EuroNanoMed II

Joint Transnational Call for Proposals (2013)

for

"European Innovative Research & Technological Development Projects in Nanomedicine"

Call Text

Submission deadline: 04-March-2013 at 17:00 (CET)

Link to electronic proposal submission

EuroNanoMed II Joint Call Secretariat

JCS is hosted by Veneto Nanotech S.C.P.A.
Postal Address: Via S. Crispino 106, I-35129, Padova - Italy
Tel. +39 049 7705520
Fax. +39 049 7705555
Monday to Thursday 9.30-13.00 and 14.30-17.30
Friday 9.30-13.00 and 14.30-16.30 (Brussels local time)

(http://www.euronanomed.net)

INTRODUCTION

This document announces the joint transnational call for proposals on Nanomedicine within the framework of the ERA-NET EuroNanoMed II. 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 II country/regions participating in the 4th joint transnational call (Belgium/Flanders, Belgium/Wallonia, France, Germany, Iceland, Israel, Italy, Latvia, Lithuania, Norway, Poland, Portugal, Romania, Spain, Sweden and Switzerland). 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 and the coordinator must be from EuroNanoMed II funding countries/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 "Guidelines for applicants", the national/regional regulations, and contact your national/regional 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*. Not to 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 II is a major opportunity for scientists from European industry (especially start-ups and SMEs, whose participation is encouraged), academic and

* *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.*

clinical/public health 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. 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.

The EuroNanoMed II project (based on the foundations of EuroNanoMed) was established under the ERA-NET scheme of European Commission (FP7). It is coordinated by the *Agence Nationale de la Recherche* (ANR) and includes 20 partners. The goal of EuroNanoMed is to coordinate the research efforts and funding programmes of European Member States and Associated Countries in the field of Nanomedicine.

Funding organizations, listed below, have decided to launch the 4th EuroNanoMed 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 country/region and coordinated centrally by the Joint Call Secretariat (JCS).

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

- **Agence Nationale de la Recherche (ANR), FRANCE**
- **Agentschap voor Innovatie door Wetenschap en Technologie (IWT), BELGIUM/Flanders**
- **Service Public De Wallonie (SPW-DGO6), BELGIUM/Wallonie**
- **VDI Technologiezentrum GmbH (VDI), GERMANY**
- **The Icelandic Centre For Research (RANNIS), ICELAND**
- **Chief Scientist Office, Ministry Of Health (CSO-MOH), ISRAEL**
- **Ministero Della Salute (IMH), ITALY**
- **Latvijas Zinatnu Akademija (LAS), LATVIA**
- **Lietuvos mokslo taryba (RCL), LITHUANIA**
- **Norges Forskningsrad (RCN), NORWAY**
- **Narodowe Centrum Badan i Rozwoju (NCBR), POLAND**
- **Fundação Para A Ciência E A Tecnologia (FCT), PORTUGAL**
- **Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii (UEFISCDI), ROMANIA**
- **Instituto De Salud Carlos III (ISCIII), SPAIN**
- **Vetenskapsradet - Swedish Research Council (SRC), SWEDEN**
- **Schweizerischer Nationalfonds Zur Forderung Der Wissenschaftlichen Forschung (SNSF), SWITZERLAND**

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 national/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 II country/regions participating in the 4th joint transnational call. The maximum number of participants in a project consortium is seven. Project partners (research teams) from EuroNanoMed II country/regions not participating in this call or from non-EuroNanoMed II countries may participate in transnational projects if they are able to secure their own funding before the recommendation of funding is taken by EuroNanoMed II 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 II funding countries/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 II funding country/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 national/regional funding organization.

A project partner can submit up to two research proposals and only one as project coordinator. Please note that this rule is subject to national/regional regulations, therefore applicants are strongly encouraged to contact their national/regional contact points to check their national/regional eligibility rules before submission (see also "Guidelines for applicants").

Whilst proposals will be submitted jointly by research groups from several countries/regions, research groups will be funded by the individual EuroNanoMed II funding organization of the respective country/region from which applicants have applied. The applications are therefore subject to eligibility criteria of relevant EuroNanoMed II funding organizations of the respective country/region. It is highly recommended to read carefully the funding rules and eligibility criteria of the relevant EuroNanoMed II funding organization. **Applicants are strongly advised to contact their relevant EuroNanoMed II funding organization contact person before submitting an application, for some countries/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 II 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 II funding organization regulations. Eligible costs and funding provisions may vary according to the respective EuroNanoMed II funding organization's regulations. Each project partner is subject to the rules and regulations of their respective EuroNanoMed II 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 (electronic signature or scanned copy of the original signed document are accepted) no later than **04-March-2013 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 countries/regions it might be necessary to submit the proposal and/or other information, in some cases before the deadline of this call, directly to the national/regional funding organizations. Therefore, applicants are strongly advised to check their EuroNanoMed II funding organizations specific Guidelines for applicants for more details.

Ethical issues must be addressed in each application, and according to the concerned country's/region's 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 (if too many experts are revoked, it might be difficult to evaluate the proposal).

3.4 FURTHER INFORMATION

If you need additional information, please contact the JCS, or your national/regional EuroNanoMed II funding organization Contact Person (see "Guidelines 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 countries; inclusion of all necessary information in English; appropriate limits on length). In parallel, the JCS will forward the proposals to the national/regional funding organizations which will perform a check for compliance to national/regional rules. Proposals passing both checks (JCS and national/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 "Guidelines for applicants" and national/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);**
- **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**

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

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 peer review panel 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 II national/regional funding organizations and will be subject to budgetary considerations and their administrative calendar. The national/regional funding organizations commit to follow the ranking list established by the PRP.

All the project consortium partners must sign a consortium agreement (CA) for cooperation in accordance with the specification of this Call text (addressing the issues given in "Guidelines for applicants" on consortium agreements, available on the EuroNanoMed II website). Upon request, this consortium agreement may be made available to the concerned EuroNanoMed II funding organizations. The project consortium is strongly encouraged to sign this CA before the official project start date, and in any case the CA has to be signed no later than six months after the official project start date.

5. REPORTING REQUIREMENTS

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, project consortium coordinators could be asked to present the project results during EuroNanoMed II meetings.

[3] Call Steering Committee: funding organisations' representatives.

When applicable, each team might have to report to its relevant EuroNanoMed II funding organization, in accordance with the respective national/regional regulations.

In case of ANY significant changes in the work program or the consortium, EuroNanoMed II 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.

6. ANNEX. SUMMARY OF THE EURONANOMED II PARTNERS INDICATIVE FUNDING COMMITMENTS AND ELIGIBILITY FOR JTC 2013

Party n°	Participant organisation name	Country / Region	Funding academic or clinical/academic or clinical partnership	Funding academic or clinic/private partnership (please specify if is private for profit or non for profit)	Funding private/private partnership (please specify if is private for profit or non for profit)	Tentative initial funding commitment (Euros)	Envisaged number of projects potentially funded with the tentative initial funding commitment
P1	**Agence Nationale de la Recherche (ANR)**	FRANCE	No. Public research institutions are eligible for funding, only if a French enterprise is also involved	Yes	Yes	1.000.000	6
P2	**Agentschap voor Innovatie door Wetenschap en Technologie (IWT)**	BELGIUM / FLANDERS	Only Flemish companies can be supported. Academic and clinical partners as subcontractor of Flemish company	Only Flemish companies can be supported. Academic and clinical partners as subcontractor of Flemish company	Only Flemish companies can be supported. Academic and clinical partners as subcontractor of Flemish company	1.500.000	6
P3	**Service Public De Wallonie (SPW-DGO6)**	BELGIUM / WALLONIA	No	Yes (profit, companies)	Yes (profit, companies)	1.000.000	2-4
P5	**VDI Technologie-zentrum GmbH (VDI)**	GERMANY	No	Cooperation of companies (large companies or SME's) with universities, public research institutes or hospitals as their strategic partners will be funded.	Cooperation between companies (large companies or SME's) will be funded.	2.000.000	2-7
P6	**The Icelandic Centre For Research (RANNIS)**	ICELAND	Yes	Yes	Yes	123.000	1-2

P7	**Chief Scientist Office, Ministry Of Health (CSO-MOH)**	ISRAEL	Yes	No	No	240.000	4
P8	**Ministero Della Salute (IMH)**	ITALY	Yes (1)	Yes (1)	No	600.000	3 – 4
P11	**Latvijas Zinatnu Akademija (LAS)**	LATVIA	Yes	Yes	Yes	200.000	2
P12	**Lietuvos mokslo taryba (RCL)**	LITHUANIA	YES :Public universities, public research centers	YES : Public university hospitals, other public hospitals	YES : SME (in collaboration with Lithuanian public partners) meeting special criteria	200.000	2-3
P13	**Norges Forskningsrad (RCN)**	NORWAY	Yes: Norwegian Universities, University colleges, Institutes, Industry, and Public Sector	Yes	Yes	2.000.000	2-4
P14	**Narodowe Centrum Badan i Rozwoju (NCBR)**	POLAND	Yes	Yes	Yes	1 500 000	5
P15	**Fundação Para A Ciência E A Tecnologia (FCT)**	PORTUGAL	Yes	Yes	Yes	200.000	1-2
P17	**Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii (UEFISCDI)**	ROMANIA	Yes	Yes	No	500.000	1
P18	**Instituto De Salud Carlos III (ISCIII)**	SPAIN	Yes (2)	No	No	175.000	1-3
P19	**Vetenskapsradet - Swedish Research Council (SRC)**	SWEDEN	Yes	SRC can only fund an academic /clinical partner, but can fund an academic/clinical partner in a consortium where the private partner is from another country	No	750.000	5
P20	**Schweizerischer Nationalfonds zur Förderung der wissenschaftlichen Forschung (SNSF)**	SWITZERLAND	Yes	No	No	500.000	not specified
			TOTAL			**12.488.000**	

(1): only IRCCS are eligible institutions according the information reported in the Annex I of the Guidelines for applicants.

(2): CIBER-BBN or other CIBER, see annex I of the Guidelines for applicants.