the Brain to Understand and Treat Fear and Anxiety (2015), and The Deep History of Ourselves: The Four-Billion-Year Story of How We Got Conscious Brains (2019).

He has received <u>several awards</u>, including the Karl Spencer Lashley Award from the American Philosophical Society, the Fyssen International Prize in Cognitive Science, Jean Louis Signoret Prize of the IPSEN Foundation, the Santiago Grisolia Prize, the American Psychological Association Distinguished Scientific Contributions Award, the American Psychological Association Donald O. Hebb Award, and the William James Award from the Association for Psychological Science. LeDoux is also a Fellow of the American Academy of Arts and Sciences, the New York Academy of Sciences, and the American Association for the Advancement of Science. He received his B.S. and M.S. in Marketing from Louisiana State University before going on to earn his PhD in Psychobiology from SUNY Stony Brook.

## **Michael McCullough**

<u>Michael McCullough</u> is currently an Entrepreneur in Residence (EIR) at Greylock Partners and is the founder of BrainMind. BrainMind and the Stanford Department of Psychiatry and Behavioral Sciences have co-hosted summits at Stanford since 2016 and have also co-hosted one at MIT. Notably, Reid Hoffman sits on the board of BrainMind. McCullough has his own personal history of brain trauma as a child. He also started the non-profit QuestBridge, works as an emergency room doctor at UCSF, and is the Dalai Lama's doctor when the Dalai Lama is on the West Coast.

## **Bill Melton**

<u>Bill Melton</u> is the founder and CEO of VeriFone and a successful tech investor in the early days of the internet. He and his wife, Patricia Smith, co-founded The Melton Foundation in 1991, which promotes and enables global citizenship as a way for individuals and organizations to work together across boundaries of place and identity to address global challenges. The Foundation has a fellowship program and fellowship network focused on global citizenship to both identify and support fellows.

## **Martin Monti**

<u>Martin Monti</u> is an Associate Professor in the Department of Psychology at the University of California, Los Angeles. His research focuses on 1) the interplay between language and thought; and 2) consciousness and cognition in coma, vegetative, and minimally conscious state. In the latter research, he explores brain processing and consciousness in patients to try to ameliorate diagnostic procedures and develop brain-computer interfaces (BCIs). The <u>lab</u> collaborates with several other researchers around the world and produces several papers each year.

## Jim Pitofsky

Jim Pitofsky is the Managing Director of Strategic Alliances at the John Templeton Foundation. Jim leads the Foundation's strategies for partnering with entrepreneurial philanthropic and business leaders around the world. Just prior, Jim was Chief Strategy Officer at the Arizona Community Foundation where he oversaw strategic planning and execution, public policy, education, and strategic alliances, as well as ACF's Center for Business Philanthropy. Prior to that, he served as ACF's Director of Education where he led education grantmaking and advised high net-worth donors on their education grantmaking. Jim also served as the V.P. and Acting President of the Echoing Green Foundation, supporting hundreds of social entrepreneurs around the world; the Deputy Director of the National Youth Leadership Council, one of the leading service-learning organizations in the U.S. and the world; and the Executive Director for Hands on Bay Area, the leading manager of corporate volunteerism in the Bay Area. Additionally, Jim founded and directed an organization that worked internationally to create school/community and business/education partnerships and was adopted by the National Association of Partners in Education. During that time, he also served as the elected President of the National and Community Service Coalition and led their federal public policy efforts.

Throughout his career, Jim has worked closely with CEOs, foundation executives, philanthropists, celebrities, policymakers, and nonprofit leaders to advance philanthropy, education reform, leadership development, social entrepreneurship, community service, and racial and economic equity. He has been a speaker at the World Economic Forum (Davos), FORTUNE Magazine CEO Forum, the Milken Institute and hundreds of other convenings of corporate, philanthropic, and nonprofit leaders. He has also organized meetings around the world in places such as the White House and the Vatican and facilitated at convenings such as TED. Jim earned his B.A. from Stanford University and his J.D. from Georgetown University Law Center where he was a Public Interest Law Scholar.

## Ian Robertson

<u>Ian Robertson</u> is a professor of psychology at Trinity College, Dublin; the founding Director of Trinity College Institute of Neuroscience; the Director of the Neuroenhancement for Independent Lives (NEIL) program; the Co-Director of the <u>Global Brain Health Institute</u>; and the T. Boone Pickens Distinguished Scientist at the <u>Center for BrainHealth</u> at the University of Texas at Dallas.

The <u>Trinity College Institute of Neuroscience</u> is a multi-disciplinary research facility providing opportunities for social scientists, psychologists, geneticists, biochemists, engineers, physicians, psychiatrists, physiologists, and physicists to come together to study brain health, aging, and Alzheimer's. The NEIL program was awarded €2.5 million from the Atlantic Philanthropies to develop a new model for the early detection and prevention of dementia that could be replicated internationally. The Global Brain Health Institute is "dedicated to protecting the world's aging populations from threats to brain health" and "works to reduce the scale and impact of dementia" through their Atlantic Fellows program, improving preventions and interventions, and sharing knowledge. And the Center for BrainHealth is a research institute composed of independent labs responsible for more than 60 research projects investigating brain health, injury and disease.

Robertson's personal research interests include measuring how humans pay (or fail to pay) attention, which he has expanded to develop new therapeutic methods resulting in improved cognitive function in aging and other populations. Specifically, he and Tom Manly developed <u>Goal Management Training (GMT)</u>, a practical intervention addressing deficits such as executive dysfunction, concentration, impulse control, planning, and use of feedback through education, task practice, narrative structure, and mindfulness practice. Brian Levine and Tom Manly have continued to expand GMT to its current format.

Robertson's work has also resulted in a new theory about the effect of socioeconomic factors on the biology of the brain and risk of dementia. His research has been published in more than 300 papers in leading journals. In addition to his research publications, Robertson has also published several <u>books</u>, including The Stress Test: How Pressure Can Make You Stronger and Sharper, Mind Sculpture, The Mind's Eye, and The Winner Effect. He has also authored or edited several scientific books, including the primary international textbook on cognitive rehabilitation: Cognitive Neurorehabilitation.

In 2014, Robertson was named as a Fellow of the American Association for Psychological Science, a status awarded to members "who have made sustained outstanding contributions to the science of psychology in the areas of research, teaching, service and/or application." He graduated from Glasgow University and then obtained his Master's degree in Clinical Psychology and Doctoral degree in Neuropsychology from the University of London.

## **Daniel Schmachtenberger**

Daniel Schmachtenberger co-founded the nootropics startup Neurohacker Collective, which launched in 2015, where he also serves as Director of Research and Development. He is particularly focused on personalized medicine, adequate approaches to complex illness, and deepening our knowledge of how the human regulatory systems function, how they break down, and how they can be supported to function with greater resilience. He conducts many podcasts at Collective Insights and has a blog on redesigning civilization at civilizationemerging.com.

# Dan Siegel

Dan Siegel is a Clinical Professor of Psychiatry at the UCLA School of Medicine, where he is also the founding Co-Director of the <u>Mindful Awareness Research Center (MARC)</u> at UCLA. The MARC aims to foster mindful awareness across the lifespan through education and research to promote well-being and a more compassionate society. The Center offers classes and workshops teaching mindfulness skills, fosters and publicizes research to support the scientific benefits of mindful awareness, brings mindfulness to professions through UCLA's medical education program, and offers mindfulness tools and classes to support mental health professionals.

Dan is also the Founder and Executive Director of the <u>Mindsight Institute</u>, an educational organization offering online learning and in-person workshops focusing on the development of mindsight in individuals, families, and communities. Additionally, Dan developed the Wheel of Awareness, a tool to help people develop well-being in their inner and interpersonal lives and

expand their container of consciousness. The Wheel of Awareness places attention at the center (the hub) and the various experiences requiring attention, including the five senses, bodily sensations, mental activities, and interconnection at the rim.

<u>The Wheel of Awareness</u> is the subject of one of his recent books, *Aware: The Science and Practice of Presence.* Dan has also written several other books, including *Brainstorm: The Power and Purpose of the Teenage Brain* and *Mindsight: The New Science of Personal Transformation*, among others. He also keeps a <u>blog</u> about his experiences and learnings in this field and has written numerous scientific articles on the topic.

Dan has been featured in UC Berkeley's Greater Good Science Center Magazine, on the <u>Like</u> <u>Mind, Like Body podcast</u>, and a Quartz article for his research on the mind and the development of the Wheel of Awareness. Dan is a Distinguished Fellow of the American Psychiatric Association, Medical Director of the <u>LifeSpan Learning Institute</u>, advisory board member of the Blue School, and a member of the Board of Trustees at the Garrison Institute. He received his medical degree from Harvard Medical School and completed his postgraduate medical education at UCLA.

## **Mikey Siegel**

<u>Mikey Siegel</u> is currently focused on the intersection of technology and consciousness and the creation of tools that facilitate people's own path toward higher consciousness, self-realization, awakening, and other definitions of transcendence. He believes that this technology can help people feel better and reduce stress as well as be more peaceful, more accepting, and happier.

In 2014, Mikey founded <u>Consciousness Hacking</u>, a global community exploring the ways technology can support psychological, emotional, and spiritual well-being. Prior to that, in 2013, he founded <u>BioFluent Technologies</u>, a company providing tools for integrating body, mind, and spirit. For example, HearNow converts the natural bio-signals of one's brain and heart into immersive soundscapes. In 2015, Mikey co-founded the <u>Transformative Technology Conference</u>, with which he is still involved.

Mikey is also currently a member of the board of the <u>California Institute of Integral Studies</u>, which is a university providing 25 degree programs combining academic rigor, consciousness, and spirituality to foster personal and professional growth. He is also an advisor at the Innovation Lab at the Institute of Noetic Sciences, an advisor at Contemplative Life, and an advisor at neuromore. He previously was the Co-Founder, Co-Director, and Senior Research Scientist at the Transformative Technology Lab at Sofia University USA and was the Director of Consciousness Engineering at the Center for the Study of Non-Symbolic Consciousness.

Mikey is also a lecturer at Stanford University, creating new curriculum at the intersection of engineering, meditation, and contemplative science as a part of the WellnessEd division. Mikey received his bachelor's degree in Computer Engineering from the University of California, Santa Cruz and his master's degree in Robotics from the Massachusetts Institute of Technology.

#### Jamie Wheal

Jamie Wheal is the co-founder, along with Steven Kotler, of the <u>Flow Genome Project</u>, an international organization focused on the research and training of ultimate human performance. Together, they also co-authored *Stealing Fire: How Silicon Valley, Navy SEALs, and Maverick Scientists are Revolutionizing the Way We Live and Work.* 

Jamie and Steven founded the Flow Genome Project in 2010 to understand the neuropsychology of optimal performance, provide those findings to the world, and thus "help individuals and organizations experience more flow and the significant boost in performance it provides." The organization both conducts research with universities and companies to advance flow science and works with individuals and organizations to teach them how to harness flow. The Flow Genome Project offers corporate training & consulting, digital programs, live events, and performance coaching.

Jamie is an expert on peak performance and leadership, specializing in the neuroscience and application of Flow states. He has advised everyone from the U.S. Naval War College and Special Operations Command, the athletes of Red Bull, and the owners of NFL, NBA, MLB, and Premier League teams to the executives of Google, Goldman Sachs, Deloitte, Cisco, and Young Presidents' Organization. His work and ideas have been covered in The New York Times, Financial Times, Wired, Entrepreneur, Harvard Business Review, Forbes, INC, and TEDx. He has spoken at Stanford, MIT, the Harvard Club, the Bohemian Club, the United Nations, Singularity University, and Summit Series.

He received his bachelor's degrees in History and Literature from St. Mary's College of Maryland and his master's degree in American Studies/Environmental History from the University of Colorado Boulder.