

JPND's role in facilitating brain health partnerships in Europe and its international strategy in expanding research partnerships without boundaries

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The name JPND (EU Joint Programme - Neurodegenerative Disease Research) is synonymous to the largest global research initiative for Neurodegenerative Disease (ND) research in Europe and beyond. It is also known for promoting ND research without boundaries. Indeed, one of JPND's key objectives is to fortify its work in brain health partnerships in Europe, to better combat the challenges of ND and of Alzheimer's disease in particular. The economic and social challenges in facing these diseases will only continue to grow; therefore, it is crucial that there is alignment in ND research and partnerships towards brain health that will help address and alleviate the increasing societal and economic burdens of brain disorders.

What is JPND?

JPND's unique programme enables the 30 participating countries to collaborate on tackling the challenge of ND. JPND is a non-binding collaboration relying on trust among its members who engage voluntarily on a shared vision, a reactive management structure and a common Strategic Research and Innovation agenda (SRIA).

JPND supports highly competitive transnational collaborative projects that link research teams from several countries and by juxtaposing large national research grants. In doing so, JPND has created a virtual common pot that efficiently supports each team of researchers towards a shared objective.

JPND calls incentivise translational approaches associated with high-level basic research. However, as ND research is not limited to finding curative treatments, these chronic diseases also require other forms of support for both the patients and their caregivers. For this reason, JPND also strongly supports social and healthcare research and public and patient involvement.

JPND and Patient and Public Involvement

Another crucial component in JPND's move towards stronger brain health partnerships is to foster greater public and patient involvement (PPI) in brain health research. JPND has been calling for heightened awareness in the need to incorporate PPI in ND and brain health research. There is an overt call for the strategic implementation of PPI in JPND's annual calls, the encouragement of active PPI participation in all of JPND-supported projects, the training of public, patients and patient advocates, the running of workshops emphasising PPI, the acculturation of scientists and physicians to PPI and dedicated PPI pages on JPND's website to increase awareness of the important role PPI plays in brain health research.

JPND's international strategy

As a 30 member strong initiative, the investment in ND research through joint transnational calls has increased. As of now, the total investment is 190 million euros. With its annual transnational calls for research projects and its offer of research databases, JPND is now a reference for European and global knowledge and an innovation platform in the area of ND. Nearly all JPND member states have a national research strategy in ND. The Expert Center for Young-onset Dementia in the Netherlands, whose research agenda is based on the JPND Strategic Research and Innovation Agenda (SRIA), is testimony to the global outreach of JPND. The national dementia research programme of 2021-2030 in The Netherlands, with a total budget of over €150 million, is based on the JPND SRIA.

Moving forward, JPND plans to intensify bilateral contacts with various countries, focusing on their specific research capacities and connecting with their government's policies. JPND also leverages on available networks like the World Dementia Council (where JPND has a seat) to reach out to new contacts.

How can Europe address the challenges of brain health?

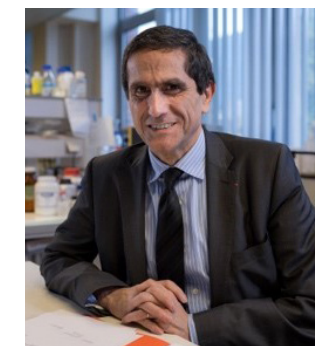
Europe can address the challenges of brain health by capitalising on existing international initiatives like JPND, facilitating access to infrastructure and resources, structuring brain research area, reinforcing patient and public involvement and accelerating research transfer and innovation. Amongst European brain health collaboratives, there is a need to strengthen collaborations between each one and to work towards establishing a common brain health agenda. In the last ten years, both the European Commission (EC) and its Member States (MS) have established and led initiatives in Europe to face these challenges collectively. To date, there is JPND, the largest global collaboration in this field/domain; NEURON – an EC ERANET partnership that supports basic, clinical and translational research in the fields of brain diseases and the Human Brain Project – an EC's Future and Emerging Technologies Flagship funded by the seventh framework programme that aims to put in place a unique Information and Communications Technology-based infrastructure for brain research. In 2019, together with the European Brain Council, these three initiatives began discussions in the context of an EU-funded European Brain Research Area (EBRA) EC Coordination and Support Action, to discover operational synergies, identify strengths and gaps and foster alignment across European and global brain initiatives.

A European Brain Research Area

In February 2022, EBRA released its long-awaited European Research Inventory and Mapping Report, providing insight into the brain research activities that are funded at the European level within the EU framework programmes FP7 and Horizon 2020 (the Framework Programme for Research and Innovation (2014-2020) under the ERA-Net Cofund programme), as well as the funding initiatives of JPND, ERA-NET NEURON and the Human Brain Project. The mapping report gives an overview of the current state of brain research in Europe and the areas of brain research (if any) that are being focused in Europe. The report shows that, in spite of increased support in brain research, funding is still lacking in all areas of brain research in the EU. More focus is needed on public and patient engagement and on enabling data sharing. From 2007 to 2019, the EC and leading European brain research initiatives allocated €6 billion to about 4,000 brain research projects, an average of €500 million per year. From 2008 to 2012, an average of 400 million was invested per year, increasing between 2014 to 2018 to 550 million, marking a steady growth.

However, continued funding of research consortia across countries is key for a lasting impact on collaboration and innovation in the European and global brain research area.

“It is now time to accelerate this momentum through an ambitious partnership on brain health in Horizon Europe under a coordinated approach.” –



Philippe Amouyel, MD, PhD, chairs the EU Joint Programme on Neurodegenerative Diseases research (JPND), a 30-country led initiative, including Canada and Australia, aimed at tackling the challenge of neurodegenerative diseases, the largest global research collaboration in this field. JPND

is a joint programming approach to research collaboration in Europe and beyond, bringing countries together to address challenges that are over the scope of any single nation. He is Professor of Epidemiology and Public Health at the University Hospital of Lille in France. He heads a large academic research unit working on public health and molecular epidemiology of aging diseases. His research is devoted to the study of determinants, mainly genetic, of Alzheimer's disease and to the prevention of cognitive decline. He participated in the discovery of more than 90% of the genetic susceptibility factors published in Alzheimer's disease. From 2002 to 2011, Philippe Amouyel headed Institut Pasteur de Lille. Since 2008, he has been the general director of Fondation Alzheimer, a private non-profit foundation dedicated to supporting innovative and cutting-edge research for Alzheimer's disease and related disorders that promotes the prevention of cognitive decline. Philippe Amouyel is member of the World Dementia Council for a global action against dementia.