

EU Joint Programme - Neurodegenerative Disease Research (JPND)

JPND Call for Proposals:

"Mechanisms and measurement of disease progression in the early phase of neurodegenerative diseases"

Submission deadline for pre-proposals:

March 05, 2024, 12:00h (noon) C.E.T.

For further information, please visit us on the web

<http://www.jpnd.eu/>

or contact the JPND Joint Call Secretariat:

Sabrina Voß and Sara Breid

(+49) 228-3821 2111 or jpnd@dlr.de

This is an ERA-Net call which is part of JPcofuND2

1. INTRODUCTION

Neurodegenerative diseases are debilitating conditions strongly linked with age. Worldwide, there are estimated to be more than 50 million people living with Alzheimer's disease and related disorders, the most common class of neurodegenerative diseases. This figure is expected to double every 20 years as the population ages. With very few causal treatments being available today, neurodegenerative diseases have high personal, societal and economic impact.

In this context, the EU Joint Programme - Neurodegenerative Disease Research (JPND) has been established to better coordinate research efforts across countries and disciplines to more rapidly find causes, develop cures and identify better ways to care for people with neurodegenerative diseases. To identify research priorities, the JPND Research and Innovation Strategy, published in 2019, provides a framework for future investment.

It is known that the onset of neurodegenerative diseases occurs years before the appearance of the first clinical symptoms. However, our current understanding on the biological, psychological and social mechanisms that determine early disease progression as well as our ability to precisely monitor the course of the disease at pre-symptomatic stages is very limited. Delayed detection of disease progression may be the reason for the multiple failures observed in clinical trials during the past years. In this context, improving our understanding of the crucial biological mechanisms and psychosocial factors determining risk and resilience for neurodegenerative diseases is needed along with an enhanced measurability of disease progression through the establishment of advanced biological and psychosocial markers. Respective advancements may allow a more accurate identification of pre-symptomatic disease stages and a reliable monitoring of disease progression, thereby enabling a better prediction of disease trajectories and paving the way for new therapeutic and preventive approaches.

2. AIM OF THE CALL

JPND launches this joint transnational call for proposals with the aim of improving the understanding of disease mechanisms and advancing measurability of disease progression at early and pre-symptomatic stages of neurodegenerative diseases. Proposals submitted under this call may include, but are not limited to, the following types of research:

- Unraveling the influence of molecular, physiological, psychological and social factors and pathways on disease progression as well as discovering new factors and pathways;
- Defining key regulatory steps affecting the disease onset and progression;
- Combining molecular, psychological, social and physiological markers in order to increase the robustness of the diagnosis;
- Harmonization of the use of novel technologies and clinical measures to increase reliability and reproducibility of disease detection and monitoring;
- Identifying molecular, environmental, social and behavioral modulators of disease progression with the ultimate aim of determining risk, protective and resilience factors;
- Examining pathological processes related to neurodegeneration by using Artificial Intelligence and other cutting-edge technologies to understand the role of mechanistic pathways;
- Enhancing patient stratification by establishing measures and technologies to characterize clinical subgroups at pre-symptomatic stages, e.g. 'risk phenotypes' or 'at-risk' groups;
- Identifying compensatory mechanisms associated to early stages of neurodegenerative diseases;

- Systematically analyzing the influence of genetic, epigenetic and phenotypic variability underlying neurodegenerative diseases on disease progression;

3. PURPOSE

It is envisaged to fund a number of ambitious, innovative and multi-disciplinary consortia that will advance research on mechanisms related to neurodegenerative diseases by working together across national borders. The funding organisations that envisage to fund this call, with a view to adding value to their existing national activities, are listed below. The call will be conducted simultaneously by the funding organisations in their countries and coordinated centrally by the JPND Joint Call Secretariat.

- **Austria, Austrian Research Promotion Agency on behalf of BMBWF (FFG)**
- **Belgium, The Fund for Scientific Research (F.R.S.-FNRS)**
- **Canada, Canadian Institutes of Health Research (CIHR)**
- **Czech Republic, Ministry of Education, Youth and Sports (MEYS)**
- **Finland, Research Council of Finland (AKA)**
- **France, French National Research Agency (ANR)**
- **Germany, Federal Ministry of Education and Research (BMBF)**
- **Hungary, National Research, Development and Innovation Office (NKFIH)**
- **Israel, Ministry of Health (CSO-MOH)**
- **Italy, Ministry of Health (MOH-IT)**
- **Latvia, Latvian Council of Science (LCS)**
- **Luxembourg, National Research Fund (FNR)**
- **Netherlands, The Netherlands Organisation for Health Research and Dev. (ZonMw)**
- **Norway, The Research Council of Norway (RCN)**
- **Poland, National Science Centre (NCN)**
- **Slovakia, Ministry of Education, Science, Research and Sport of the Slovak Republic (MESR)**
- **Spain, National Institute of Health Carlos III (ISCIII)**
- **Sweden, Swedish Research Council (SRC)**
- **Switzerland, Swiss National Science Foundation (SNSF)**
- **Turkey, Scientific and Technological Research Council of Turkey (TUBITAK)**

4. REQUIREMENTS

Proposals submitted to this call must focus on one or several of the following neurodegenerative diseases:

- **Alzheimer's disease and other dementias**
- **Parkinson's disease and PD-related disorders**
- **Prion diseases**
- **Motor neuron diseases**
- **Huntington's disease**
- **Spinocerebellar ataxia (SCA)**

- **Spinal muscular atrophy (SMA)**

Project

Proposals should have novel, ambitious aims and ideas combined with well-structured work plans and clearly defined objectives deliverable within three years. Approaches should be integrative, combining relevant scientific approaches (e.g. clinical, epidemiological, experimental) and involve state-of-the art methodology and techniques. The potential of existing cohorts and data sets should be exploited. Proposals must be hypothesis-driven and should have a strong emphasis on reliable methodology. They should consider the diversity and differentiation of the target group, including gender, ethnic background, age, socioeconomic situation, level of education, cultural background, migration status and sexual orientation, where it is relevant for the implementation of the project.

Collaboration

Each consortium should have the critical mass to achieve the identified scientific goals and should specify the benefit of working together. Applicants should demonstrate that they have the expertise and range of skills required to conduct the research project or that appropriate collaborations are in place. Utilizing expertise from areas outside of neurodegeneration research, which can bring innovation to the approach, is encouraged. The value that will be added to ongoing activities and the expected impact on research, medical application and well-being of patients should be explicitly stated. If a proposal is complementary to research already funded or submitted to other funding initiatives, it must be stated how JPND funding can supplement the ongoing activities.

Patient and Public Involvement (PPI)

Most patient-related research would be impossible without the active involvement of patients. Thus, JPND has determined that PPI should be an integrated part of the implementation of its Research and Innovation Strategy. Proposals to be funded under this call will therefore need to adequately involve patients, carers and the public. Consortia are expected to make every reasonable effort to include approaches that involve these groups, where appropriate, at each stage of the research process, including the preparation of the application (see the [JPND website](#) for further information). In the full proposal (see section 6.3), the PPI approach of the consortium must be described in detail following the criteria outlined in section 7.1. The quality of the approach will be evaluated and considered for the funding decision.

Use of European infrastructures

To increase impact at the European level, it is encouraged to use European Research Infrastructure Networks such as [BBMRI \(Biobanking and Biomolecular Resources Research Infrastructure\)](#), [EATRIS \(European infrastructure for translational medicine\)](#) or [ECRIN \(European Clinical Research Infrastructure Network\)](#) as valuable resources and platforms for knowledge exchange. Information can be found via the [European Strategy Forum for Research Infrastructures in Europe - ESFRI](#). To further optimize benefit, data, tools and resources being generated within the research projects should be made widely available, considering national and international legal and ethical requirements. Access must be provided to other bona fide research groups. Consortia are strongly advised to define arrangements to deal with this issue across countries, while preserving integrity of study participants as early as at the submission of the preproposal.

Training

Training of young researchers and mobility (e.g. lab rotations and visits) within the consortia are encouraged if justified in terms of the training opportunities provided to the individual and the

needs of the field, in the context of the proposed workplan. Please note that there may be restrictions according to the specific regulations of each funding organisation.

5. ELIGIBILITY

Institutions

Under this scheme, joint transnational research proposals can be funded for a period of up to three years. Proposals may be submitted by research groups working in universities or other higher education institutions, non-university public or private research organisations, hospitals and other health and social care settings, as well as commercial companies, in particular small and medium-size enterprises (SMEs). Collaborations with companies from outside the traditional medical sector (e.g. computing, artificial intelligence) are welcome. With regard to the research setting and collaborations with companies, specific regulations of individual funding organisations as well as the EU State aid regulations must be considered when creating the consortium.

Consortium

Consortia may consist of partners who receive funding for research by funding organisations participating in this joint call (“regular partners”) as well as non-funded external collaborators. Regular partners are represented by the leaders of individual research groups (typically a principal investigator or a young academic group leader) within research institutions. If different research groups from the same research institution are requesting for funding, these groups must be treated as separate regular partners.

In addition, external collaborators (e.g., research groups from countries not participating in this call) may participate in proposals. External collaborators must secure their own funding. They must state in the proposal if these funds are already secured or how they plan to obtain funding.

Transnationality

Each proposal must involve a minimum of three and a maximum of six regular partners, including the coordinator, from at least three different countries participating in this call (see section 3). However, if the proposal involves at least one regular partner from an EU-13 country (Hungary, Latvia and Poland) or from Turkey, the maximum number of regular partners is extended to seven. For reasons of transnational balance, no more than two regular partners from the same country are allowed to join a proposal.

Whilst proposals are to be submitted jointly by regular partners from different countries, each regular partner will be funded by the corresponding funding organisation of their country participating in this call. In consequence, eligibility for funding and details of what may or may not be funded are subject to the specific regulations of the funding organisations and thus may vary. Information on specific regulations (e.g., budget restrictions, additional forms to be submitted or details on eligible costs) is provided in the [specific information sheets](#). In addition, applicants are strongly advised to contact their corresponding funding organisation (see section 9) to obtain the latest information. The inclusion of a regular partner that is not eligible for funding may result in the rejection of the entire proposal.

6. APPLICATION

There will be a two-stage procedure for applications: pre-proposals and full-proposals. At both stages, one joint proposal document shall be prepared by the consortium and submitted by the coordinator. In addition, some funding organisations request additional information to be submitted before the proposal submission (see [specific information sheets](#)). In case of any questions concerning the proposal submission, please contact the Joint Call Secretariat.

6.1 Pre-proposal submission

Pre-proposals must be submitted by the coordinator in electronic format no later than 12:00h (noon) C.E.T. on March 05, 2024, via the JPND [electronic submission system](#). No other means of submission will be accepted. A [pre-proposal template](#) is available at the JPND website. Adherence to this template is mandatory.

6.2 Revision of proposals

A revision is allowed after the pre-proposal evaluation under certain conditions and only to those consortia explicitly selected for the full-proposal stage. The following modifications are permitted in the preparation of a full-proposal:

- Adding or replacing regular partners. This should normally be restricted to one regular partner and the following cases:
 - Where a regular partner from the pre-proposal has been declared non-eligible or where the modification is derived and justified from the pre-proposal evaluation.
 - Where the aim is to include a regular partner from an underrepresented or an EU-13 country (Hungary, Latvia and Poland) or from Turkey and where such inclusion can be scientifically justified. Further information will be provided directly to the coordinator prior to the full-proposal stage.
- Including or excluding external collaborators.
- Changing the work plan and/or the budget where it is either derived from the pre-proposal evaluation or the modification of the consortium (as outlined above). Changes to the budget of individual regular partners require approval by the respective funding organisation.

Applicants are responsible for ensuring that changes applied during the revision are in line with the eligibility criteria of the call (see section 5). Full-proposals exceeding the conditions for revision or the calls eligibility criteria may be rejected without review. Applicants are strongly advised to consult the Joint Call Secretariat and/or the respective funding organisations in advance of submission.

6.3 Full-proposal submission

Full-proposals will be accepted only from those consortia explicitly invited to submit them by the Joint Call Secretariat. They must be submitted by the coordinator in electronic format no later than 12:00h (noon) CEST on June 25, 2024. The Joint Call Secretariat will provide further information regarding the submission and a full-proposal template to the consortia. Adhering to this template is mandatory.

7. EVALUATION AND DECISION

Detailed information on the evaluation and decision making process can be obtained from the accompanying [procedures document](#).

7.1 Evaluation criteria and scoring

Pre-proposals and full-proposals will be evaluated according to the following criteria:

- **Relevance** to the aim of the call.
- **Scientific quality** including level of innovation, originality and feasibility.

- **Transnational added value** from working together as a research consortium, including planned scientific interaction, knowledge exchange and training.
- **International competitiveness** and scientific expertise of participating research groups, including diversity in gender, geographic and seniority.
- **Deliverable outcomes** in the short, medium and long-term, including risk assessment and management, including a focus on open science and open access.

In addition, full proposals will be evaluated according to the following criteria:

- **Quality** and accessibility of the lay summary in the proposal.
- **Plan for the promotion** of research outcomes and dissemination activities.
- **Feasibility and quality** of the co-design in the application, e.g. with PPI partners, the general public, etc.
- **Transcultural added value** of PPI activities by involving regular partners in different countries.

7.2 Evaluation and decision on pre-proposals

The Joint Call Secretariat will check the pre-proposals to ensure that they meet the formal conditions. In parallel, the involved funding organisations will perform eligibility assessments according to their specific criteria. Pre-proposals that do not meet the formal or eligibility criteria may be rejected without review. At least three reviewers will be asked to evaluate each pre-proposal that passes the checks on a written basis. Based on the recommendations, the Call Steering Committee will decide on full-proposal invitations. The Joint Call Secretariat will inform each coordinator about the outcome of the evaluation and provide information on the subsequent revision process (see section 6.2).

7.3 Evaluation and decision on full-proposals

Full-proposals will be checked and evaluated as described in sections 7.1 and 7.2. The Peer Review Panel will make funding recommendations for each full-proposal while considering also the evaluation results of the PPI approach and agree on a ranking order according to the evaluation criteria. Based on the recommendations and on the funds available, the Call Steering Committee will select the list of proposals for funding, in accordance with the national funding authorities where applicable. Funding decisions will be made by the relevant funding organisations and administered according to their terms and conditions, considering all other applicable regulations and legal frameworks. The Joint Call Secretariat will inform each coordinator about the outcome of the evaluation and the decision of the funding organisations.

8. FUNDING REGULATIONS, RESPONSIBILITIES AND REPORTING

The coordinator represents the consortium externally, acts as first point of contact and is responsible for its internal management in terms of formal responsibilities towards JPND (such as monitoring, reporting, intellectual property rights issues and sharing of data and resources).

The coordinator manages the preparation of a consortium agreement signed by all regular partners and external collaborators of the proposal, which is required within 6 months after the beginning of the project. It will specify as a minimum: decision-making authority, monitoring, reporting, intellec-

tual property rights management and sharing, and handling of data and resources, as appropriate. Administrative and funding arrangements will be stated in the consortium agreement to be a bilateral responsibility between each regular partner and the relevant funding organisation.

The coordinator submits a brief annual scientific progress report in January of each year and a final scientific progress report within three months from the end of the project to the Joint Call Secretariat. Those reports may be used internally for monitoring and evaluation purposes to assess the progress of the implementation of JPND’s Research and Innovation Strategy. It may be necessary for regular project partners to submit additional reports to their funding organisation, as required.

Funding recipients must ensure that all outcomes (publications, etc.) of transnational JPND projects and all other communications include a proper acknowledgement both of JPND and the respective funding organisations. For this purpose, a [JPND dissemination strategy](#) has been agreed to by all JPND member states. Adhering to the [JPND dissemination guidelines](#) is mandatory for researchers funded under the umbrella of JPND. From time to time consortia will be asked to work with the JPND Communications Manager and the funders on related communications (e.g., project summaries for the JPND website, blogs, tweets).

All regular partners and external collaborators of a consortium (hereinafter referred to as the “partners”) may as part of their activities individually or jointly with other partners collect or process Personal Data, as defined in Article 4(1) of Regulation (EU) 2016/679 of 27 April 2016 (General Data Protection Regulation, GDPR) or any applicable national data protection law. In such event, the partners shall individually or collectively with other partners be responsible for ensuring that the Personal Data is processed in accordance with GDPR or any applicable national data protection law and other applicable data protection legislation (“Data Privacy Legislation”).

9. CONTACT DETAILS

Please note that country specific requirements might apply to this call. For further information please contact your national representative:

Country	Funding organisation, contact details
Austria	Austrian Research Promotion Agency on behalf of BMBWF (FFG) Susanne Meissner-Dragosits susanne.dragosits@ffg.at +43 0664 88641809 +43 57755 4406
Belgium	The Fund for Scientific Research (F.R.S.–FNRS) Agnès Roba +32 2 504 9236 Florence Quist +32 2 504 9351 international@frs-fnrs.be
Canada	Canadian Institutes of Health Research (CIHR) Contact Centre Telephone: 613-954-1968 Toll Free: 1-888-603-4178 Support-soutien@cihr-irsc.gc.ca
Czech Republic	Ministry of Education, Youth and Sports (MSMT) Daniel Hanšpach +420 23 48 11 360 or Daniel.Hanspach@msmt.cz
Finland	Research Council of Finland (AKA) Päivi Kolu +358 29 53 35 028 or paivi.kolu@aka.fi
France	France French National Research Agency (ANR) Sheyla Mejia-Gervacio +33 178 09 80 14 or sheyla.mejia@agencerecherche.fr Anthony Petit +33 1 73 54 81 41 or anthony.petit@agencerecherche.fr
Germany	Federal Ministry of Education and Research, supported by DLR-PT Sabrina Voß, Sara Breid +49 228 38 21 2111 or jpnd@dlr.de
Hungary	National Research, Development and Innovation Office (NKFIH) Klara Horvath +36 18 96 37 48 or klara.horvath@nkfih.gov.hu
Israel	Ministry of Health (CSO-MOH) Irit Allon +972 25 08 21 67 or irit.allon@moh.health.gov.il

Italy	<p>Ministry of Health (MOH-IT) Chiara Ciccarelli Email: c.ciccarelli@sanita.it Simona Bifulchi Email: s.bifulchi@sanita.it</p>
Latvia	<p>Latvian Council of Science (LCS) Maija Bundule +371 26 51 44 81 or Maija.Bundule@lzp.gov.lv Uldis Berkis +371 29 47 23 49 or Uldis.Berkis@lzp.gov.lv</p>
Luxembourg	<p>National Research Fund (FNR) Sean Sapcariu +352 691 362 831 or sean.sapcariu@fnr.lu Gideon Giesselmann +352 691 362 805 or gideon.giesselmann@fnr.lu</p>
Netherlands	<p>Netherlands Organisation for Health Research and Development (ZonMw) Gabriëlle Lijten +31 70 349 5470 or JPND@zonmw.nl</p>
Norway	<p>Research Council of Norway (RCN) Alexandra Bjørk- Skaflestad +47 22 03 72 24 or alb@forskningsradet.no</p>
Poland	<p>National Science Centre (NCN) Alicja Dyląg +48 532 086 494 or alicja.dylag@ncn.gov.pl Jadwiga Spyrka jadwiga.spyrka@ncn.gov.pl</p>
Slovakia	<p>Ministry of Education, Science, Research and Sport of the Slovak Republic (MESR) Tomáš Tabiš +42 12 593 747 31 or tomas.tabis@minedu.sk</p>
Spain	<p>Institute of Health Carlos III (Spain) Cándida Sánchez Barco Email: cbarco@isciii.es Tel: (+34) 91 822 20 63</p>
Sweden	<p>Swedish Research Council (SRC) Elisabeth Hedström Elisabeth.Hedstrom@vr.se +46 854 644 008 Susanne Frykman Susanne.Frykman@vr.se +46 8 271 656</p>

Switzerland	Swiss National Science Foundation (SNSF) Francis Parlange +41 31 308 23 85 or francis.parlange@snf.ch Carolin von Schoultz +41 31 308 23 25 or carolin.vonschoultz@snf.ch
Turkey	Scientific and Technological Research Council of Turkey (TÜBİTAK) Elif Güney Tamer +90 312 298 1384 or elif.guney@tubitak.gov.tr Emine Derebay Yıldız +90 312 298 1195 or emine.derebay@tubitak.gov.tr