15th February 2023

Mind-body Approaches to Boosting Brain Capital

EMEA HQs, Sant Pau Recinte Modernista, UNESCO World Heritage building

Hosted by the Euro-Mediterranean Economists Association and co-organised by the Brain Capital Alliance and the Imaginator Academy

Background

In a world impacted by the pandemic, with all its human and economic consequences, and in the face of new challenges posed by misinformation and mental health conditions, there is a need for new analytical approaches, tools, and insights from science to help use navigate the complex systems we live in.

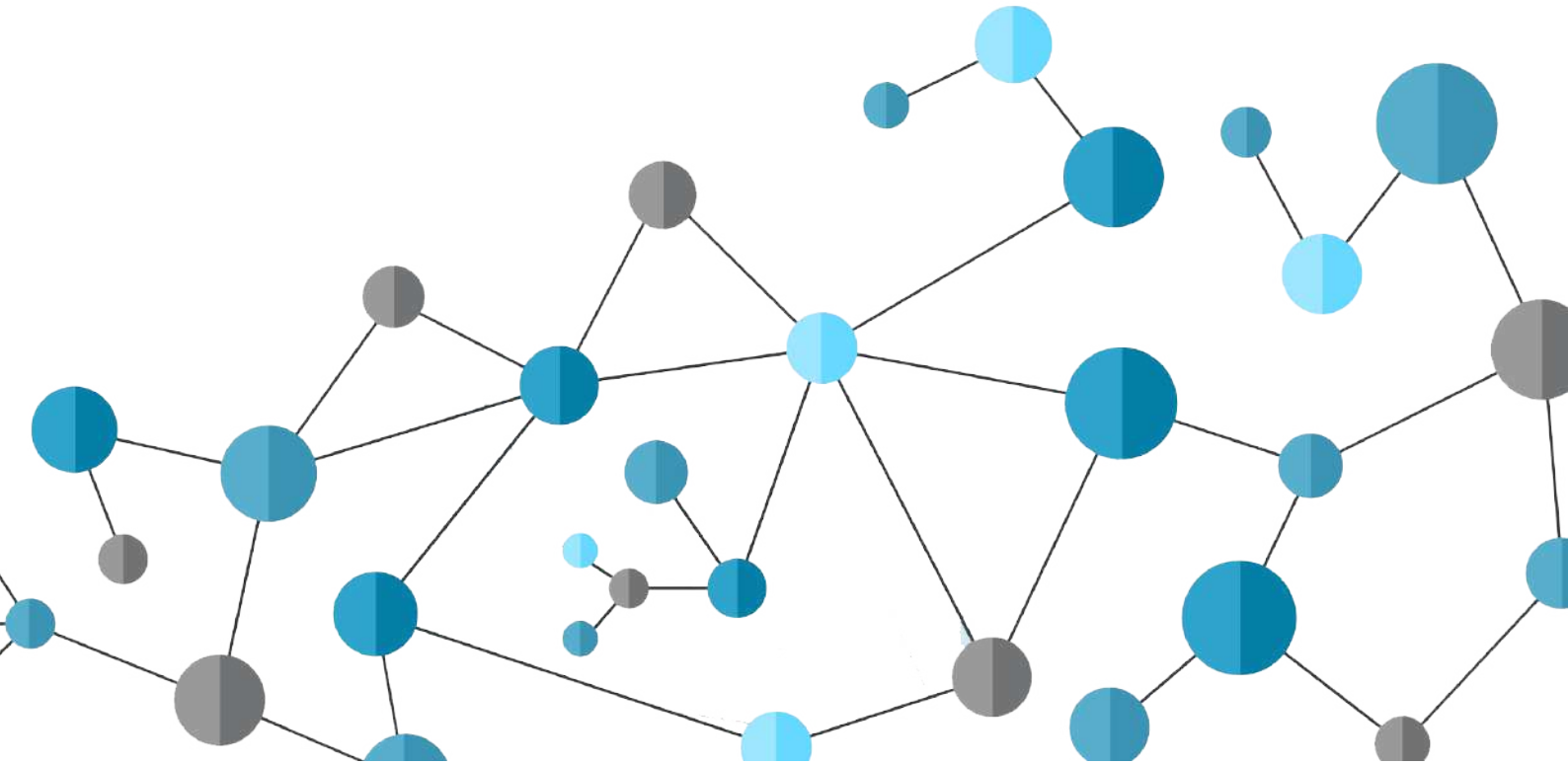
Understanding the brain, brain health, and brain disorders is essential to improving health and quality of life. It also offers a pathway to understanding the new economic and social reality. The world is increasingly relying on brain capital, where a premium is put on brain skills and brain health (e.g. individual's cognitive, emotional, and social brain resources). Investing in building brain capital is fundamental to meet modern societal challenges and to drive innovation.

This workshop aimed to deep dive into examples which improve brain health and brain skills, respectively. Exercise was explored as an approach to improving brain health and creativity was explored as a key brain skill. Powerful links between exercise and creativity were drawn out. The workshop aimed to bring in a mixture of academic, clinical, economic, policy and private sector actors to generate new, scalable solutions and pilot projects that can drive a new economic dynamic that is needed to enhance well-being and resilience.

It appears that regular physical activity provides benefits to the brain. Studies show that people who are physically active and not sedentary are less likely to experience a range of health conditions from obesity to depression.

Due in part to advances in brain health research and technology, the science behind human creativity is poised for exponential growth. In the process it may reshape how we innovate in arts, research, and business — all expressions of creativity and all deeply connected to brain health. Studies and our own research are proving the intertwined connection between human creativity with well-being, mental health, focus, attention, and social participation of all. Creative activities are particularly helpful for those living with mental health and brain health challenge.

Creativity is a critical brain skill in the modern economy. Interest in creativity as a driver of workforce productivity and enterprise innovation is growing. Creativity is among the top skills for leaders and workers alike.



Welcome and introduction: Brain Capital and the Brain Capital Dashboard

Prof. Rym Ayadi, President and Founder of the Euro-Mediterranean Economists Association, opened the introduced the workshop and welcomed the participants. She explained that our approach is to think of innovative ways to boost brain health and capital and link it to economic productivity. This includes thinking about new programmes for health policy especially against a background of Covid-19 and other shocks. This has led us to a multi-disciplinary approach involving economists, neuroscientists, psychologists, and creative actors. EMEA aims to contribute to economic reforms in the MENA region based on in-house research covering an array of topics.

Brain capital is an economic concept allowing us to understand it as a stock. This reframes the question to discuss brain health and longevity and brain skills. Determinants of brain capital are exercise and creativity. Exercise is a preventative measure and can be considered from a social protection standpoint. Creativity is more complex as it can be acquired as a skills to enhance productivity. Healthy and skillful brains can enhance economic development and wellbeing.

Under the initiative, EMEA has been part of working groups to define these aspects in order to measure brain capital. It was agreed that the concept is complex and cannot be fully reflected within a single indicator. The next step therefore is to develop a composite indicator to allow us to make well researched policy recommendations. The Brain Capital Dashboard, available here, is a working platform to measure these indicators. It shows a set of prerequisites for brain health and brain skills such as a functioning health infrastructure.

Prof. Ayadi then turned to Dr. Harris Eyre, Lead of the Brain Capital Alliance and advisor to the Euro-Mediterranean Economists Association, who gave an overview of brain capital. He explained that there are several big brain challenges facing us in society including mental health, education disruptions due to Covid-19, and the impacts of social media on the health of young people and women. These can be split into clinical (such as stress and depression) and non-clinical issues (such as fake news and pollution). Brain capital is being increasingly recognized internationally as fundamental to meeting societal challenges and driving innovation and has been highlighted by the WHO, Lundbeck, and the OECD.

The key to tackling this is having an aligned strategy where it is considered collectively in a way where health policy, education, and other societal issues can be explicitly linked to uncover not only the brain capital of individuals but also of entire societies, countries, and regions.

For more information on the Brain Capital Alliance, visit the website.

Sara Ronco, Researcher at EMEA, then introduced the Brain Capital Dashboard developed by EMEA. She presented the working definition of brain capital as: a productive and complex capital stock that accumulates over the lifecycle. Brain capital is considered a multi-dimensional set of factors varying from physical to social-cultural enabling the brain to remain healthy, allowing it to develop, and avoiding deterioration.

The dashboard is composed of 3 pillars: Drivers, Brain health, and Brain Skills. The key question to answer under the theme of this conference is how creativity and exercise can be incorporated into the platform to demonstrate how it boosts brain health and skills. She then presented some of the pilot programmes to be launched under the initiative. Brain health as part of our thinking when designing economic policies. Now we need to think of new growth, brain capital endowment. This is the innovative dimension.

Session 1 - Exercise and creativity as boosters of brain capital

Exercise and creativity are factors that can influence brain health and capital. This session explored each one of them separately: exercise as an avenue to support brain capital and thus tackle modern societal challenges such as the increasing rates of dementia in ageing populations and increasing mental health issues among youths and creativity within the environmental determinants of brain health (built, natural, social, cultural, economic, and technological).

Marta Sanchez Bret – Manager, Catalan Mental Health Cluster

Prof. Ayadi then introduced Marta Sanchez Bret, Director of the Mental Health Cluster Catalunya, to be rebranded as the WeMind Cluster. She set the scene by explaining that there is a historical issue of stigma with mental health in Catalonia and that their cluster is trying to firmly put this stigma in the past. One such method has been to care for the brain capital stock of the community.

Theo Edmonds – Directing Co-founder, CU Denver's Imaginator Academy

Prof. Ayadi then gave the floor to Theo Edmonds, Founder of the Imaginator Academy. He said that this conference aims to bring thought leadership to creativity and exercise allowing for applied science that not only focuses on the social-ecological profile of the individual, but of entire communities and societies. As a cultural futurist, Theo looks at cultural trends and analyses the reasons for societal change and highlights differences across societies. He explained that we have a social-psychological profile, or "social brain" which is influenced by our communities, for example, the social agreements we make in Europe are very different from those made in the United States. These factors influence what is possible in society.

He pointed out that creativity and exercise are not usually thought of as identity transitions which presents an opportunity. Retirement is an example of an identity transition. If acknowledged as such, the way we view creativity changes and becomes a possible indicator for quality of life in such an identity transition.

Felipe Isidro - Professor of Physical Exercise and Health, Physical Exercise and Health Consulting

He then gave the floor to Felipe Isidro, a consultant in physical health and exercise. He began by giving a scientific overview of the structure of the brain highlighting that the frontal cortex is the most important part as the control centre of the body and point of creativity. Advances in brain scanning technology allow us to see parts of the brain that are active during creative tasks and physical exercise. He highlighted that often these activations in creativity and exercise are the same. There is a huge amount of evidence on the benefits of exercise for brain health. Even after just one session of exercise, brain function improves. A combination of aerobic activity and strength leads to greater brain neuroplasticity. He then explained his work with the Alfonso X Rafa Nadal Sports University and the Physical Exercise, Brain Health & Artificial Intelligence Project. It was found that AI can be used to design a personal programme with physical exercises to boost brain health incorporating gender, age, environment etc. to generate effective training programmes.

Prof. Rym Ayadi commented that this work is key from a social policy and social protection perspective. It can be integrated into social protection systems and has the potential to kickstart a pilot project demonstrating a reduced cost for social protection and present a shift towards economic productivity.

Michael Berk - Alfred Deakin Chair of Psychiatry at Deakin University

Michael Berk from Deakin University is a Professor of Psychiatry and is one of the top experts in bipolar disorder. He runs a research institution called Impact with a particular interest in lifestyle. In his presentation he focused on exercise as a lifestyle strategy. He highlighted that there are many drivers of mental health illnesses and many overlap. Amongst the environmental influences, low levels of physical activity are a common risk factor. Physical activity is one of the most viable intervention targets demonstrating that in depression, for example, exercise has a restorative effect on hormones influencing depression. Its effects are comparable to psychological treatments and medications. If exercise is added to other forms of treatments, there are additional benefits. He explained that the same is true for schizophrenia. Regarding cognitive decline, physical exercise is probably one of the most effective methods of treatment and prevention.

Kirk Erickson - Director of Translational Neuroscience at the AdventHealth Research Institute

Kirk Erickson is the Director of Translational Neuroscience at the AdventHealth Research Institute. His presentation focused on Building Brain Capital: Leveraging Physical Activity to Enhance Brain Health. He explained that there are certain conditions that we try to avoid such as cognitive decline and mental health issues and in the work that he has done, physical exercise affects brain health across our lifespan, in childhood, adulthood, and old age. More evidence is needed to study the effects in infancy and adolescence. Exercise training improves cognitive function in older adults. This is in cognitively normal people making it an approach for maximizing brain health, even if one is not suffering from some condition. It acts across many levels: the cellular, the functioning and structural brain changes, and behavioural and socioemotional changes. These effects are not mutually exclusive. The hippocampus, critically involved in memory formation, retains its natural capacity for plasticity as a result of exercise. There are many unanswered questions such as the economic impact of exercise on brain health, which conditions are most strongly influenced by exercise, and what is the best way to implement and maintain exercise as a method for maximizing brain health.

When asked about preferrable policy options, he explained that starting exercise early in life is the best option, but it is important to be realistic. We have to be aware of the cultural differences in exercise as some cultures are hesitant and resistant to it. An effective way to incorporate exercise is to prescribe it alongside other treatments. Despite the evidence, this is not common practice for treating neurological conditions.

Susan Magsamen - Founder and Executive Director of International Arts + Minds Lab

Shifting the conversation to creativity, Susan Magsamen Founder and Executive Director of International Arts + Minds Lab, Centre for Applied Neuroaesthetics began by drawing the parallels between physical activity and creativity. In her work, the research deals with arts and aesthetic experiences open to addressing a number of global and intractable problems. They have a series of recommendations for laying down the foundations of this discipline, arts and aesthetic experiences. This includes raising awareness, capacity building, and enriching education. She explained the arts have the capacity to transform us. Examples such as 20 minutes of creativity a day can bring beneficial effects, 45 minutes a day reduces cortisol, and 1 new artistic activity a month can prolong life.

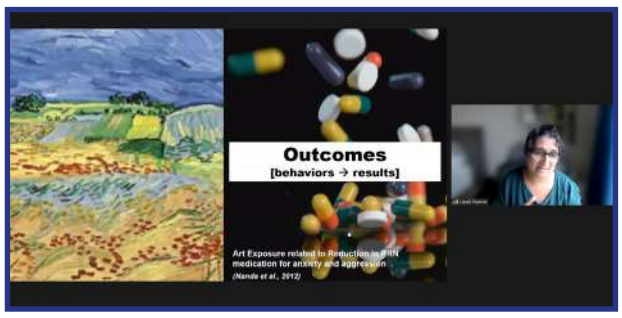
Arts are available at any time in any form cementing them as a non-luxury product. This makes them a very powerful tool. During the pandemic, it was found that moving activities online made the activities readily available and participants carried out the activities more often. If the lens is changed on the role of aesthetics, a huge array of tools are made available to us to tackle conditions such as stress and anxiety in activities of just 15 minutes.

She finished by citing the World Bank which has found that without strong cultures we cannot have strong communities, and without strong communities, we cannot have strong economies. Creating strong communities through arts and culture can expand and create other opportunities.

Upali Nanda - Global Practice Director, Research, HKS Architect

An architect and dancer, Upali Nanda of HKS Architect, gave her view on the topic of the built environment and creativity and brain capital. She began by asking, do our environments and the infrastructure influence our behaviour? She used this to present the case of the built environment as a brain capital asset. The built environment often gets taken for granted. She argues that the way we set the stage is not conducive to good brain health or good brain capital. The digital physical reality that we navigate is a new world which far outpaces our evolved biology. The environments we live in may have become more distant and less enriched.

A powerful finding made in her work, is that by replacing the cost of the pill, the pharmacist, the nurse, the care provider etc. with art, hospitals could potentially save 30,000 USD a year. This was a small study but proved that changing the environment can influence well-being and be used as a treatment method. Enriched environments lead to increased brain activity due to higher rates of synaptogenesis and more complex dendrite arbors. An optimum level of complexity could also be a way to boost cognitive health. She explained that they are working on a new report, Brain Healthy Workplace Report to release findings on brain health in the workplace. She finished by saying that better de-sign leads to better outcomes, and this includes the planning of buildings and environments.



Martin Schmalzried, Senior Policy and Advocacy Manager at COFACE-Families Europe, joined the conversation. He explained that in nature there are patterns that constantly appear. Is it possible that human art is simply a reflection of human expression which can be found repeated in fundamental patterns of the universe. Great pieces of art share certain qualities and it is possible that given these poor environments, there is a link here with the language of the universe? He secondly commented that these creative environments could be a collective hallucination being a social construct of the mind.

Closing of Session 1

In the close of the first session, Prof. Rym Ayadi highlighted that it is necessary to transform the models of well-being and health. In economics, our models of growth need to consider the living effect. We need regenerative growth for the individual and that sums up into the collective. There is a need for connecting all of these practices into a speedy transformation.

Session 2 - Intersections between exercise and creativity to boost brain capital

This session had the aim to explore the powerful links between exercise and creativity to accelerate progress on brain capital. In a recent study, it was found that, in general, being more active meant being more creative demonstrating a link between the two. Exercise can boost brain health and creativity can boost brain skills, making the two activities potentially groundbreaking in driving a new economic dynamic for wellbeing and resilience.

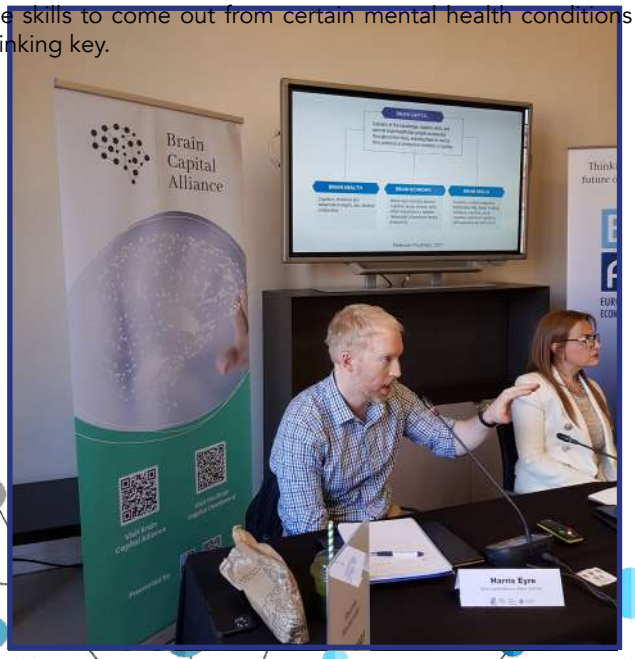
Dominic Campbell – Co-founder Creative Aging International
At Creative Aging International, Dominic focuses on celebrating ageing and creative the conditions for people to live better for longer. It is clear that the old industrial model for determining health is not able to deal with social, environ-mental, political, and economic determinants. Health is somewhat determined by a birth lottery. As people live longer, we are exposed to difference conditions and the model is not appropriate.

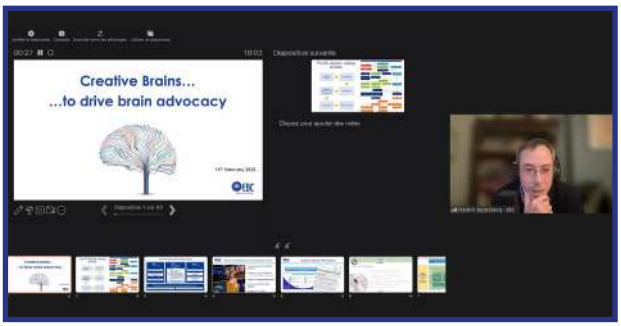
A wider approach to identifying and measuring brain health determinants includes creativity and touches on themes such as a sense of belonging, agency, reward systems, and stigma reduction. These themes are then mapped to neu-roscience providing a holistic view of brain health that includes an older generation.

There is a new concept of awe: awe can be experienced in nature but also in the arts. The science comes from the indi-vidual self and the connection with the community. This makes place a key and allows for an embodiment of emotion. Theo Edmonds, in this view, asked what the best policy option would be to be pursue. Dominic highlighted unaddres-sed grief as a key issue, especially post pandemic. He has found that many people are emotionally and mentally stuck which could be alleviated by particular places and spaces in communities.

Harris Eyre – Lead of Brain Capital Alliance
Dr. Harris Eyre brought the conversation to a personal level and explained his "brain story". He explained his journey to neuroscience through his experience of migraines. It is an inherited condition, and the medication is only available in the USA. He used this story to explain how the stigma about brain conditions can be broken and flipped to view the positive side such as empathy, resilience, and creativity. Linking creativity and exercise in the theme of the conference, exercise is also a method for alleviating the symptoms. This includes forest walking and awe walking which can stimu-late creative impulses which incidentally was a driver to the idea of "Brain Capital".

Theo commented that these skills to come out from certain mental health conditions are in fact skills for the future making this line of thinking key.



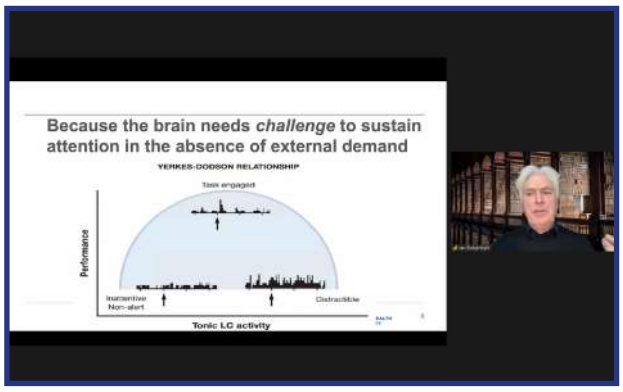


Frédéric Destrebecq – Executive Director, European Brain Council

A key part of Frederic's work is advocating for the brain and to understand the decisions made at the policy level. He highlighted that the European Union has had developments in this area where the Commission President, Ursula von der Leyen, included the issue of brain health in the state of the union speech. The key issues highlighted are mental health and skills. The WHO also have an agenda on mental health and there is a Global Action Plan on epilepsy and neurological disorders.

The European Brain Council have a collaborative model to structure the ecosystem in brain research bringing together scientists, clinicians and patients – patients being the core of the constituency. Their policy priorities are the socio-economic impact of the brain and brain disorders, and they released a study on the cost of brain disorders which they found to total almost 800 billion euros. Through their Brain Innovation Days, the EBC wants to shift to a positive accessible narrative on brain health and educate people on the successes.

Ian Robertson - Co-Director Global Brain Health Institute



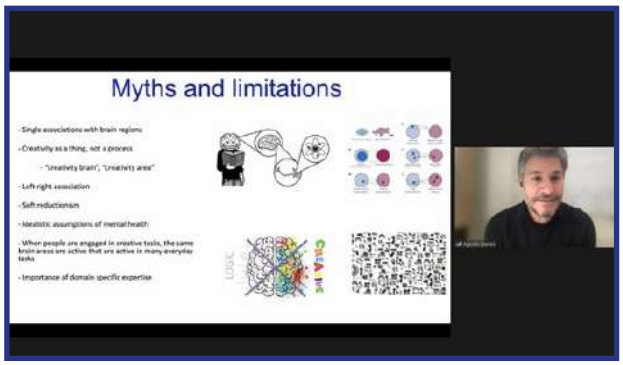
Ian Robertson's intervention brought the conversation back to the neurological perspective. He began by stating that the brain needs challenges to sustain its attention using the example of straight roads and curved roads. Civil engineers curve roads to cater to this human characteristic which stimulates the locus coeruleus. Brains that are positively challenged over a lifetime can build cognitive reserves which builds resilience to brain disease and injury.

He then linked this to physical activity and creativity. It has been shown that greater physical fitness is positively linked to the integrity of the locus coeruleus. It has also been shown that people with the personality trait "openness to experience" (people who tend to like hearing new ideas, believe in the importance of art and have a vivid imagination) is linked to the integrity of the locus coeruleus.

He finished by discussing people's purpose in life and those who have a "creative spirit" have an inherent purpose which, it can be argued, is incredibly nourishing for the brain. Having a sense of purpose is correlated to Alzheimer's and cognitive impairment meaning that creativity could be seen through this lens as a tool for reducing the risk of Alzheimer's disease.

When asked about how to arrive at better questions in creating policy, he looked to citizens assemblies and role play and suggested that if we could create political neutral stages such as role play in citizens assembly, may allow people to take back some agency and sense of purpose.

Agustín Ibáñez - Latin American Brain Health Institute
The typical way we understand creativity is compartmentalized and we don't fully understand it in a practical real-life context. There is no clear framework on creativity. He first highlighted myths and limitations regarding creativity and the brain. Creativity is not a thing; it is a process which involves many cultural and environmental factors. There are different types of creativity, and we need to understand the areas of the brain that influence creativity and that it is not all focused in one part of the brain.



There is a clear basic scientific link between creativity and exercise which is that during exercise, there is an increase in blood flow and reduced allostatic load meaning that creative thinking can be increased. Bringing in a cultural and environmental perspective, he said that there are movements in Latin America to encourage exercise such as Weekend Warriors and opened cycle lanes on Sundays in cities such as Santiago de Chile and Bogotá. He used this example to show that we don't need a complete theory of these concepts to make important changes.

Salvador Simó – Universitat de Vic
Salvador Simó focused his intervention on young people and mental health in Catalonia. He used this opportunity to introduce the pilot project E-Green Social Design – a mission to include young people in the job market preparing them for the future economy – Economy 4.0 – whilst ensuring wellbeing and social inclusion. He drew from Ian's intervention that 85 million jobs will be lost to artificial intelligence by 2025. They have started with 12 young people in rural areas, Calldetenes in Catalonia, for a 6-month period teaching them about the digital economy, green economy, and entrepreneurship. This not only provides knowledge transfer but also builds the confidence of young people which as we have seen is key to building brain capital. He explained that from 2024, the pilot will be scaled and replicated internationally with EMEA and Brain Capital Alliance as partners.

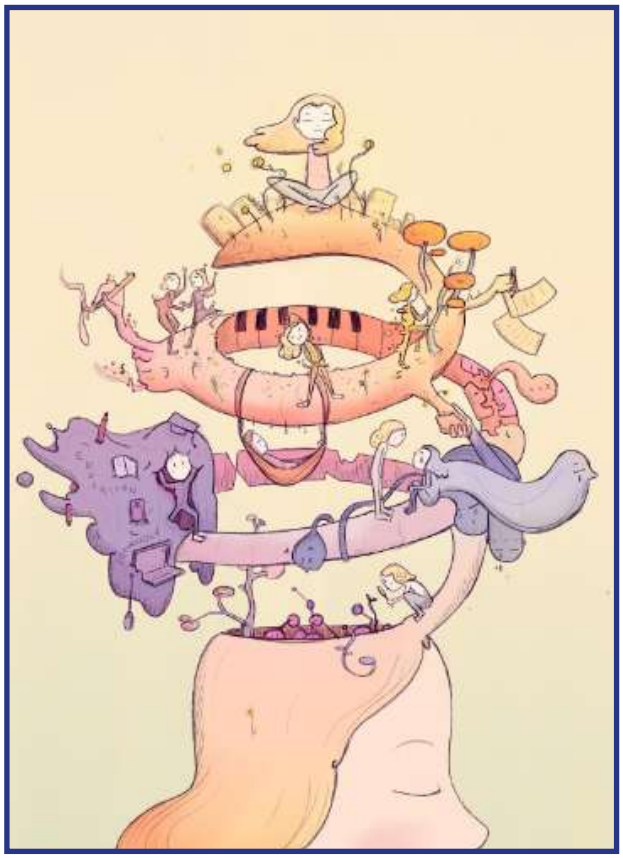
Carlo Sessa, Advisor at EMEA, asked whether the project has considered if the project work prepare young people for a world where the platform economy is growing? Salvador responded that the focus of the project is to prepare young people and empower them to "surf the tsunami". Their philosophy is humanistic and pragmatic meaning the key to this preparation is resilience and not to drive young people to believe the only option is working for big enterprises, rather having the resilience and creativity to start something themselves.

Felip Miralles – Executive Director of Health Technologies, EURECAT

The workshop ended as it began bringing in another voice from Catalonia, Felip Miralles, Executive Director of Health Technologies at EURECAT. EURECAT is a technology centre in Barcelona aimed at helping entities to innovate through technology focusing on socially driven innovation. They do that through a co-design process with citizens and proving support in funding and sustainable business models. They have had some projects on brain health and social inclusion, exercise and biomechanics, Effion Health to help in the diagnosis of mobility implications.

The approach they take is centred on the end user and the experience of the citizen as the main driver for innovation whilst also taking into account other stakeholders. New methods of including the patient are being explored. The one main asset for innovation is the data source. The aspect that has been changing over time is taking a holistic preventative approach considering factors such as nutrition, sleep, exercise, and social life. These solutions become pragmatic and personalized. Another project in this line of thinking is CarpeDiem which conveys the prevention and promotion of healthy habits focusing on the elderly in one of Catalonia's cities - Mataró.

As a follow-up, Prof. Rym Ayadi asked for more information on the nutrition aspect as it is an interesting theme to be included within brain capital. She also asked where creativity can fit into the framework of EURECAT. Felip Miralles responded by explaining that at EURECAT they have a team of nutrition experts that are investigating the impacts of nutrition and policy options for improving overall health and mental health based on this factor. He then explained they have been testing various psycho-social project such as promoting social networks in elderly people allowing them to connect given that loneliness is becoming a growing issue among that generation. He clarified that the projects shown have been financed through the public sector, yet sustainability of these projects is key.



Conclusion

On the closing of the session, the participants were presented with the work of Sara Fascetti who had been following the session through a creative lens. Below is the visual and artistic representation of the topics covered in the workshop: brain health, creativity, physical exercise, wellbeing, and quality of life all being connected by a path to show the various areas of research.

Speaker Biographies

Prof. Rym Ayadi
President and Founder, EMEA

Professor Rym Ayadi is the Founder and President of the Euro-Mediterranean Economists Association (EMEA). She is Founder and Director of the Euro-Mediterranean and African Network for Economic Studies (EMANES). She is Senior Advisor at the Centre for European Policy Studies (CEPS); Professor at the Bayes Business School, City University of London; and Member of the Centre for Banking Research (CBR); Academic member and Chair (2018-present) of the European Banking Authority – Banking Stakeholders Group (EBA-BSG). She is also Associated Scholar at the Centre for Relationship Banking and Economics (CERBE) at LUMSA University in Rome.

Dr. Harris Eyre
Co-founder of Brain Capital Alliance, Fellow at Baker Institute,
Senior Fellow at Meadows Mental Health Policy Institute

Originally from rural Australia, Harris Eyre MD PhD is a global physician-executive and neuroscientist focused on advancing the field of brain capital. He is lead of the Brain Capital Alliance and co-lead of the OECD Neuroscience-inspired Policy Initiative. He is Fellow with the Baker Institute for Public Policy and Senior Fellow with the Meadows Mental Health Policy Initiative. He is an advisor the Euro-Mediterranean Economists Association and the Texas Medical Center Innovation Institute. Harris maintains adjunct roles with the Global Brain Health Institute, Baylor College of Medicine, Deakin University, the Latin American Brain Health Institute and the University of Texas Health Sciences Center at Houston.

Theo Edmonds
Directing Co-founder, CU Denver's Imaginator Academy

Culture Futurist. Transdisciplinary Academic & Researcher with Focus on Humanizing the Future of Work. Industry-University Collaborations and Private-Sector Engagement Leader. Public Health Entrepreneur. Cultural Analytics Inventor. Developer of Next-generation Corporate Social Responsibility Initiatives in the Creative Economy. Artist & Poet.

Sara Ronco
Researcher, EMEA

Sara Ronco is a Researcher at the Euro-Mediterranean Economists Association (EMEA), right after obtaining a MSc in Development Economics from the University of Florence with a thesis based on a research conducted in Costa Rica on trade and food security. She has previously obtained a BA in International Relations from the University of Turin with a thesis based on a research conducted in Kenya on the urbanization and the proliferation of slums. She has been involved in data collection and editing activities of the European Institute for the Mediterranean (IEMed), and she participates to the project on Trends in Global Governance and Europe's Role (TRIGGER) funded by the European Commission under the Horizon 2020 programme.

Marta Sanchez Bret
Manager, Catalan Mental Health Cluster

The raison d'être of the Mental Health Cluster of Catalonia is to promote research, knowledge transfer, and the creation of the synergies required to be able to offer the best bio-psycho-social support to people who suffer from mental illness and to their families. Marta Sanchez Bret has been head of the cluster for 8 years and leads the strategic plan whilst responding to the needs of the cluster members.

Felipe Isidro
Professor of Physical Exercise and Health, Physical Exercise and Health Consulting

Professor of Physical Exercise and Health. Graduate in Physical Activity and Sport Sciences (INEFC, University of Barcelona). Member of the Board of Directors of the International Institute of Physical Science and Health. Coordinator of the Physical Exercise and Obesity group of the Spanish Society for the Study of Obesity (SEEDO). Lecturer on the official Master's Degree in Physical Activity and Health at the European University of Madrid (UEM). Lecturer on the International Master's Degree in personal training, prevention and physical-sports rehabilitation. Isabel I University of Burgos. Lecturer on the Master's Degree in optimisation of training and physical-sports rehabilitation. CEU- San Pablo University- Seville. Lecturer on the SENMO Master's Degree in Nutrition, Medicine and Orthomolecular Practice and scientific advisor to the society. Researcher, speaker, article writer and author on Physical Exercise, Health and Fitness in various Universities at national and international level and in specialized publications.

Michael Berk
Alfred Deakin Chair of Psychiatry at Deakin University

Professor Michael Berk is currently a NHMRC Senior Principal Research Fellow, and is Alfred Deakin Chair of Psychiatry at Deakin University and Barwon Health, wherehe heads the IMPACT Strategic Research Centre.He also is an Honorary Professorial Research Fellow in the Department of Psychiatry, the Florey Institute for Neuroscience and Mental Health and Orygen Youth Health at Melbourne University, as well as in the School of Public Health and Preventive Medicine at Monash University. He has published over 950 papers and is listed by Thompson Reuters ISI as highly cited (2015-2019). He has been awarded over $76M in grant funding. His major interests are in the discovery and implementation of novel therapies, and risk factors and prevention of psychiatric disorders.

Dr. Kirk Erickson
Director of Translational Neuroscience at the AdventHealth Research Institute

Kirk I. Erickson, PhD is a Professor in the Department of Psychology and is the Director and Principal Investigator of the Brain Aging and Cognitive Health Laboratory at the University of Pittsburgh. He is also a Faculty Member for the Center for the Neural Basis of Cognition and Center for Neuroscience at the University of Pittsburgh. Dr. Erickson's research interests are focused on studying the impact of physical activity on brain health and function throughout the lifespan. He has conducted numerous studies on this topic and has published >270 articles. The main message from these studies is that physical activity maintains and improves brain health.

Susan Magsamen
Founder and Executive Director of International Arts + Minds Lab, Senior Fellow at Meadows Mental Health Policy Institute

Susan Magsamen is the founder and executive director of the International Arts + Mind Lab (IAM Lab), Center for Applied Neuroaesthetics, a pioneering initiative from the Pedersen Brain Science Institute at Johns Hopkins University School of Medicine. Her body of work lies at the intersection of brain sciences and the arts—and how our unique response to aesthetic experiences can amplify human potential. Magsamen is the author of the Impact Thinking model, an evidence-based research approach to accelerate how we use the arts to solve problems in health, well-being, and learning. In addition to her role at IAM Lab, she is an assistant professor of neurology at Johns Hopkins and serves as co-director of the NeuroArts Blueprint project in partnership with the Aspen Institute.

Upali Nanda
Global Practice Director, Research, HKS Architect

Dr. Upali Nanda is Global Practice Director, Research, and a Principal at HKS. Based in Detroit, Upali has extensive experience leading research projects in design practice with a focus on the impact of design on human health and perception. She is executive director of Center for Advanced Design Research and Evaluation, or CADRE, the research arm of HKS, and teaches as the Associate Professor of Practice at the Taubman School of Architecture and Urban Planning at University of Michigan.

Dominic Campbell
Co-founder, Creative Aging International

Dominic Campbell currently works at the Department of Neuroscience, Trinity College Dublin at the Global Brain Health Institute as an Atlantic Fellow for Equity in Brain Health Working as an Artistic Director, Curator, and Producer of high-profile activity, Dominic's multidisciplinary practice changes culture. His recent work explores celebration as a change strategy, longevity as a driver of social change, the roles played by creative work in promoting equity and health, and displacement as a healing process.

Frédéric Destrebecq
Executive Director, European Brain Council

Frédéric Destrebecq is the Executive Director of the European Brain Council since October 2014. In this capacity, he is responsible for providing strategic direction and leadership while managing the day-to-day operations of EBC and its ongoing relationships with its member associations and other stakeholders, as well as representing the organisation in various European and national forums.Fred holds a Master Degree in Political Science and International Relations from the Université Catholique de Louvain (Belgium). He also studied at the Institut d'Etudes Politiques (Paris) and University of Wales College (Cardiff), in the framework of the former EU Socrates exchange programme. Prior to EBC, Fred served the European Union of Medical Specialists (UEMS) as Chief Executive Officer, and previously as Director for European Affairs.

Ian Robertson
Co-Director, Global Brain Health Institute

Dr. Ian Robertson is T. Boone Pickens Distinguished Chair at the Center for BrainHealth, UT Dallas and co-leader of The BrainHealth Project. He is also co-director of the Global Brain Health Institute (www.gbhi.org) and Emeritus Professor at Trinity College Dublin. He was founding director of the Trinity College Institute of Neuroscience in Dublin and was previously a Senior Scientist in University of Cambridge's Cognition and Brain Sciences Unit, where he was also a Fellow at Hughes Hall. Trained as a clinical psychologist at the Institute of Psychiatry in London, he trained as a cognitive neuroscientist during his PhD at the University of London and worked in clinical rehabilitation of brain disorders in Edinburgh's Astley Ainslie Hospital.

Agustín Ibáñez
Director of the Latin American Institute of Brain Health

Agustín Ibáñez is an Argentinian neuroscientist interested in global approaches to dementia and social, cognitive and affective neuroscience. He is Director of the Latin American Institute of Brain Health (BrainLat) at the Universidad Adolfo Ibáñez (UAI, Chile), Senior Lecturer and Researcher at the Centre for Social and Cognitive Neuroscience, Universidad Adolfo Ibáñez (UAI, Chile), Research Associate Professor at Trinity College Dublin, TCD, and Team Leader of the Predictive Brain Health Modelling Group, Trinity College Dublin. In addition, he is Senior Atlantic Fellow at GBHI-UCSF and Visiting Professor at GBHI-TCD and Member of the Scientific Researcher Career of CONICET, Argentina.

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Salvador Simó Algado PhD, MsC, MBA, is an international consultant in themes related to mental health, social participation, and inclusive economic development. Lecturer, researcher, Adjunct Director of the Mental Health Chair, and Coordinator of the Mental Health and Social Innovation Research group at UVIC-UCC. Lecturer of Entrepreneurship at the European Business School. He has been visiting lecturer at more than 24 international universities (in Canada, Sweden, France, Germany, Belgium, Denmark, Portugal, The Netherlands, Ireland, England, Greece, Cyprus, Bulgaria, Latvia, Turkey, Chile, Argentina, Costa Rica, and Guatemala).

Felip Miralles
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Felip is Computer Science Engineer by Universitat Politècnica de València, hold a MSc in Information Systems by New Jersey Institute of Technology and a PhD in Engineering and Advanced Technologies by Universitat de Barcelona. He has have been leading ICT projects both in the public sector and the private enterprise. He is an entrepreneur, professor and principal investigator in many digital health initiatives. His research interests span modelling and representation of healthcare knowledge, multimodal interfaces, telemonitoring, mobile health, predictive and prescriptive models, clinical decision support systems and interoperability to progress beyond the State of Art in digital health domains such as integrated care, personalized medicine and biomechanics.