



Science Summit at the
78th United Nations
General Assembly
Conference Report
September 19, 2023

BRAIN CAPITAL BUILDING @ UNGA78

Brain Deals to Harness AI and Drive
Sustainable Development Goal Implementation by 2030

Hosted at Steelcase Work Life Center, New York





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Introduction

The flagship conference on **Brain Capital Building at the United Nations General Assembly**, which took place on 19 September 2023, was the largest and most significant event organized globally on the emerging concept of brain capital, which puts premium on brain skills and brain health. Focused specifically on how **Brain Deals Can Harness AI and Drive Sustainable Development Goal Implementation by 2030**, the event was part of the UN Science Summit, a major platform for discussion on the scientific input to the achievement of the global objectives. It was organized jointly by the Brain Capital Alliance, Rice University's Baker Institute for Public Policy and HKS, with the support of the Mental Health Services Oversight and Accountability Commission of California as well as Kooth.

The need for **transformational policy approaches** in all areas covered by the concept of brain capital was stressed throughout the day. In the context of the current geo-economic, demographic, or environmental challenges, our societal objectives cannot not be achieved on the basis of business-as-usual in economic, social or health policies. Brain capital provides unique value because of its **integrative potential**, bringing together disparate objectives and initiatives into an integrated platform that inspires change through its emphasis on matters of central importance to individuals, such as their cognitive and emotional potential, and brain health. The importance of advancing rapidly on this trajectory was stressed by Governor Jay Inslee of Washington who opened the conference, focusing on the need to break the opioid cycle and mental health crisis through science.



Brain Capital Strategy: Blueprint for Holistic Transformation

Anchoring of the transformative approach to policy was proposed in the **Brain Capital Industrial and Innovation Strategy**, launched at the Conference: <https://www.bakerinstitute.org/research/7-steps-igniting-brain-capital-industrial-strategy>.

The Strategy aims to usher in **a multitrillion dollar industry**, improving brain and mental health across the life span. Brain capital is the special economic asset that the Strategy is advancing on the basis of the joint work of a transdisciplinary team of economists, investors, ethicists and policy-makers.

Creativity, adaptability and resilience are skills which are essential to the modern economy. Brain capital is as important as the GDP and the underlying infrastructure. At the same time, brain capital is under siege with up to 3 trillion dollars lost through mental health crisis or education disruption. **Our brain is the most important asset of our societies**. In this notion, we move beyond the knowledge economy and enter the brain economy. Given that the brain and mind activities are not coordinated across government, the brain capital approach aims to bring them together. By focusing on the industrial sector, it aims to bring in the private sector and build public-private partnerships.

The Strategy places emphasis on seven key steps, including:

- **Developing and investing in brain capital technologies:** covering approaches across the lifespan, from early childhood neurodevelopment to mental health and neurological treatments.
- **Aligning the built environment:** embedding technology in schools, hospitals, parks, or recreational spaces.
- **Utilizing novel financial incentives and innovations:** harnessing financial innovation, especially public-private partnership.
- **Ensuring workforce preparedness:** focusing on curricula and workforce development agendas.
- **Leveraging a mission-oriented approach for brain capital:** realizing tangible missions to reduce prevalence of dyslexia or depression in specific localities.
- **Coordinating within government:** placing emphasis on the new governance structure that is needed.
- **Articulating supporting policies:** providing implementation tools in a broad range of areas.

The emerging movement to carry on the brain capital agenda is a coalition of the willing. It aims to deal with multiple societal challenges, give answers from science and transform the interaction as well as debate. As an instrument to guide policy actions, the **Brain Capital Dashboard** was launched at the Conference: <https://research.euromed-economists.org/brain-capital-dashboard/>. Its aim is to help develop new models for mental wellbeing and flourishing, considering the brain as an asset which creates wellbeing for the population. The Dashboard is based on the premise of **going beyond wealth creation and towards accumulation of wellbeing at the level of the individual**. Measuring brain capital is important for new thinking about health policy, education, and life-long learning. It is also essential to have an impact on economic policy and derive actions at different levels, from national to local. Three pillars of the definition of brain capital have been integrated into the Dashboard: brain capital drivers, brain health and brain skills. **Dashboard is an open knowledge platform which can be used by everyone**. It will help to demonstrate that every dollar or euro invested in brain capital is an investment in the future.

Directionality and mission-orientation can be supported by the activities of public investment banks, such as the European Investment Bank (EIB), which allows for the faster channeling of funds to the given policy area. This is critical in climate-related emergencies or pandemics an ability to invest at a rapid pace is needed. The advantage is that banks like the **EIB take the risk earlier and stay longer**, paving the way for private financing to follow, also providing expertise to support projects. Public sector banks can tackle problems that private sector cannot tackle, through risk sharing between different public institutions, as it has been done between the European Investment Bank and the European Commission in the area of funding for infectious disease preparedness. Green bonds are another example, pioneered by the EIB in 2007, are today a 3 trillion-euro market. The EIB Institute, as part of its mandate to future-proof bank activities, has proposed to bring brain capital issues into the reflection process inside the organization. One possibility would be to issue dedicated **“brain bonds” to channel investment into the brain capital economy**.



A tangible illustration of how the concept of brain capital can be implemented in practice came with the **launch of the HEKA Fund**, the first venture fund to invest in Brain Capital:

<https://www.linkedin.com/feed/update/urn:li:activity:7109516435097276417/>.

The initiative bridges the gap between scientific discovery and unmet medical needs. It intends to build a portfolio of 25 startups, roughly 75 percent in neurology and psychiatry and 25 percent in nutrition. **The uniqueness of the approach has to do with it being science-based.** Scientific assessment of projects will come through a **partnership with the specialized mental health organization, Fondation FondaMental.** Particular attention will be paid to prevention and treatment. It is a Brain Capital project because it brings resilience to people through solutions that leverage scientific results in the fields of skills development, neurology, nutrition, and psychiatry.

Social production is the glue that hold complex societies together and give them a sense of purpose. In essence, social production makes nations more prosperous and promotes a more inclusive narrative. In this contest, the US Brain Wealth Observatory was launched at the Conference:
<https://fas.org/publication/mental-wealth-observatory/>

The UN work on human development has traditionally focused on the ability of people to live their lives to their full potential. For a long time, the metrics were those associated with objective measures of well-being, like life expectancy at birth, or income. However, it has emerged that there is a devolution of these objective measures of well-being. UNDP has found that **6 out of every 7 people around the world felt insecure about some aspects of their lives.** In a world that is changing very rapidly, not only due to technology but also climate change, geopolitics are in upheaval. Hence it is not enough to look only at objective indicators but understand better the polarized realities around the world.

Regulating influences on the brain is at the center of attention of **neuroscience-inspired law.** The latter approach builds on the proposition that historically, all technological revolutions are innovations that interact with our brains, from the discovery of fire to AI. There is one reason, however, that makes the current period stand out. While it would have been effective for the regulation of technologies to occur through judicial decisions or legislation and administrative rulemaking, this can only happen as long as technologies move at human-scale, allowing for rules of procedures, process and adjudication to take place.

This is no longer the case today. **Modern technical advances operate at what might be termed quantum scale.** Just as quantum systems have discrete jump-like behaviors, technological innovations often feel like they make sudden leaps. They can be surprising, disruptive and incredibly hard to predict. Moreover, advances in technology are largely decentralized. A couple of inventors working in a garage can turn the world upside down. It is the medical researcher in a small lab that can clone a human being. As for the consequences for the fundamental processes of legal regulation, there are conventional possibilities, including administrative review of new technologies, as is performed through the Federal Trade Commission in the case of mergers. Administrative agencies have the power to create advisory committees, where you have experts doing the reviews. Another possibility is to turn to the courts, which have preliminary review power and might be better factfinders in real time.

Given the disruptive nature of the current phase of technological acceleration, none of these approaches might be up to the task. Therefore, a reflection is necessary about the potential for **systemic change in the way the law operates**, given its almost entirely reactive nature at present.

Challenge of a Generation: Youth Mental Capital

Healing the mental health crisis was a prominent focus of the conference. Globally 1 in 7 young people is diagnosed with a mental health issue but many are undiagnosed. As many as 57% of teenage girls in the US feel persistently sad and hopeless. Isolation, school from home in the course of the pandemic created a lot of challenges. **Formative years of adolescence are extremely significant.** As much as 75 percent of mental health problems emerge by the year 25. Often it is mental distress, rather than disorder but has to be answered early. Digital tools accessible on the phone are very important and can offer great relief. Dealing with that level of distress as a young person must be intolerable. The implications are enormous both for the individuals but also for the economy. Governments are acting, stigma is being addressed and promise of technology is significant.

Collaborations between public and private actors are a vital part of this space. **The current system for supporting children and young people is broken.** We have a heavily rationed treatment system which fails to meet the needs the families routinely. The imperative for change has rarely been stronger. Power of the communities has to be unleashed. Working through community organizations is crucial. Addressing behavioral health needs to be done in conjunction with all the other aspects of an individual's life.

Waiting for 8 months for diagnosis and then to have your treatment initiated means a dramatic loss of time. When people go into therapy, their symptoms are often aggravated. Scaling telehealth services to provide faster access is necessary. In the current complex payer systems, people need to navigate through what they qualify for and what they do not qualify for. The youth in particular fails to develop a confidence in the system. **Investment is, therefore, needed to get the youth to engage on the platform of their choice.** They are best placed to choose the modalities. Tools should not be payer-specific but available to all residents. The information could then go to the payer for case management. We tend to think about the system in a microcosmic context – what is covered where. Creativity is needed to work on the back of a model that had long since stopped working. In each case, one needs to keep in mind what is the real saving, the real cost of care.

Much of the challenge today is a legacy problem, whose roots can be found several decades ago, in a particular in the fragmented and inadequately scaled behavioral health system of care. In itself, this is a testimony to the need for cross-generational consensus on the main tenets of public policy, such as mental health. **Innovation must occur across sectors – public and private** and ways have to be found to accelerate the adoption and scale of innovations in treatment and delivery of care to disrupt the disparities and improve outcomes. The hope is to challenge and incentivize the private sector to focus on inventing and innovating for underserved and other deeply impacted communities who are so often overlooked. If one really believes in equity, this is about how we integrate innovations into our safety net.



In the **shift away from illness response to well-being**, more needs to be done to innovate what professions are needed for modern day behavioral care. These should be community mental health workers, or peer support workers. If one does not start finding these new roles for the future system, the risk of ending with the same issues of saturation and inability to provide access is very real. The youth want clinicians to help but also behavioral workforce that speaks their language and looks like them. The first person they want to see are wellness coaches. This requires the development of a near-peer model.

Data is often as fragmented as are mental health services. **Public data reservoirs need to be built to start measuring outcomes.** It is important to have authoritative information but also real stories. This is about cross-sectoral work and bringing workforce to rural community, localizing virtual care, as well as **bringing youth into the design process.** They want to have safe spaces to share their stories and support each other. The youth prefer to work with a coach who can be a trusted partner to guide them through their challenges. The **infrastructure needs to allow kids to navigate the healthcare delivery system.** Addressing digital divide is important as well, through partnerships with community service providers, or libraries, where people can access digital technologies. **Brilliant solutions need to have good user experience.** Children are consumers of digital products and they have high expectations with regard to the digital mental health tools as well. The latter have to be engaging and keep the attention. You have to do this in a responsible way as well.

California's Behavioral Health Transformation

Californian behavioral health system has reached a breaking point, as both the pandemic and the racial reckoning have drawn the necessary attention to the drivers of poor behavioral health policy. "Our safety net has had holes in it for decades and Californians have slipped through it for decades", it was noted.

Transformational agenda becomes a must. Lifting all boats came to be seen as the only way for the policy to deliver, addressing underprioritized areas, suffering from decades of under-attention and inadequately scaled.

California is today investing in key building blocks to build a **system of care and a continuum of care.** Children and Youth Behavioral Health initiative represents 20 workstreams, with a budget of 4.7 billion USD, for children and youth to access care and address their needs. It is a multi-department package of investment that is focused on many aspects of the mental health crisis in California. The aim is to **integrate physical and brain health in a way that has not been done before.**

Social drivers of health care are enormously important: housing and food insecurity, transportation issues.

This means building **an infrastructure of care that has never been built before**. The Behavioral Health Modernization Package makes available new long-term placements in the community, funds housing and substance use disorder services, prioritizes most in need, continues a focus on prevention, separate from early intervention and innovation. County-by-county, an ability to understand outcomes will emerge. While acting within the public safety net system, the government is pushing commercial providers.

Public awareness campaign to address stigma is also part of the approach, as is workforce development, and partnerships with schools to deliver care. California is investing in technology-enabled solutions to **provide services to kids where they are**. In January, it will be launching two applications, coaching support, providing educational services, peer services, moderated and supported by coaching workforces. Investment in digital mental health therapeutics are made, including through virtual reality tools and the use of AI to understand youth that are in need of assistance, so as to elevate for them the crisis helpline.

Importantly, one needs to realize that **there is not a behavioral health and health, there is only one health**. Thinking about integrating services which used to be in different silos is necessary. **Holistic care is foundational for the brain capital approach**. It is all about linking up, synergizing and providing access in a simplified way.

The concept of brain capital brings all the structural factors together, housing and food stability, financial security, and how all this impacts youth mental health. Brain capital has to be part of everyone's agenda to reflect how different factors impact on the brain of a child. It has to be **a multisector process**. Bending the cost curve cannot be about cutting services but getting healthier people. Continuous reiterative conversation is necessary.



All-in-One Services: Overcoming the Perils of Fragmentation

Teachers genuinely care about neuroscience and want it integrated in how schooling and curricula are organized. Today, we are much more student-centered than in the past, which is a great achievement. In healthcare, we have moved from healthcare to health. In education, we have gone from education to learning. **Brain science has worked to bring everything together, from early childhood education to later years.** Behavioral approaches and cognition had been divided for years but we are dealing with the same brain that sustains cognition and can create behavioral reactions, like impulsivity. When it is considered a learning issue, it is a different set of lanes. However, where there is behavioral weakness, we might find cognitive strength, so it is important to see this in an **integrated fashion**. It is important to work around the separation of behavioral and cognitive approaches.

Some of the key considerations have to do with channeling youth voices. Given that youth know what they want, it is essential to bring them into the design process. **Youth want a safe space where they can come together and share their stories.** Allowing them to navigate through the system is, therefore, essential. Addressing the digital divide is very important in this context, so as to reach kids without access to broadband internet through partnerships with providers, schools and libraries.

Creating ecosystem for behavioral support and health means addressing kids where they are, including in the virtual space. For youth, culture is healing. Their identity, their family, their community have to be activated for support in times of fragility. Access to parks and green spaces is also seen as critical by the youth. This has led to the greening of spaces in and around schools. Problem-based learning should be promoted, including by redesigning majors around SDGs and ways of achieving them. **Using brain science is a neutral, non-polarizing way of getting people interested.**

Payers of health services have had no relationship with the schools, even though they help the same schools. Along the same lines, **incentive alignment** needs to be discussed. Programs that bring policy makers, educators, mental health workers and faculty members together are needed to make change personal. This point was stressed by Governor Inslee who called for personal relationships to be developed between researchers and policymakers.

Holistic Approach to Health

Cardiovascular health is foundational for brain health. What is less appreciated is that **brain health is also foundational for cardiovascular health**. If people have mental health problems, they are less likely to refrain from smoking, or take other risks affecting their heart. A lot of other clinicians need to be brought into the conversation, learning what we can do for the brain from what cardiovascular associations have done for the heart. Neuroscience is important to maintaining health in general, through proper nutritional habits or exercising. The important question is how we get people to change behavior. **This is about mastering the neuroscience of persuasion**. New blockbuster drugs for obesity work in the brain but we associate them with other conditions because they have not been thought of as drugs influencing behavior. **A positive vision of brain health is important with regard to creativity, attention, openness, or entrepreneurship**.

Commitments made to prevention are still shallow and concern some aspects of the social ecosystems. Inequity is the root of that. There are areas with laudable attempts to create integrated organizations. However, there is a question of leadership at the systems level, where people make reimbursement decisions and affect incentives. **For prevention to work, we have to be robust about evaluation and this means better designed trials**. A lot of prevention in mental health is tertiary but interventions need to come earlier. AI and genomics will help but a lot of the challenge is about reconnecting communities. When kids had gone through years of disrupted education because of the pandemic, AI is not going to fix that.

The relation between environment and brain, can be called bi-directional since it is not only the impact of environment on the brain that matters, but also the reaction of the brain gaining some skills that can affect or impact our environment. We have ecological intelligence, which is the ability to understand the natural environment, and the impact of human in this environment. When we connect the creativity, infrastructure development with the brain capital, we will be able to overcome the existing challenges and achieve sustainable ecosystem.

One of the pillars of the green capital model is **adaptability** which is the capacity to adjust one's thoughts, behaviors, and strategy in response to the changing circumstances. And this scale is critical in the context of the green brain capital model, as transformation across various level takes place, ranging from ranging from individuals to entire societies, to foster sustainability. There is also an emerging field of research that will explore **the intersection of brain health and**

misinformation. Findings already show that some of the determinant factors that affect the misinformation, susceptibility, and resilience are all related to the brain.

Poor nutrition is the number one driver of poor health outcomes in the United States. One in two Americans have diabetes or prediabetes. Three out of four are overweight or obese. We are among some of the worst countries in that regard, and 90% have suboptimal cardio, metabolic health. Poor diets are actually the leading cause of death, and these effects are even greater in marginalized and underrepresented communities. Cardio metabolic disease is a growing problem as well that in the future will contribute to their cognitive and mental health as well. There has been research associating certain foods with an increased risk of stroke, or pointing to the beneficial effect of dietary flavanols on cognition. Neurologists are very familiar with food serving as a trigger for migraines. Aged cheeses, processed meats, chocolate, or bananas can trigger migraines. Diet has also been found to play a role in neuropathy, neuroimmune disorders, autonomic disorders. There is a whole literature on food and mood or how food is related, and nutrition is related to mental health as well.

The American Heart Association has just launched **a national platform for food as medicine research**, with 50 million dollars in funding from the Rockefeller Foundation. It is worth extending the work done under this program to address the relationship between food and brain health as well. Research questions could consider how best to enable people with cognitive impairment to eat healthy diets that might preserve their cognition for a longer period of time.

Partnerships between academia and business are essential because there are lots and lots of questions that could be neuroscience-informed. Big financial institutions follow the behavioral data in real time emerge, but they do not necessarily have access to the academic questions and hypothesis, testing what that those partnerships can bring together. There is an entirely brand new area where industry and academia need to come together to ask really challenging questions and put the neuroscience to work.

How and Where we Live is Who We Are

Our built environment creates the stage for the lives we live. We are always somewhere. Our brain resides in our body, and our body resides in environments. Somehow, the environment seems to be invisible to us although we live and breathe in it all the time. However, our environments are not neutral. They actively

harm, or they actively help. ZIP code is a predictor of mortality because of access to healthy foods, water, air, light, social connection, healthcare and education.

Building for brain capital must elicit innovation and creativity. It must bring people together in a new way. It must stimulate behavioral change. This is the next generation of design. It aims at creating environments where brains and talents can be at their very best. Integration, multi and interdisciplinary approaches to massive problems will need to bring together scientists, clinicians, community members, citizen scientists, and thinkers. Inclusion is the ability to integrate a variety of viewpoints, lived experiences, and make everyone feel welcome in an environment. Such environments concentrate leverage and amplify investment. They create this power of a place into which investments can be made and leveraged.

We need to think about **innovation as a constellation**, to make sure that the connections are being made so that the opportunity the people, places and programs can spread like a matrix like a web. This is also about an environment of care, the setting in which everyone is supported, irrespective of their needs. When thinking about the environment of care and the philosophy of care started in nursing homes, it amounted to a culture change. It has everything to do with enabling well-being as opposed to focusing heavily on addressing disability and disease. There is a real opportunity to focus on this intentionally, proactively and make buildings help people be healthier. There has been a huge push in the real estate space for healthy certified buildings, and green certified buildings that have healthy elements in them. Therefore, the focus also needs to be on greening buildings for healthier people, taking into account that humans spend 90% of their time indoors.



Significant research has been done on **the cognitive benefits of healthy buildings and neighborhoods**, with results showing significantly improved performance. People in green buildings have 26% better cognitive function assessments while occupants also enjoyed 25% increase in sleep scores. The key reasons behind this difference have to do with better lighting, air and optimal thermal conditions. People who are in a green certified building have 30% fewer sick building syndromes versus those in a conventional brown building. Enriched environments, environments that meet our physical, social, sensory, and cognitive needs can generate new synapses in the brain, a process called neurogenesis.

University City in Philadelphia

This is an area in Philadelphia between the 13th Street Station and about 15th Street, with a number of research institutions and an innovation district called U City Square. It features complex and beautiful buildings where groundbreaking research is being done in gene and cell therapy. It is designed, so that the entire ground floor serves as an open space for the community to come in, grab a cup of coffee, use some free wi-fi, or have a meeting. There are spaces for larger events or one-to-one chats. There are public institutions but also private companies, including a number of pharmaceutical ones. You walk between that building and the other buildings, and there are plazas and places to sit. There is interesting public art to look at. It is porous because it connects to the Penn campus. There is housing there, there are programs like the West Philadelphia Skills initiative, that integrate science into the curriculum of the local school. And... this was a piece of land that was taken during urban redevelopment. It used to be a detriment and a scar on West Philadelphia and was turned into an area of economic opportunity, mobility, and inclusion. It is a constellation of activity.



New team structures are essential, with healthcare professionals speaking to designers and designers speaking to healthcare professionals. The aim is to make space for human scientists, ecologists, everybody who could possibly have something to contribute. Whatever the exact process, the key component is going across disciplines and giving away some of the disciplinary arrogance that we fall all victim to. The end users need to be part of the experience as they are the people who are actually going to live with whatever innovations are collaboratively assembled. It is all about creative ideation and then testing ideas in real world environments, whether on campus, or across the full continuum of where seniors live. So that someday, when we say we'd rather stay at home, we have good reason to want to stay at home because the environment at home and the care provision and the supporting technologies meet our needs. We do not measure our built environments the same way we measure other aspects of our life critical to our health and wellbeing. Not all systems perform evaluations in the first place. Accountability is important, especially when we want the built environments to actively support brain health and brain capital. The latter can bring various strands together, the tendency to improve the health of the occupants, the energy, efficiency and sustainability of our cities, and the creativity and innovation potential of society. The integrative power of the brain capital concept is unprecedented.

Conclusions

The Brain Capital Building at the United Nations General Assembly conference was a day of unprecedented discussions on the centrality of the brain. It brought about an endorsement of the view that the brain capital approach is uniquely relevant in addressing the transformational requirements of today's public policy agenda. The following conclusions could be drawn from the discussion:

1. Global **challenges** such as climate change, rising inequalities, food and energy insecurity, polarization and misinformation **are interconnected**, and are weakening democracies, eroding the social fabric of communities, undermining progress towards SDGs, and posing threats to social and economic stability. **Transformational policies are needed** given the existence of many legacy issues, such as the fragmentation of mental health care in a number of countries.
2. **Systemic problems require systemic solutions.** Building brain capital is the key to acting systemically and unlocking innovative solutions to address these global threats and rebuilding the Mental Wealth of nations. Transformational policies are needed given the existence of many legacy issues, such as the fragmentation of

mental health care in a number of countries. A **life-cycle approach to health** is a must, with strong emphasis on prevention and early intervention.

3. **Public-private partnerships** have an important role to play in investing in science, policy innovation, and social capital infrastructure needed to build and deploy brain capital in ways that deliver inclusive economic prosperity, social wellness, and human flourishing. Given the web of large, complex systems and poly-crises in which we function, **the focus on brain capital can help to bring a unifying policy platform to address all of these issues.**

Creating bipartisan platforms is possible and brain capital is uniquely well suited as a platform of convergence. Argentina is currently working on a mental capital bill, which is focused on investing in brain capital. It enjoys broad support in a deeply divided country. Similarly, the Secretary General of the United Nations has recently issued a policy brief called United Nations 2.0. with emphasis on the need to “leverage behavioural science to improve UN family programme and policy effectiveness and reduce bureaucratic processes”.

Providing the necessary multidisciplinary expertise and harnessing the brain capital data and evidence, need to be important objectives of the Brain Capital Alliance in the next phase. In this way, the notion of the brain capital can become a powerful ingredient in **the transition from the SDG to the post-SDG global agenda.**



About the Authors

[Harris A. Eyre, M.D., Ph.D.](#), is a fellow at Rice University's Baker Institute for Public Policy and a senior fellow at the Meadows Mental Health Policy Institute. He leads the Brain Capital Alliance. He is an advisor to the Latin American Brain Health Institute (BrainLat), FondaMental Fondation, the Euro-Mediterranean Economists Association (EMEA), the Mental Wealth Initiative, the Women's Brain Project, Texas Medical Center's Innovation Institute and Kooth. He is a member of the Champion's Cabinet for the Davos Alzheimer's Collaborative and an instructor for the Global Brain Health Institute (GBHI). Eyre maintains adjunct positions with the Baylor College of Medicine, The University of Texas Health Sciences Center at Houston, Houston Methodist, and Deakin University's Institute for Innovation in Mental and Physical Health and Clinical Translation.

[Julie Hiromoto](#) is a Principal and Director of Integration at HKS. Her design, technical and management expertise excels in delivering complex, large-scale projects, including One World Trade Center. She serves as the Mayor's appointee to the Dallas Environmental Commission, sits on the International Living Future Institute board, serves as the Urban Land Institute Americas Sustainable Development Council Vice Chair or DEI, represented 95,000 American Institute of Architects members when she testified before Congress in 2020 and also as a delegate to the United Nations Climate Conference, COP 26, in Glasgow, Scotland. She will also represent Architecture 2030 as a virtual delegate at COP28.

[Kevin Winters](#) is an accomplished Healthcare Executive with two decades of extensive international experience, having worked in the US, UK, Middle East, and South East Asia. Currently, I hold the position of Sales Leader at Silvercloud Health, where I am entrusted with driving strategic partnerships within North American Payers, Employers, and Providers.

[Pawel Swieboda](#) is a Brain Capital Alliance Steering Committee Member and former Director General of the Human Brain Project and CEO of EBRAINS AISBL. He led one of the world's largest brain science research programs, overseeing the development of the cutting-edge EBRAINS Research Infrastructure. Pawel is a contributor to the OECD Neuroscience-Inspired Policy Initiative, and he previously held roles at the European Commission and served on advisory boards for European and global organizations.

[Steve Carnevale](#) is a successful entrepreneur, founding businesses including the University of Michigan's Center for Entrepreneurship, the UCSF Dyslexia Center, and Point Cypress Ventures. He is a Commissioner of the California Mental Health Commission. His current focus on Brain Capital explores how biological neuroscience can unlock the potential of companies and countries.

[Upali Nanda, PhD](#) is Partner and Global Director of Research for HKS, Associate Professor of Practice at the Taubman School of Architecture and Urban Planning at University of Michigan and Executive Director for the non-profit Center for Advanced Design Research and Education. Her award-winning research sits at the intersection of design and health, architecture and neuroscience, practice and academic, place and perception. She is the 2015 HCD magazine researcher of the year and 2018 Women in Architecture Innovator Award winner currently focused on the intersection between brain, building and biosphere.

Program

8:15 - 9.00 Registration and Networking Breakfast

Ron Martere, VP, Sales- North Business Group, Steelcase | [LinkedIn](#)

9.00 - 9.10 Welcome Remarks from Co-Convenor

Paweł Świeboda, Member, Steering Committee, Brain Capital Alliance, former CEO of EBRAINS and former Director General of the EU Human Brain Project | [LinkedIn](#)

9.10 - 9.20 Opening Address

Jay Inslee, Governor of Washington | [Website](#)

9.20 - 9.30 Launching the Brain Capital Industrial Innovation Strategy

[Presentation Slides](#)

Harris Eyre, Lead, Brain Capital Alliance. Fellow, Rice University's Baker Institute for Public Policy. Senior Fellow, Meadows Mental Health Policy Institute | [LinkedIn](#)

9.30 - 9.40 Keynote Launching the Brain Capital Dashboard

[Presentation Slides](#)

Rym Ayadi, President and Founder, Euro-Mediterranean Economists' Association. Co-founder of the Brain Capital Alliance | [LinkedIn](#)

9.40 - 9:50 Keynote Californian Brain and Mental Health Innovation

[Presentation Slides](#)

Mark Ghaly, Secretary of the California Health and Human Services Agency | [Website](#)

9.50 - 10.30 Youth Mental Health: The Challenge of the Generation

There is hardly a family across the world that has been spared the impact of the mental health crisis. An increase in depression and anxiety among adolescents is particularly pronounced. Often, it is not a crisis of prevalence, but a crisis of care. Challenges have to do with access and heterogenous nature of the disorders, which are being treated. This session will issue a call to action for investing in the mental health of the younger generation.

CHAIR and MODERATOR: Tim Barker, CEO, Kooth | [LinkedIn](#)

Jayme Banks, Deputy Chief of Prevention, Intervention and Trauma for the School District of Philadelphia | [LinkedIn](#)

Monica Bharel, MD, MPH, Clinical Specialist, Google | [LinkedIn](#)

Autumn Boylan, Deputy Director of Strategic Partnerships, California Department of Health Care Services | [LinkedIn](#)

Shaun Tyrance, Ph. D., Vice President of Player Services and Assessment, Kansas City Chiefs | [LinkedIn](#)

Brian Wallace, Chief Medical Officer, Calmsie | [LinkedIn](#)

Dawn Zieger, Vice President, Psychiatry and Behavioral Health - Geisinger | [LinkedIn](#)

10.35 - 11.15 Public Private Partnership for Youth Mental Health: Policy and Approaches to Improving Access and Outcomes

Join us for a dynamic conversation that transcends traditional boundaries, bringing together legislative expertise and private sector innovation to catalyze change in youth mental health support systems. By examining real-world examples, attendees will leave empowered with fresh insights and actionable takeaways to contribute to the betterment of youth mental health on a global scale.

CHAIR and MODERATOR: Erin Davis, VP of Government Relations, Kooth | [LinkedIn](#)

Ethan Berke, Chief Public Health Officer & SVP Enterprise Integration & Innovation at Optum | [LinkedIn](#)

Jane Brown, CEO Aetna Better Health of Kansas | [LinkedIn](#)

Rushil Desai, CEO Aetna Better Health of Illinois | [LinkedIn](#)

Rep. Aaron Kaufer, Pennsylvania House of Representatives | [Website](#)

Hon. Sir Norman Lamb MP, Chair of South London and Maudsley NHS Foundation Trust, former Minister responsible for Mental Health | [Website](#)

11.20 - 11.30 Keynote Investing in Brain Capital: the HEKA Fund [Presentation Slides](#)

Marion Leboyer, Director, Fondation Fondamental | [LinkedIn](#)

François Véron, Founder, Newfund | [LinkedIn](#)

12.30 - 13.25 Youth Brain Capital: The Importance of Education and Workforce Development for Citizens of Tomorrow

Insights from brain science are deeply relevant in education and training. Understanding how we learn has to be part-and-parcel of designing school curricula. Neuroscience tells us that learning achieves better results when objectives are well defined and communicated, when more cognitive effort is required, and when feedback is provided. There is also a need to address the evidence pointing to a close link between the use of social media and the mental health crisis affecting adolescents across the world.

CHAIR and MODERATOR: Steve Carnevale, California Mental Health Commission | [LinkedIn](#)

Alan Boldon, Co-Founder, Weave Global | [LinkedIn](#)

Patrick Brennan, Director of the UC/ CSU Fellowship, UCLA School of Education and Information Studies | [LinkedIn](#)

Toby Ewing, Executive Director, California Mental Health Services Oversight and Accountability Commission | [LinkedIn](#)

Marilu Gorno-Tempini MD, Professor at UCSF | [Website](#)

Laura Jana MD, Associate Research Professor at Penn State's Edna Bennett Pierce Prevention Research Center | [LinkedIn](#)

Erin Smith, Senior Atlantic Fellow for Equity in Brain Health, Global Brain Health Institute | [LinkedIn](#)

Melissa Stafford Jones, Director of the Children and Youth Behavioral Health Initiative, California Health and Human Services Agency | [LinkedIn](#)

13.30 - 14.25 Economic Security and Resilience: from Human Capital to Brain Capital

We live in a shock-prone world, in which unthinkable scenarios need to be considered. From the pandemics, through wide-spread fake news propagation, to climate catastrophes and political instability, resilience has not only become a virtue but an essential prerequisite of economic success. Debate about decoupling versus derisking reflects an underlying tension in the new global order. Against this background, investing in human cognitive capacities and skills offers unparalleled resilience.

CHAIR and MODERATOR: Paweł Świeboda, Member, Steering Committee, Brain Capital Alliance | [LinkedIn](#)

Gary Belkin, Former Deputy Health Commissioner for New York City, Founder of Billion Minds Institute | [Website](#)

Frédéric Destrebecq, Executive Director, European Brain Council & European Brain Foundation | [LinkedIn](#)

Shiva Dustdar, Head of the European Investment Bank Institute | [LinkedIn](#)

Mitchell Elkind, Chief Clinical Science Officer, American Heart Association | [LinkedIn](#)

Quazi Haque, Chief Medical Officer, Elysium Healthcare & Global Mental Health & Brain Science CoP Lead, Ramsay Healthcare | [LinkedIn](#)

Jo-An Occhipinti, Professor, Faculty of Medicine and Health, University of Sydney; Co-Director Mental Wealth Initiative | [LinkedIn](#)

Alessio Terzi, European Commission; author of "Growth for Good. Reshaping Capitalism to Save Humanity from Climate Catastrophe" | [LinkedIn](#)

15.00 - 15.10 Keynote Green Brain Capital to Drive Sustainable Futures [Presentation Slides](#)

Mohamed Salama, Associate Professor, Institute of Global Health and Human Ecology, American University of Cairo | [LinkedIn](#)

15.15 - 16.15 Brain Capital and the Built Environment

The environments we live in (built, natural and digital) matter. Emerging evidence shows that elements ranging from air quality, lighting, form, views, acoustics to land-use and planning can have a direct impact on our physical, mental, cognitive and social health. As we think about how to invest in the UN Sustainable Development Goals, we cannot forget the built environment that sets the very stage of our society. In this session researchers, designers, investors, and operators will discuss how insights from brain science and building science can come together to build brain capital, BY design.

CHAIR and MODERATOR: Upali Nanda, Partner | Global Practice Director, Research, HKS | [LinkedIn](#)

Jennifer Kolstad, Global Design and Brand Director, Ford Motor Company | [LinkedIn](#)

Clayton Mitchell, Senior Vice President, Jefferson Health | [LinkedIn](#)

Thomas Osha, Executive Vice President, Wexford | [LinkedIn](#)

William Reichman, President and CEO, Baycrest | [LinkedIn](#)

Marta Schantz, Co-Executive Director, Randall Lewis Center for Sustainability in Real Estate at the Urban Land Institute | [LinkedIn](#)

16.45 - 17.00 Keynote Advances in Neuroscience-inspired Law

David Faigman, Dean and Chancellor of UC Law College, San Francisco | [LinkedIn](#)

17.00 - 18.00 Designing and Implementing National and Regional Brain Deals

The concept of brain deals postulates that new socio-economic contracts are needed to prepare societies for the acceleration of technological change, including new advances in Artificial Intelligence. It encompasses several core areas, including effective infrastructure for mental health and wellness, brain-capital informed research agenda, and advancing national security through brain-focused investments. This final session of the conference will examine how to construct national, regional and global brain

deals, to reflect the centrality of cognitive skills and brain health.

CHAIR and MODERATOR: Paweł Świeboda, Member, Steering Committee, Brain Capital Alliance | [LinkedIn](#)

Pedro Conceição, Director, Human Development Report, UNDP | [LinkedIn](#)

Maro Machizawa, Associate Professor [special appointment], Hiroshima University and CEO of Xiberlink | [LinkedIn](#)

Facundo Manes, President of the Committee on Science, Innovation and Technology of the Argentine Parliament | [LinkedIn](#)

Zab Johnson, Deputy Director, Wharton Neuroscience Initiative | [LinkedIn](#)

18.00- 19.15 Networking Reception [Presentation Slides](#)

Mitchell Elkind, Chief Clinical Science Officer, American Heart Association “Food Is (Brain) Medicine: Leveraging Food Systems for Brain Capital” | [LinkedIn](#)

[Brain Capital Alliance](#)

Neuroscience-inspired investment.
Advancing a movement to build Brain Capital.

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