

Preliminary Announcement

Call for Proposals for Multinational Research Projects on "Sensory Disorders"

Sensory disorders cover a broad range of often debilitating conditions and are major causes of morbidity and impaired quality of life. Around one billion people suffer from disorders of the central nervous system. To promote biomedical and health research in the field of disease related neuroscience, the 'Network of European Funding for Neuroscience Research' (NEURON) has been established under the ERA-NET scheme of the European Commission (www.neuron-eranet.eu). Using the ERA-NET mechanism, an international joint call for funding multilateral research projects in the field of Sensory Disorders will be launched on January 8th, 2020. The following funding organizations **intend** to fund the present joint call for multinational research projects.

•	Fonds de la Recherche Scientifique-FNRS (F.R.SFNRS) Research Foundation – Flanders (FWO) Fonds de recherche du Québec - Santé (FRQS) (Québec)	Belgium Belgium Canada
• He	Canadian Institutes of Health Research – Institute of Neurosciences, Mental alth and Addiction (CIHR-INMHA)	Canada
•	French National Research Agency (ANR)	France*
•	Federal Ministry of Education and Research (BMBF) General Secretariat for Research and Technology (GSRT)	Germany Greece*
•	Ministry of Health (MOH) State Education Development Agency (VIAA)	Italy
•	State Education Development Agency (VIAA) The Research Council of Norway (RCN) National Centre for Research and Development (NCBR)	Latvia Norway* Poland*
• Fu	Executive Agency for Higher Education, Research, Development & Innovation nding (UEFISCDI)	Romania
•	Slovak Academy of Sciences (SAS)	Slovakia
•	National Institute of Health Carlos III (ISCIII)	Spain
•	Spanish State Research Agency (AEI) Swiss National Science Foundation (SNSF)	Spain Switzerland
•	The Scientific and Technological Research Council of Turkey(TUBITAK)	Turkey*
	*to	be confirmed

2. Aim of the call

The aim of the call is to facilitate multinational, collaborative research projects that will address

important questions related to sensory disorders and their impact on the nervous system. They may include, among others, research into all the sensory modalities including the somatosensory system. Research questions addressing synergies across modalities and multisensory dysfunction are also encouraged in the present call.

Proposals should focus on impairment and/or loss of sensory function of neural origin. The proposals may include studies on sensory neurons, including receptor cells, the related neural pathways and connected brain areas. Research on accessory, non-neural parts of sensory organs is not the main focus of the call, and may be included only if they have a significant impact on the nervous system. Research questions may encompass the entire lifespan.

The sensory system is particularly amenable to innovative therapeutic approaches, and recent years have witnessed remarkable developments in this regard. Innovative treatment approaches may include *e.g.* restoration of function through gene, molecular and cell therapies, regenerative strategies, new electronic interfaces or prostheses. The use of novel approaches to improve therapeutic or diagnostic technology is accepted in the context of this call. Proposals may comprise studies on *e.g.* disorders of development affecting sensory systems, the role of environmental factors on sensory functions as well as health economic issues, based on existing cohorts or registries. A focus on chronic pain is excluded from the present call.

The NEURON funding organizations particularly wish to promote multi-disciplinary work and translational research proposals that combine basic and clinical approaches. In the context of the present call, the collaboration of clinicians with fundamental neuroscientists in the postulating consortia is highly encouraged, where appropriate, along with other disciplines with specific expertise. The consortia are expected to submit novel, ambitious ideas that can only be achieved by the complementary collaboration between partners.

Research proposals should cover at least one of the following areas:

- a) Fundamental research addressing the pathogenesis and etiology of sensory disorders. This may include the development of innovative or shared resources and technologies. The relevance of the research to sensory systems disorders must be clearly described. Pre-clinical studies may be included. Any animal or cell models should already be established and validated.
- b) Clinical research to develop novel strategies for prevention, diagnosis, patient stratification, therapy and/or rehabilitation for sensory disorders.

Clinical studies are eligible up to the point of proof of concept¹. The establishment of large patient cohorts will not be funded by NEURON, but the use of existing cohorts and exploitation of existing data sets is encouraged. Appropriate access to relevant, well-characterized patient populations or suitable biomaterial collections must be demonstrated. Applicants should demonstrate that they have the expertise and range of skills required to conduct the study or that appropriate collaborations are in place. The development of new animal or cell models is excluded from the scope of the call unless it constitutes a marginal support of the main part of the proposal (i.e. as a strategy to strengthen the results or hypothesis in a project). If relevant, it is highly recommended to get in contact with appropriate European infrastructures early in the planning of the projects, in particular EATRIS-ERIC (focused on translational medicine), BBMRI-ERIC (focused on biobanking) and ELIXIR (focused on data sharing). Different platforms can be found via the European Strategy Forum for Research Infrastructures in Europe - ESFRI (www.esfri.eu).

The following research areas are excluded from this call:

- Chronic pain;
- Impairment of sensations or hallucinations caused by mental disorders and effects of neurological diseases (e.g. stroke);
- Eye movement disorders due to neurological diseases;
- Neurodegenerative disorders that are addressed by the EU Joint Programme -Neurodegenerative Disease Research (JPND)².

The ERA-NET NEURON seeks to strengthen patient engagement in research. Applicants are expected to include patients, where appropriate, in their research process. Meaningful patient engagement can occur at the level of research planning, conducting research or research result dissemination. Patient representatives will participate in the review of selected proposals and provide feedback on patient engagement aspects. All the applications should include a description of expected outcomes with potential relevance for the patients.

2. General conditions for application

Joint transnational research proposals may be submitted by research teams working in universities (or other higher education institutions), non-university public or private research institutes, hospitals or foundations, as well as in commercial companies, particularly small and medium-size enterprises³. The eligibility of the afore-mentioned institutions, together with details of eligible costs (e.g. personnel, material, consumables, travel money, investments), are subject to the administrative requirements of individual funding organizations and will therefore differ. Please note that, for some funding

Eligibility and funding requirements for clinical trials vary between the partner countries. Clarification may be obtained from the individual funding agencies.

Alzheimer's disease and other neurodegenerative dementias, Parkinson's disease (PD) and PD-related disorders, Prion disease, Motor neuron diseases, Huntington's disease, Spinocerebellar ataxia, Spinal muscular atrophy

³ Please check carefully the national regulations for further information on eligible beneficiaries

organizations, commercial companies are not eligible or are only eligible under certain conditions (e.g. only in partnership with academic institutions in the consortium). Clarification should be obtained from the individual funding agencies (see contact details below). It is advised to read carefully all national annexes regarding eligibility and funding by the respective funding agencies.

Only transnational projects will be funded. Each consortium submitting a proposal must be comprised of a minimum of three research partners eligible for funding by organizations participating. The eligible research partners must be from at least three different countries. The total number of research partners in a consortium is limited to five, including partners participating by own expenses. No more than two research groups can be from the same country.

The ERA-NET NEURON strives to strengthen the European Research Area by including as many partner countries as possible in its funding scheme. Therefore, consortia including partners from countries that are to date underrepresented in this funding scheme (Latvia, Romania and Slovakia may increase the total number of partners to six.

Applicant partners not eligible to their national funding organizations or from countries which are not involved in this call may participate in projects only if their participation clearly provides an added value to the consortium and if they present evidence on secured budget for their part in the project. Such potential partners are not considered in the minimum number of three research groups mentioned above. In any case, the total number of research groups in one consortium must not exceed five, or six if one of the underrepresented countries listed above is comprised.

Each consortium should have the critical mass to achieve ambitious scientific goals and **should** clearly demonstrate added value from working together. Projects can be funded for a period of up to three years and according to the national/regional funding organizations' regulations.

There will be a **two-stage procedure** for joint applications: **pre-proposals** and **full proposals**. In both cases, one joint proposal document (in English) shall be prepared by the partners of a joint transnational proposal, and must be submitted to the Joint Call Secretariat by one spokesperson, the coordinator, through the electronic submitting system exclusively. A link to access to submission system as well as the proposal templates will be published together with the call text.

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3. Timetable

The call is scheduled to open on January 8, 2020.

The deadline for submitting the **pre-**proposals is scheduled for **March 10, 2020, 14:00 CET**.

The pre-proposals will be reviewed in a written (remote) peer review process. By mid-May 2020 the coordinators of the top-ranked pre-proposals will be invited by the Joint Call Secretariat to submit a **full**

proposal by June 22, 2020, 14:00 CET.

An international Peer Review Panel will evaluate the full proposals and establish a ranking list of the fundable proposals by scientific assessment. Based on this ranking list the Call Steering Committee will determine the projects to be funded. Based on these recommendations, final decisions will be made by the funding agencies and will be subject to budgetary considerations.

Funding is expected to start early in 2021.