

#BRAINHEALTHCONFERENCE2024

9–10 | December | 2024

Towards a Strengthened European Cooperation in Brain Health Research

Budapest

brainhealth.nkfi.gov.hu



#BRAINHEALTHCONFERENCE2024

Set of recommendations for a high-quality European Brain Health research collaboration with multistakeholder approach

The “Towards a Strengthened European Cooperation in Brain Health Research” conference, organized by Hungary’s National Research, Development, and Innovation Office (NRDIO) under the Hungarian EU presidency in collaboration with the European Commission, marks a significant milestone in addressing one of Europe’s most critical health challenges. Held on December 9-10, 2024, in Budapest, the event brought together renowned scientists, policymakers, and stakeholders from across the continent to foster interdisciplinary dialogue and promote collaborative efforts in brain health research.

Brain health encompasses neurological and mental well-being, including neural development, plasticity, functioning, and recovery throughout the human lifespan. With over one-third of Europeans affected by brain-related conditions, from Alzheimer's and Parkinson's disease to depression and developmental disorders, the need for coordinated research and innovative solutions is urgent. The EU spends approximately €800 billion annually on mental health care alone.

The conference supported key priorities of the Hungarian EU presidency, including reducing fragmentation in Europe's research and innovation ecosystem and enhancing the societal impact of EU-funded initiatives. By emphasizing citizen engagement and collaboration with healthcare providers, private sectors, and regulators, the event aligned with the Framework Agreement for the Strategic Research and Innovation Agenda of the Brain Health CSA, aiming to translate ground breaking research into accessible and impactful solutions for patients and caregivers across Europe.

The conference served as a platform to highlight interdisciplinary collaboration, promote best practices, empower stakeholders, and introduce practical tools. Panel discussions and breakout sessions explored ways to integrate diverse fields such as neuroscience, psychiatry, and public health, fostering a comprehensive understanding of brain-related challenges. Experts shared insights on overcoming obstacles in implementing research outcomes and strengthening ties between basic and clinical research. By involving patient organizations and widening countries in research discussions, the event underscored the importance of inclusive and equitable science.

The Brain Health CSA published the Framework Agreement for its Strategic Research and Innovation Agenda in the making in January 2024. As the conference focused on the importance and practicalities on the multi stakeholder approach in Brain Health research, a collection of recommendations was produced that contribute to the following key approaches defined by the Framework Agreement: Bridging with health care providers, private sectors and regulator ("This fourth pillar is of utmost relevance since the CSA consortium recognizes the capital importance of appropriate and responsible translation of research outcomes into affordable solutions to improve the quality of life in health and disease") and Citizen engagement (A fifth pillar will be dedicated to empower all citizens including patients and careers).



Message

01

Effective European collaboration needs to be done through stakeholder engagement

The importance of the multi-stakeholder approach was one of the key elements of the Brain Health Conference. It is clear that closer coordination and collaboration between different actors involved in the field of brain health research is essential to achieve the desired objectives of European research and innovation efforts. The effectiveness of research is improved when professionals work together. A European Commission official highlighted that brain diseases affect not only the person who suffers from it, but also their environment, the healthcare system and the economy too.

Stakeholders highlighting that no one can see all sides of a problem from the same perspective. To be able to reach our maximum potential, there is a pressing need to create a comprehensive European brain health ecosystem through capacity building and strategic coordination between stakeholders, such as researchers from different fields, industry, health care professionals and also patient organizations. The conference highlighted that patients are one of the key stakeholders of this field, because of their valuable insights that make science more actionable. The

PREMOS initiative, aims to improve the translational value of preclinical models by working with patient representatives and clinicians.

Although brain health is an increasingly important area in European research funding, there is still a need for researchers to make the importance of this field more visible, and for funding bodies and policy makers to understand the value brain health research brings into making the lives of society better. One funding agency representative highlighted that overcoming this fragmentation in research and innovation was one of the priorities of the Hungarian Presidency, both on the geographical level, but also in the quadruple helix innovation ecosystem. Hungarian government representatives also credited Hungary's progress in innovation over the past decade to increased collaboration between academia and industry and a significant push for digitization. The coordination of strategic investments from the public and private sphere is clearly a key issue. The importance of public investment being aligned with the research value chain was stressed.

Message

02


International cooperation creates crucial European added value in research

International collaboration in brain health research in Europe is essential to maximize impact, inspire innovation and address shared challenges. Bringing together researchers across the EU creates added value that cannot be reached at the national level, bringing synergies between common objectives and leads to more effective solutions. A representative of the European Federation of Neurological Associations stressed that collaboration is particularly important for innovation, as bringing together the best minds improves problem solving and accelerates progress.

Although healthcare remains a national competence, it is useful to learn from each other's successful practices and work on making collaboration across borders easier. Researchers stressed the importance of pooling together different skills, and for Europe to use its diverse expertise fully and that the greatest strength of

European cooperation lies in integrating researchers from different countries, disciplines and levels of experience.

It is clear that a common European framework for brain health research is going to be helpful in allowing individual nations to implement solutions in line with their own capacities, while benefiting from shared knowledge and infrastructure. A European Commission representative also highlighted that coordination of funding and research efforts between EU member states and associated countries is key to maximizing the impact of scientific results. While there are still challenges ahead, coordinated efforts provide a special opportunity to drive European innovation and improve healthcare outcomes. Only by working together can lasting success in brain health research be achieved.



Message

03

Patient involvement in the research process increases the real-world impact of results. Patients are key stakeholders in the research progress.

As crucial stakeholders in the field of brain health, patients offer unique perspectives that increase the relevance and real life applicability of research findings. The lived experiences of patients provide unique insights, and involving them in the research progress is essential to make sure that scientific results have a meaningful impact in the real world and can be translated into treatments that are needed for patients.

Patient organizations play a key role in advocating for the visibility of patient experiences. One stakeholder highlighted the critical role they play in the multi-stakeholder approach of brain health research, and the development of new disciplines, contributing to collaboration with competitive skills. Another stakeholder brought attention to the positive effect of peer to peer storytelling, which inspires other patients to share their own perspectives and also informs researchers.

However, representing different patient backgrounds, experiences and opinions all in one research initiative can pose a big challenge for researchers, highlighted by a stakeholder. He stressed that researchers need to take a proactive approach to patient engagement, while also being mindful of when and how to engage patients to maximize impact with minimal burden.

Stakeholders called on funding institutions to prioritize patient organizations, in order to give them more recognition in their role in driving research priorities. Policy makers and researchers also need to take into account the diversity of patient populations, particularly those from disadvantaged backgrounds, to ensure that research results and new technologies benefit all of European society.



Message

04

A holistic approach of brain health is needed for the efficiency of the health ecosystem.

A holistic approach to brain health is essential to improve the efficiency of the health ecosystem and to boost research results and make treatment more personalized. Because the brain is such a complex organ, efforts in brain health research should bring together many different professionals, working for the same goal. There is a need for taking a broader perspective that includes brain-body interactions and genetics to address complex brain functions and improve societal structures. Hungarian research network representative advocated for combining basic research with a holistic approach to maximize its real impact.

Challenges, such as brain ageing need to be addressed through a combination of research, lifestyle change and market-driven innovation. A researcher also highlighted how seemingly separate factors such as prenatal stress, maternal obesity and poor nutrition are common underlying mechanisms that influence brain development negatively. This underlines the need for interdisciplinary research to bridge the gaps between different fields.

Research network members pointed out that the adoption of a holistic approach could essentially lead to a more integrated and quality-based healthcare system across Europe and stressed the importance of prioritizing prevention, diagnosis, care and ethical considerations in current European funding initiatives.



Message

05

Health Literacy should be increased in society.

Increasing health literacy in society is crucial for public well-being, preventing the acceleration of brain related disorders and for a better understanding of the importance brain health in society. There is a pressing need for better education on this topic across Europe. There are many social determinants that contribute to brain health, such as economic stability, access to education and healthcare, environment and family status, highlighting their impact on health. It was also advocated for a holistic and person centered-approach to patient care, stressing the importance of prevention, rehabilitation and the support of caregivers.

According to a study, the majority of citizens would change their diets to reduce the risk of cognitive decline and heart disease if they had more knowledge, which highlighted a gap in both

public and professional understanding of the role of diet in brain health. There are also noticeable disparities between research findings and their implementation in everyday life, particularly with regard to lifestyle changes such as diet, exercise and social interaction.

The treatment of brain disorders and taking care of patients requires significant European resources and puts a strain on healthcare systems, making brain health a key priority area for research and innovation funding. Efforts need to be focused on increasing the health literacy of society to be able to make healthier lifestyle choices and improve brain health. Slowing down the rapidly increasing number of cases in brain disorders should be a top priority for aging European populations.



Message

06

Bridging the gap between research and the market is essential for European competitiveness.

Translating research results into real solutions remains a major challenge in the field of brain health, which requires closer collaboration between researchers, industry and policy makers. The conference highlighted the pressing need to bridge the gap between scientific results and market applications.

European Commission officials noted that while Europe excels in research, it struggles to commercialize innovations, so it is crucial to strengthen collaboration and leverage existing initiatives. They also stressed the role of public-private partnerships in ensuring that research leads to tangible products and services.

It is important that research actually benefits patients and results do not remain only in scientific journals. A group leader from Hungarian research network stressed the importance of moving from “technology-driven” innovation, where solutions are developed without clear demand, to “market-driven” innovation, which directly addresses pressing societal needs. All the actors of this process need to make continuous efforts for research to reach its goal of being applicable and useful. The discussions clearly emphasized the need for interdisciplinary collaboration, and a strong innovation ecosystem that will ensure that research outcomes deliver significant societal benefits. There are already existing initiatives in place that policy makers can capitalize on to strengthen European competitiveness.



Message

07

Talents need to be mobilized from all over Europe

Pooling talent from all over Europe, especially from the Widening countries, is essential to foster an inclusive and innovative research ecosystem. Truly innovative ideas can come from anywhere, so it is of outmost importance that the less-well performing regions of the EU also get real access to the same opportunities as the leading innovative member states. To increase their participation in EU projects, Widening countries often need more support to build capacities, establish more connections and participate in more inclusive programs, such as co-funded partnerships. There is a clear need for more diversity in research funding and more visibility of the excellent research that is facilitated in those regions.

Coming from Hungary, a research network member pointed out that making face-to-face contacts and active participation in relevant events is key for researchers, while the language

barrier remains a major obstacle. Representative of a Brain Council from a Widening country added that Widening regions often show high efficiency in terms of return on investment, and there is also an increase of online collaborations, accelerated by the COVID-19 crisis, that has made cross-border research more accessible.

It is clear that overcoming the geographical fragmentation of European research efforts should be a top priority, because scientific breakthroughs, innovative solutions and cutting-edge technologies can be produced anywhere in the EU. Efforts should be focused on creating a single European research ecosystem in the field of brain health. In order to be more efficient, bureaucratic barriers need to be minimalized, and European policies should ensure that researchers from all regions can fully contribute to and benefit from initiatives.



Message

08


Dedicated research infrastructures are essential for efficient data management

It has become clear that effective data management for brain health research requires dedicated research infrastructures that facilitate data storage, sharing and access across the European Research Area. These infrastructures play a critical role in linking different methods, tools and data archives, while also streamlining research efforts to minimize duplication. Organized efforts ensure that valuable insights are not lost and make research results available for cross-border use.

Research network representatives from around Europe stressed the importance of viewing brain data as FAIR - findable, accessible, interoperable and reusable - to encourage broader collaboration. They pointed out the need for standardization of data, establishing European protocols to

maximize research impact and to increase trust in existing infrastructures. Knowledge is often lost when researchers move between laboratories or archive data, which raises the importance of continuity and long-term sustainability of research projects. While efficient systems are costly to set up, the cost of inefficiency is much higher in the end.

However useful they are, many researchers are not aware of the role and value of these infrastructures, despite their crucial contribution to scientific progress. Stakeholders called for greater efforts to raise awareness and commitment to these tools, which advance European research efforts.



Message

09

There is a need for less administrative burden in the European Research Area.

Reducing administrative burdens is crucial for achieving more productivity in the European Research Area. There is a need coming from researchers for simplified procedures and increased institutional support to foster a thriving and competitive research environment in Europe. Writing time-consuming submissions for proposals poses a great burden on the community, who need more support from policy makers and funding agencies to be more efficient.

The concept of “consortium fatigue” was introduced, highlighting the significant time requirements international collaborations take up, which often leave researchers with less time for actual scientific work. The excessive documentation and administrative burdens can discourage researchers from participating in valuable projects and reduce their willingness to engage in large-scale initiatives. It is clear that Europe could benefit from simplified funding mechanisms and easier cross-border collaboration methods.

Policy makers should also focus on harmonizing European and national data sharing policies and other regulations that are relevant to international collaboration in research. A researcher also called for more funding for innovative and exploratory research, and stressed the need to reassess the way scientific success is measured to better support cutting-edge innovation and inclusivity. During an interactive discussion, the audience agreed that one of the biggest challenges is the overwhelming competition between research proposals, which all set out to solving important health related problems, but only a few can receive funding at the end. They added that this selection procedure should be well-designed in order to give space to the areas that need innovation the most and highlighted the need for a more precise European monitoring system in order to be able to assess the results better.

#BRAINHEALTHCONFERENCE2024

