

Pledge for Science: Brain Research and Innovation in the EU

Brain disorders – neurological and mental alike – are widespread, highly disabling and often difficult to treat. Approximately 60% of the European population lives with a neurological condition[1]. Prior to the onset of the COVID-19 pandemic, mental health problems already affected around 84 million people in the EU, amounting to one in every six citizens[2]. These conditions represent a high individual, social and economic burden and contribute to the global disease burden and disability.

The brain is the most complex organ of the human body. Understanding how the brain works, how brain diseases progress (basic research) and finding treatments and cures for these diseases (applied research) is a long-term endeavour. Brain research is highly interdisciplinary, requiring the use of a wide range of research techniques, based on different models – human, artificial, digital and, predominantly, animal – which remains essential for progress in this domain.

Brain research and innovation must therefore be recognised, more than ever, as a health and research priority in the EU. The scientific community calls upon national, EU and international policymakers to support the development of a European Brain Research and Innovation Plan, combining research and public health initiatives to address brain function and disorders in a comprehensive, collaborative and innovative way:

- **Enhance the collaboration between all stakeholders** to foster dialogue, exchange knowledge, facilitate business development and accelerate investment in basic neuroscience and brain disorders research and innovation.
- **Facilitate the creation of a global brain research agenda** towards understanding brain function and the prevention, diagnosis, treatment, and care of diseases, focusing on enhancing synergies and accelerating progress.
- **Recognise that animal research remains key for progress in brain research** given the absence of workable and validated alternative models[3], while also **fostering the use of advanced technologies** such as modern neuroscience tools, molecular, physiological and imaging approaches, artificial intelligence, machine learning, and data science that are all drivers of research into a comprehensive understanding of brain function and disease.
- **Facilitate concerted actions to build research infrastructure**, strengthen human resources in research and development, increase collaboration among the research community, health professionals, people living with brain disorders and the private sector to catalyse brain research and development.



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- The image displays a comprehensive collection of logos for European neuroscience organizations, arranged in a grid. The logos represent a wide variety of fields within neuroscience, including brain research, neurodegenerative diseases, mental health, and basic neuroscience. The organizations are from various European countries, including the UK, Germany, France, Spain, Italy, and the Netherlands. The logos are presented in a clean, professional manner, with each logo clearly visible and legible.
- Logos visible include:
- EBC** (European Brain Council)
 - FENS** (Federation of European Neuroscience Societies)
 - IBRO** (International Brain Research Organization)
 - ecnp** (neuroscience applied)
 - European Animal Research Association**
 - EFNA** (European Federation of Neurological Associations)
 - EPA** (European Psychiatric Association)
 - European Association of Neurological Societies**
 - EUROPEAN PAEDIATRIC NEUROLOGY SOCIETY**
 - ean** (European Association of Neuroanatomists)
 - EC** (European Council)
 - Partners**
 - SRPSKI SAVET ZA MOZAK** (Serbian Brain Council)
 - CPC** (Cognitive Psychology Centre)
 - Hjernerådet** (Danish Brain Council)
 - FUNDACIÓN DE NEUROCIENCIAS**
 - Hellenic Brain Council**
 - MNS** (Mediterranean Neuroscience Society)
 - GBC** (German Brain Council)
 - ms international federation**
 - EARLS** (European Association for Research on Longitudinal Studies)
 - SEBBM** (Societas Europaea Britannica Britannica)
 - Tallaght University Hospital**
 - Ospidéal Otisocite Thamlachta**
 - Pain Alliance Europe**
 - ns** (Neuroscience School of Advanced Studies)
 - PRINCIPE FELIPE** (Centro de Investigación)
 - EFic** (European Federation of Intellectual Circles)
 - neuro** (Neuroscience)
 - OXFORD HEALTH POLICY FORUM**
 - MS** (Multiple Sclerosis)
 - LE RU** (Leuven Research University)
 - VIB** (Vlaamse Instelling voor Biologisch Medisch Onderzoek)
 - CONSEJO ESPAÑOL DEL CEREBRO**
 - EBRAINS**
 - NWG** (Neuroscience Working Group)
 - ACTION PARKINSON**
 - PAREA** (Psychiatric Access and Research European Alliance)
 - CCC** (Coalition to Cure Cerebral Palsy)
 - MT** (Miguel Hernández)
 - GV-SOLAS** (Gesellschaft für Versuchstierkunde Society for Laboratory Animal Science)
 - UNIVERSITAT JAUME I**
 - BAP** (British Association of Psychopharmacology)
 - TU Delft**
 - BRSF** (Brain Research Society for Functional Studies)
 - emsp** (European Multiple Sclerosis Platform)
 - parkinson's europe**
 - ESO** (European Stroke Organisation)
 - AEOL** (Association of European Olfactory Laboratories)
 - The Institute of Cancer & Crisis**
 - dgppn** (Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde e.V.)
 - NeuroLab**
 - NeuroFederation**
 - BCBNL** (Brain Cancer Brain Network)
 - stardust**





