

## Tackling Neurodegenerative Diseases



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**N**eurodegenerative diseases such as Alzheimer's and Parkinson's are a truly global challenge. Most of these diseases remain incurable and are strongly linked with aging populations. Dementias alone affect more than 7 million people in Europe and their care is estimated to cost €130 billion a year. The challenge facing the world of diagnosing, treating and caring for people affected by neurodegenerative diseases is extremely daunting and no single country alone has the expertise, or resources, necessary to tackle all of the big questions in this area.

The EU Joint Programme - Neurodegenerative Disease Research (JPND) was established in 2009 as the pilot of the Member State-led Joint Programming Initiatives (JPI) to enable participating EU Member States to work together on the challenge of age-related neurodegenerative diseases, in particular Alzheimer's.

In the past five years, JPND has become a global initiative with 28 countries now participating (21 EU Member States, 5 Associated Countries and 2 Third Countries - Canada and Switzerland). Tremendous progress has been made by JPND in that time in terms of increasing coordination, collaboration and alignment between national research programmes related to neurodegenerative disease research. This has resulted in an unprecedented mobilization of awareness, human resources, actions, contributions and funding to tackle this problem which no country can address alone.

The past 12 months in particular have seen JPND countries work together very effectively in a number of priority areas with activities moving forward in parallel, creating the necessary trust

and alignment between the 28 participating countries in order to implement our Strategic Research Agenda (SRA).

Guided by our Phase One Implementation Plan (2012-2014), these actions include, but are not limited to:

- Annual Calls for Proposals - two calls closed in February this year in the areas of "Preventive strategies" and "Cross-disease analysis of pathways", the final results of which will be announced in Autumn 2014.
- Alignment Actions to determine research needs and opportunities in areas such as Longitudinal Cohort studies, Animal and Cell Models, Assisted Living Technologies, Palliative and End-of-life Care.
- Action Groups to promote engagement and partnership, including with the European Commission, patient organisations, industry and other international organisations.

These JPND actions, among others, are bringing together leading scientific experts, important stakeholders and funding bodies to investigate the key research questions and barriers to progress in these areas. It is likely that further actions (including calls for proposals) will be developed and launched during this phase, with more than €100 million in total due to be made available. Importantly, this funding will be in addition to, not instead of, other neurodegenerative disease funding.

It is important to note that JPND is moving beyond just calls for research proposals. Priority areas such as Longitudinal Cohort studies have been assessed through expert-led JPND Action Groups and their recommendations are being adopted by JPND. For example, a "rapid action" was launched in April 2014 to establish a series of community-led working groups to establish 'best practice' guidelines and methodological frameworks to overcome barriers to research in population studies and neurodegenerative disease-related cohorts. This call is supported by 10 JPND member countries and currently has a budget of €500k.

We are also moving towards realising another JPND medium-term objective - the development of cross-border transfer of funds. In order to do this, common procedures between JPND member countries need to be established and /or develop a common "pot" that could centralize the funding. This issue is central to the joint programming concept, and partnership with industry and the European Commission is vital to address this issue. We are actively pursuing collaborative actions with the European Commission in this regard.

### International Partnerships and Sustainability

JPND is also engaging in strategic partnerships both nationally and internationally, focusing on areas where expertise can be pooled and more progress can be made through collaborative efforts. Raising awareness of JPND among the new EU Member States (EU-13) will be a key focus in these efforts. It is worth noting that JPND was repeatedly highlighted as an example of successful international cooperation in dementia research at the 2013 G8 Dementia summit in London, and we are now working with the new global plans and initiatives emerging from the summit. A meeting was also organised with the Office of Science and Technology Policy at the White House regarding future partnership with the USA.

The most important question for JPND in 2014 is how it is going to sustain the progress already being made. Our initial support from the European Commission ends later this year, so we are now preparing the sustainable management structure which will see JPND successes in transnational collaboration in neurodegenerative diseases continue into the long-term in order to tackle these chronic and complex diseases.

For more information on JPND - visit [www.jpnd.eu](http://www.jpnd.eu) or follow us on Twitter @JPNDEurope