



Joint Programming in Neurodegenerative Disease Research (JPND)

Disseminate, liaise, exchange, network

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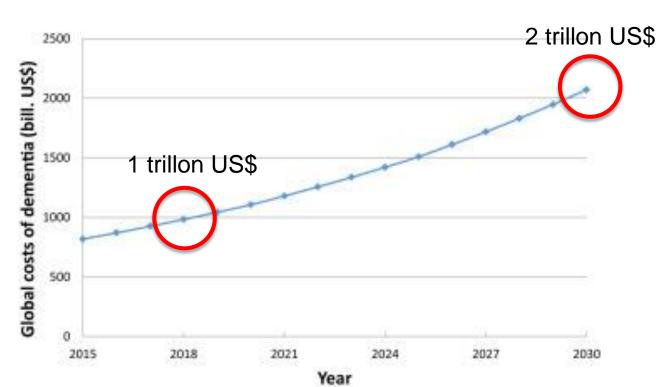
A major global challenge





Forecasted global costs of dementia 2015-2030







The conditions of success



- Increase the critical mass of physicians and scientists involved in neurodegenerative disease research
- Increase the **funding** dedicated to neurodegenerative disease research (10x less than in cancer research)
- Increase the number of collaborations globally



The largest global research initiative aimed at tackling the challenge of neurodegenerative diseases

The Joint Programming Concept



Joint programming was originally created as a *Member States-led* initiative in Europe. It aims to address "grand challenges" to EU and global society by *coordinating* **national research programmes** to increase the impact and effectiveness of research efforts.



Source: Communication from the Commission to the European Parliament, the Council, the European Economic and social committee and the Committee of the Regions toward Joint Programming in Research: Working together to tackle common challenges more effectively - COM(2008) 468 final, Brussels



Overcoming barriers



- New forms of long-term collaboration
- Fostering and testing innovative approaches and science-policy cooperation
- Gateways for scientific excellence, relevance and international cooperation
- Strategic platforms for alignment

Joint Programming - principles

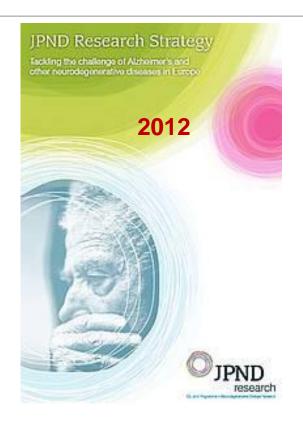


Three pillars

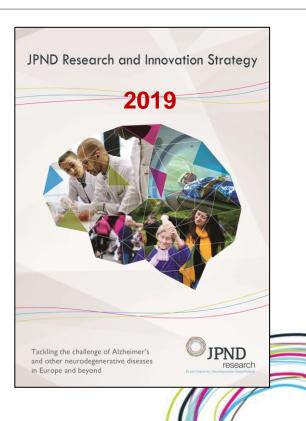
- Shared vision: JPND countries engage <u>voluntarily</u> and on <u>a variable-geometry</u>
- Reactive management structure
- Common strategic research and innovation agenda

The JPND Research and Innovation Strategy





- 1. Origins of neurodegenerative diseases
- 2. Disease mechanisms and models
- 3. Disease definitions and diagnosis
- 4. Developing therapies, preventive strategies and interventions
- 5. Health and social care



Scope of the JPND initiative



Disease areas

Alzheimer's disease and other dementias
Huntington's disease
Motor Neurone Diseases
Parkinson's disease and
PD-related disorders
Prion disease
Spinal muscular atrophy (SMA)
Spinocerebellar ataxia (SCA)

Scientific

- Animal models
- Biobanks
- Cohorts/registries
- Disease pathology

Focus on Three Domains

Medical

- Early diagnosis
- Prevention
- Clinical trials

Social

- Health care delivery
- Home automation
- Health economics
- Ethics





What are the goals of JPND?

- To develop new treatments and preventive strategies
- To improve health and social care approaches
- To raise awareness and de-stigmatise neurodegenerative disorders
- To alleviate the economic and social burden of these diseases

Aligning to defragment and enhance collaboration JPND













Internationalisation: Europe and beyond

JPND is the largest global ND research initiative led by EU countries, with 30 participating

EU member states

Associated countries

Partner countries

Collaboration with USA NIH in 2018, renewed in 2020 Exploring potential for future collaboration with

- EU13 countries
 - Brazil
 - China
- India
- Japan
- Singapore
- South Korea

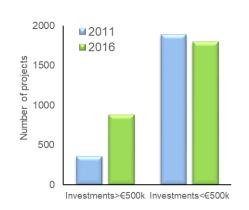
Croatia Czech Republic Germany Luxemboura Portugal

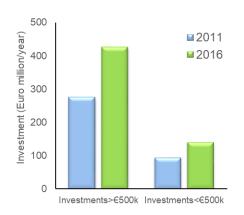
Albania

JPND Mapping: bigger investments



2016	Number of Projects	Full Value (€ Millions)	%	Per Year (# Millions)	%	
Total	2672	2,217	-	566		In 2011 → 370 M€/y
Investments >€500k	881	1,722	77.7	425	75.1	53% overall
Investments <€500k	1292	256	11.5	87	15.3	
Fellowships	499	239	10.8	54	9.6	



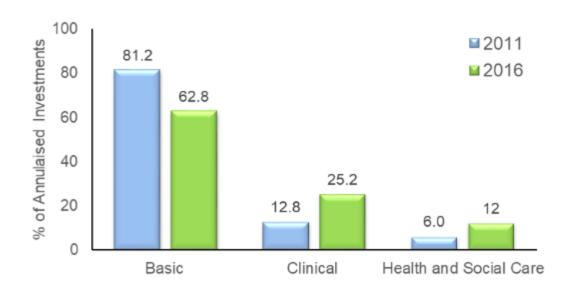


JPND calls were a major factor in this change



Research Funding: by Research Category





Percentage of annualised funding by research category across all investments in 2011 and 2016. Total investments for all data whether above or below €500k



JPND Alignment Actions, working together











Harmonisation and Alignment in Brain Imaging Methods for Neurodegeneration: how to implement the recommendations of the working groups within the framework of future JPND actions?

Paris, December 6, 2019 Biopark - Bâtiment A - 8 Croix de Jarry 75013 PARIS France Room: Paris (2nd floor)



Publicly available tools and resources for researchers and stakeholders



Global Cohort Portal

 Database on Experimental Models for Parkinson's Disease

 A map of funded research, resources and infrastructures





Collaboration – Interaction - Dissemination

WHO-Global Dementia Observatory

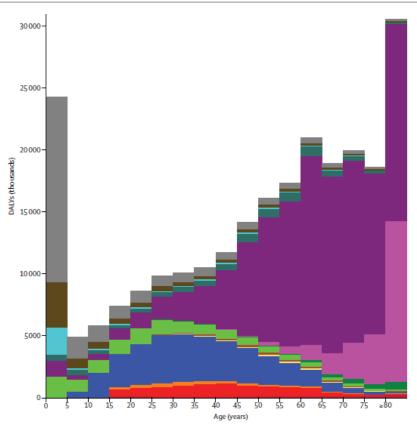


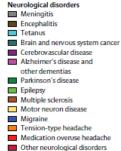
- International Alzheimer's Disease Research
 Portfolio
- Collaboration with academia and industry
- Patient Public Involvement











380 million patients 800 billion Euros annually in Europe alone

Global, regional, and national burden of neurological disorders during 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015

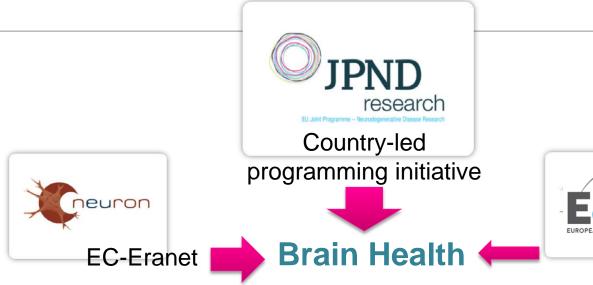
GBD 2015 Neurological Disorders Collaborator Group*

Lancet Neurol 2017; 16: 877-97



Aligning initiatives toward Brain Health













2020 JPND transnational call: Outlook



"Novel imaging and brain stimulation methods and technologies related to ND"

- The aim of the call is to establish a number of ambitious, innovative, multidisciplinary and multi-national research projects that will advance the development and the use of imaging technologies and brain stimulation techniques to better understand, diagnose or treat neurodegenerative dis.
- Patients, carers and the public must be adequately involved at each stage of the research process.
 Milestones
 - 20 countries joined the call
 - · Expected budget: ~20 M€
 - Pre-announcement: December 2
 - Scheduled call launch: January 7
 - Application deadline: March 3





JPND / JPco-fuND Symposium

- Showcase and dissemination of up-to-date research achievements from 51 completed JPND-supported projects (Call 2011-2013 and JPco-fuND 2015) to all relevant stakeholders.
- Networking and knowledge exchange between JPco-fuND projects and other JPND-supported projects, as well as between other conference attendees.
- Train young scientists from the JPND funded projects.





Practical information

- Visit the posters in the Marble room and Throne room during the coffee / tea break to follow on the discussion
- After the last parallel sessions on 4 workshops (end time 18:10) you are invited for the networking dinner in the Marble room and Throne room
- Poster award ceremony day 2 15:30
- Tweets about our symposium
 - #jpnd
 - #jpndsymposium2019
 - #neurodegeneration







Next JPND/Jpco-fuND symposium

See you in 2021



JPND research EU Joint Programme - Neurodegenerative Disease Research

Keep up to date

- Visit the new JPND website:
 - http://www.jpnd.eu
- Sign up to the JPND News Feeds
- E-mail us: <u>secretariat@jpnd.eu</u>









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JPND Progress

Click here for the latest progress and updates from ongoing JPND activities.



JPND Newsletter

The JPND Newsletter is a bi-annual "look back" at JPND activities and highlights.