3rd Call for Proposals for

"European Innovative Research & Technological Development Transnational Projects in Nanomedicine"

Submission deadline: April 15th, 2011
17:00:00 CET (Brussels local time).

http://www.nanomedsubmission.net/

EuroNanoMed Joint Transnational Call Office
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Introduction

This document announces the joint transnational call for proposals on Nanomedicine within the framework of the ERA-NET EuroNanoMed. The main purpose of the call is to generate transnational collaboration for research and development in the field of Nanomedicine (see definition below) in Europe.

Each proposal must involve a minimum of three research groups from three different countries including at least two EuroNanoMed member states participating in the 3rd joint transnational call (BASQUE REGION (SPAIN), FRANCE, GERMANY, ICELAND, ISRAEL, LATVIA, LITHUANIA, POLAND, ROMANIA, SPAIN, SWITZERLAND, TURKEY, WALLOON REGION (BELGIUM), VENETO REGION (ITALY)). The maximum number of participants in a consortium is seven. Research groups from non-funding countries may participate in projects if they are able to secure their own funding. Such partners should state the source of funding for their part in the project. However, the majority of research groups in a consortium must be from EuroNanoMed funding member states/regions (see below and ANNEX).

Please note that the inclusion of a non-eligible partner in a proposal will result in the rejection of the entire proposal without further review (for a definition of eligible partners see "Information for applicants", the national/regional regulations, and contact your national contact person).

Regardless of its size, each collaborative project consortium should have the optimal critical mass to achieve ambitious scientific & technological goals and should clearly show the specific contribution of each research consortium partner and the added value of working together. In particular, the project consortium should clearly demonstrate an added value in knowledge transfer towards either clinical (public health applications/research) or towards pharmaceutical/industrial applications (for details see text below).

To apply to this joint transnational call, it is mandatory to have a consortium comprising group(s) from at least two out of the three following categories:

- academia (research teams working in universities, other higher education institutions or research institutes);
- clinical/public health research sector (research teams working in hospitals/public health and/or other health care settings and health organizations);
- enterprise (all sizes of private companies). Participation of small and medium-size enterprises (SMEs) is encouraged.

1. Motivation

Nanotechnology is a strategic priority for Europe because technologies related to this sector have a vast potential for developing public welfare and economic growth, changing the way of life of citizens in many fields of application: healthcare, Information and Communication Technologies (ICT), environment.

The aim of Nanomedicine may be broadly defined as the comprehensive monitoring, control, construction, repair, defence and improvement of all human biological systems, working from the molecular level using engineered devices and nanostructures, ultimately to achieve medical benefit. In this context, nanoscale should be taken to include active components or objects in the size range from one nanometer to hundreds of nanometers. They may be included in micro-devices (that might have a macro-interface) or in a biological environment. The focus, however, is always on nanointeractions within a framework of a larger device or biological, within a sub-cellular (or cellular) system.

> *Definition: Nanomedicine is the application of nanotechnology to achieve breakthroughs in healthcare. It exploits the improved and often novel physical, chemical and biological properties of materials at the nanometer scale. Nanomedicine has the potential to enable early detection and prevention, and to essentially improve diagnosis, treatment and follow-up of diseases.*
>
> *It was perceived as embracing five main sub-disciplines that in many ways are overlapping and underpinned by the following common technical issues: analytical tools, nanoimaging, nanomaterials and nanodevices, novel therapeutics and drug delivery systems, clinical, regulatory and toxicological issues.*

Over the last few years, Europe has been successful in a lot of efforts made in basic research dedicated to nanotechnologies. However, within the Nanomedicine field in Europe, a critical issue concerns especially the RTD players: their capability to move effectively innovation from basic knowledge into either industrial applications or clinical applications, *i.e.* translational research[*]. To not be excluded from this sector, it is time for Europe and European member states to support efforts to bridge the gap between research and its clinical/public health and commercial application, especially SMEs, to reach a sufficient level of competitiveness and a critical size in terms of their R&D projects portfolio, their scientific and clinical excellence.

Therefore, EuroNanoMed is a major opportunity for scientists from European industry (especially start-ups and SMEs, whose participation is encouraged), academic and clinical/public health

[*] *Translational research transforms discoveries arising from "the bench" to the patients "bedside",* i.e. *from basic research – in which scientists study disease at a molecular or cellular level – to the clinical and/or industrial level. Its purpose is to improve and strengthen collaboration spanning various research fields.*

communities to take advantage of the flexible co-ordination of several existing national/regional funding programmes to enlarge their possibilities for partnerships by fruitful cross-border partnerships. A similar multidisciplinary translational approach in this field with an international focus as the one developed in EuroNanoMed does not yet exist. This initiative will bring together the academia, the clinical/public health and the industrial research teams to develop innovative diagnostic and therapeutic solutions for the patient, thus enhancing the competitiveness of the European health industry.

In this context, EuroNanoMed was established under the Era-Net scheme of European Commission (FP7). It is coordinated by the French Atomic Energy Commission (France) and includes 24 partners from 15 countries and 3 regions. The goal of EuroNanoMed is to coordinate the research efforts and funding programmes of European member states in the field of Nanomedicine.

Funding organizations, listed below, from 11 countries, and 3 regions, have decided to launch the 3rd joint transnational call to fund multinational innovative research projects in Nanomedicine. The present Call for proposals will be conducted simultaneously by the participating funding organizations in their respective member states/regions and coordinated centrally by the Joint Call Secretariat (JCS).

Under the umbrella of EuroNanoMed, a Joint Transnational Call is launched with the participation of the following funding and management organizations:

- Industry, Innovation, Trade and Tourism Department, Basque Government, BASQUE REGION (SPAIN)
- The French National Research Agency (ANR), FRANCE
- VDI Technologiezentrum GmbH, GERMANY
- The Icelandic Centre for Research (RANNIS), ICELAND
- The Chief Scientist Office, The Ministry of Health (CSO-MOH), ISRAEL
- The Latvian Academy of Sciences (LAS), LATVIA
- Science Council of Lithuania (LSC), LITHUANIA
- National Centre for Research and Development (NCBiR), POLAND
- Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii (UEFISCDI), ROMANIA
- Instituto de Salud Carlos III (ISCIII), SPAIN
- Swiss National Science Foundation (SNSF), SWITZERLAND
- The Scientific and Technological Research Council of Turkey (TUBITAK), TURKEY
- Project Unit research and innovation, VENETO REGION (ITALY)
- Public Service of Wallonia: Operational General Directorate for Economy, Employment, and Research (DGOEER), WALLOON REGION (BELGIUM)

2. Aim of the call

The aims of the call are:

- To support translational research proposals that combine innovative approaches (basic, clinical, industrial) in the field of Nanomedicine and;
- To encourage and enable transnational collaboration between public and private research groups from academia (research teams from universities, higher education institutions, public research institutions) and clinical/public health research (research teams from hospital/ public health, healthcare settings and other healthcare organizations) or research teams from industrial enterprises (all size). The participation of SMEs is encouraged.

Project proposals will address multidisciplinary and translational[1] research. The project proposals must cover at least one of the following areas that are equal in relevance for this call:

a) Regenerative medicine
b) Diagnostics
c) Targeted delivery systems

Proposals may include, but are not limited to: identification, characterisation and validation of biomarkers, early diagnosis, convergence of nanotechnology and stem cell technology, standardization of stem cells for regenerative therapy, cell biology applied to nanomedicine, multimodal imaging agents or techniques, point of care diagnostics (on site sensors), standardized procedures for preparation & characterization of drug delivery systems, gene or cell therapies using nanotechnology and development and use of nanomaterials for medical purposes. Clinical studies are eligible up to the point of proof of concept.

Proposals must clearly demonstrate the potential health impact and/or business plan and economic impact as well as the added-value of transnational collaboration: sharing of resources (models, registries, diagnosis, etc.), harmonization of data, sharing of specific know-how and/or innovative technologies.

The individual project partners of the joint applications should be complementary and contain novel, innovative ambitious ideas.

[1] See definitions for Nanomedicine and translational research under the chapter 'Motivation'

3. Application

3.1 Funding recipients

Joint research proposals may be submitted by applicants belonging to one of the following categories (according to member state/regional regulations, please see Guidelines for applicants):

- Academia (research teams working in universities, other higher education institutions or research institutes);
- Clinical/public health sector (research teams working in hospitals/public health and/or other health care settings and health organizations);
- Enterprise (all sizes of private companies). Participation of small and medium-size enterprises (SMEs) is encouraged.

Only transnational projects will be funded. Each proposal must involve a minimum of three research groups from three different countries including at least two EuroNanoMed member states participating in the 3rd joint transnational call. The maximum number of participants in a project consortium is seven. Project partners (research teams) from EuroNanoMed member states/regions not participating in this call or from non-EuroNanoMed member states may participate in transnational projects if they are able to secure their own funding before the recommendation of funding is taken by EuroNanoMed Call Steering Committee (CSC). Such partners should state in advance the source of funding for their part in the project. However, the majority of research groups in a consortium and the coordinator must be from EuroNanoMed funding member states/regions (see annex).

In addition, each application should include partners from at least two of three of the following categories: academia, clinical/public health, private sector (industry/SME).
The number of participants and their research contribution should be appropriate for the aims of the transnational research project and reasonably balanced in terms of international participation. Each transnational collaborative project should represent the critical mass to achieve ambitious scientific goals and should clearly demonstrate an added value from working together.

Each transnational project must nominate a project consortium coordinator among the project partner principal investigators. The coordinator must be a project partner from a EuroNanoMed funding member state/region. The project coordinator will represent the consortium externally and towards the JCS and CSC, and will be responsible for its internal scientific management (such as controlling, reporting, intellectual property rights, IPR, issues and contact with the JCS). Each project partner will be represented by one (and only one) principal investigator. Within a joint

proposal, each project partner principal investigator will be the contact person for the relevant member state/regional funding organization.

A project partner can submit up to two research proposals and only one as project coordinator. This rule is subject to member state/regional regulations.

Whilst proposals will be submitted jointly by research groups from several member states/regions, research groups will be funded by the individual EuroNanoMed funding organization of the respective member state/region from which applicants have applied. The applications are therefore subject to eligibility criteria of relevant EuroNanoMed funding organizations of the respective member state/region. It is highly recommended to read carefully the funding rules and eligibility criteria of the relevant EuroNanoMed funding organization. Applicants are strongly advised to contact their relevant EuroNanoMed funding organization contact person before submitting an application, for some member states/regions it might be mandatory.

The duration of the projects can be up to 3 years. Nevertheless, a partner can receive funding for less than 3 years according to EuroNanoMed funding organizations eligibility criteria and regulations.

3.2 Financial and legal modalities

Funding is awarded as a grant for a maximum of three years according to EuroNanoMed funding organization regulations. Eligible costs and funding provisions may vary according to the respective EuroNanoMed funding organization's regulations. Each project partner is subject to the rules and regulations of their respective EuroNanoMed funding organization.

3.3 Submission of joint proposals

Joint proposals (in English), submitted electronically, must be received by the Joint Call Secretariat in a signed PDF-format file no later than April 15th at 17:00 CET (Brussels local time). The server will not accept proposals after this time. Information on how to submit proposals electronically and the forms that have to be used for submission of the proposal are available in "Guidelines for applicants" and "Proposal template" on the EuroNanoMed website (www.euronanomed.net).

For applicants from some member states/regions it might be necessary to submit the proposal and/or other information directly to the member state/regional funding organizations. Therefore, applicants are strongly advised to check their EuroNanoMed funding organizations specific information for applicants for more details.

Ethical issues must be addressed in each application, and according to the concerned member states'/regions' regulations.

Applicants may ask not to refer their applications to certain reviewers, giving a reasonable ground for this. The CSC may consider meeting this request but it is not obliged to do it.

3.4 Further information

If you need additional information, please contact the JCS, or your member state/regional EuroNanoMed funding organization Contact Person (see "Information for applicants" or http://www.euronanomed.net).

4. Evaluation

The evaluation of the joint transnational project proposals will be organised as follows:

4.1. Formal check of proposals

The JCS will assess all proposals to ensure that they meet the call's formal criteria (date of submission; number of participating member states; inclusion of all necessary information in English; appropriate limits on length. In parallel, the JCS will forward the proposals to the member state/regional funding organizations which will perform a check for compliance to member state/regional rules. Proposals passing both checks (JCS and member state/regional) will be forwarded to the Peer Review Panel[2] (PRP) for evaluation. Proposals not meeting the formal criteria may be declined without further review. Please note that if a proposal includes one non-eligible partner, the whole proposal will be rejected (for a definition of eligible partners see "Information for applicants" and member state/regional regulations). It must be stressed that faulty eligibility of one partner in a proposal will result in an automatic decline of the whole proposal.

4.2. Peer-review of proposals

The reviewers of the Peer Review Panel will carry out the evaluation according to the following specific evaluation criteria.

- Adequateness to the aim(s) of the joint transnational call and relevance to the Nanomedicine field;
- Scientific & technological quality of the proposal (novelty; innovation potential; methodology; degree of technological maturity);

[2] Peer review panel: external & international reviewers that will review the applications according to their expertise.

- Quality and international competitiveness of participants in the field(s) of the proposal (previous work in the field, expertise of the participants);
- Quality of the project consortium and management (well balanced partnership; integrated partnership in work packages; added value of the transnational project consortium; previous level of collaborative interaction between the project consortium partners; quality and efficiency of the coordination of work package and tasks management);
- Feasibility of the project – human, technical and financial resources: adequateness of the work package structure and work plan (tasks, matching events, calendar); expertise; adequateness of equipment and manpower resources; scientific justification and adequateness of the requested budget; safety issues should be addressed (when necessary); assessment of the disease target appropriate to nanomedicine, when applicable.
- Potential impact: knowledge transfer towards clinical/public health applications; knowledge transfer towards pharmaceutical/health device applications (when applicable business plan, expected time for market/transfer to patient including market size access and risks); knowledge transfer towards other industrial applications, with business plan, expected time to market incl. market size access and risk; translational research (from bench to bedside patients).

Evaluation will be carried out based on external reviews of research proposals, and discussion by panel review members for establishing the ranking list of best proposals.

4.3. Final decision on funding

Based on the ranking list established by the PRP, the Call Steering Committee[3] will recommend the projects to be funded. Based on this list, final decisions will be made by EuroNanoMed member state/regional funding organizations and will be subject to budgetary considerations and their administrative calendar. The member state/regional funding organizations commit to follow the ranking list established by the PRP.

Projects to be funded should start in 2012.

Before a transnational project starts, all the project consortium partners must sign a consortium agreement for Cooperation in accordance with the specification of this Call text (addressing the issues given in “Information for Applicants” on consortium agreements, available on EuroNanoMed’s website). Upon request, this consortium agreement may be made available to the concerned EuroNanoMed funding organizations.

5. Reporting requirements

[3] Call Steering Committee: funding agencies representatives.

Each project consortium coordinator, on behalf of all participating partners, should submit to the JCS a brief annual and final scientific progress report of the transnational project (in English). Each transnational project consortium coordinator´s report will also state in the scientific progress especially the goals met, and eventual corrective measures set in case that the annual project plan has not been fulfilled. In addition, when applicable, each team might have to report to its relevant EuroNanoMed funding organization, in accordance with the respective member state/regional regulations.

In case of ANY significant changes in the work program or the consortium, EuroNanoMed funding organizations will inform each other and the JCS as soon as these are found out. The relevant funding organizations will decide upon the proper action to be taken.

SUMMARY OF THE EURONANOMED ORGANIZATIONS INDICATIVE FUNDING COMMITMENTS AND ELIGIBILITY FOR JTC-3

Party n°	Call Participant EuroNanoMed Party name	EuroNanoMed Party ACRONYM	Member state/region	Partners eligible for funding			Tentative initial funding commitment (Mio. Euros)	Envisage number of projects potentially funded with the tentative initial funding commitment
				Academia (if necessary, please specify)	Clinic / Public Health (if necessary, please specify)	Industry (large industry and SME; for profit or non for profit)		
P2	Industry, Innovation, Trade and Tourism Department, Basque Government	Basque government	Basque Region	No (but can be subcontracted by industry)	Only if it is private	Yes	0.3	2-3
P4	Swiss National Science Foundation	SNSF	Switzerland	Yes	Yes	No	0.37	na
P6	VDI Technologiezentrum GmbH	VDI	Germany	Partners from Academia can be funded as strategic cooperation partners of companies (large companies or SME's)	Partners from Clinical/public health research groups can be funded as strategic cooperation partners of companies (large companies or SME's)	Yes	4	4-7
P7	Instituto de Salud Carlos III	ISCIII	Spain	Only University Hospitals	Only Hospitals and health care settings	No	0.5	3-5
P8	Agence Nationale de la Recherche	ANR	France	Yes	Yes	Yes (in collaboration with public partners)	1.5	8-10
P10	Ministry of Health, The Chief scientist office	CSO-MOH	Israel	Yes	Yes	No	0.3 (depending on budget approval)	Up to 3
P11	The Icelandic Centre for Research RANNIS Iceland	RANNIS	Iceland	Yes	Yes	Yes (no limitations)	0.17	1
P12	Latvian National Academy of Sciences	LAS	Latvia	Yes	Yes	Yes		

Party n°	Call Participant EuroNanoMed Party name	EuroNanoMed Party ACRONYM	Member state/region	Partners eligible for funding			Tentative initial funding commitment (Mio. Euros)	Envisage number of projects potentially funded with the tentative initial funding commitment
				Academia (if necessary, please specify)	**Clinic / Public Health** (if necessary, please specify)	**Industry** (large industry and SME; for profit or non for profit)		
P14	National Centre for Research and Development NCBIR	NCBIR	Poland	Yes	Partners from clinical or public health institutions may be founded only if they meet the requirements specify in the Science Financing Act under the article 2 point 9 fig. f), published in Journal of Laws 96 pos. 615 of 2010.	Yes	1	1-3
P17	Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii	UEFISCDI	Romania	Yes	Yes	Yes	0.5	1-3
P20	The Scientific and Technological Research Council of Turkey	TUBITAK	Turkey	Yes	Yes	No	0.5	2
P21	Science Council of Lithuania	LSC	Lithuania	Yes: Public Universities, public Research centers	Yes: Public University hospitals, other public hospitals	No	0.105 (0.035 per year)	1
P22	Veneto region	Veneto Region	Veneto Region (IT)	Yes	Yes	Yes	0.5	1-4
P24	Public Service of Wallonia / Research and scientific cooperation Directorate	DGOEER	Walloon Region	Yes	No	Yes	1	2-4
TOTAL							10.745	