Call for Proposals for

"European Innovative Research & Technological Development Projects in Nanomedicine"

Submission deadlines: 01 September 2009

http://www.nanomedsubmission.net/

Euronanomed Joint Transnational Call Office
EJTCO is hosted by Veneto Nanotech S.C.P.A.
Postal Address: Via S. Crispino 106, 35129 Padova - Italy
Tel. +39 049 7705520
Fax. +39 049 7705555
Monday to Thursday 9.00-13.00 and 14.30-18.00
Friday 9.00-13.00 and 14.30-17.00 (Brussels local time)

calloffice@euronanomed.net
or your National/Regional Agency
(http://www.euronanomed.net)

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. It is open to joint transnational research proposals with a minimum of 3 and a maximum of 7 participants from at least 3 different EuroNanoMed participating countries (BE, CH, DE, ES, FR, IL, IT, IS, LT, LV, NL, PO, PT, RO, SW, TR).

Regardless of its size, each collaborative 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 from working together. In particular, the consortium should clearly demonstrate an added value in knowledge transfer towards either clinical 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 academy (research groups working in universities or other higher education institutions) and group(s) either involved in clinical/public health research (hospital and/or other health care settings and health organisations, public or private, etc) and/or groups from private companies (all size, industries, small and medium-size enterprises, SMEs, etc). Participation of SME 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 a micro-device (that might have a macro-interface) or a biological environment. The focus, however, is always on nanointeractions within a framework of a larger device or biologically, 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.*

Nanomedicine is defined as the science and technology of diagnosing, treating and preventing disease and traumatic injury, of relieving pain, and of preserving and improving human health, using molecular tools and molecular knowledge of the human body. 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 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 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.

For that purpose, EuroNanoMed is a major opportunity for scientists from European industry (especially start-ups and SMEs, whose participation is encouraged), academic and clinical/public health communities to take benefit from the flexible co-ordination of several existing national/regional funding programmes to enlarge their possibilities for partnerships, to fruitful cross-border partnerships. A similar multidisciplinary translational approach in the field with an international focus as the one developed in EuroNanoMed does not yet exist. This initiative will bring together the academic, 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.

** Translational research transforms discoveries arising from "the bench" with basic research – in which scientists study disease at a molecular or cellular level – to the clinical level, or the patients "bedside". Its purpose is to boost and strengthen mutual collaboration spanning various research fields (including academic, clinical and/or industrial research).*

In this context, the ERA-Net for research programmes on Nanomedicine (EuroNanoMed) has been established under the Era-Net scheme of the European Commission, and coordinated by the French Atomic Energy Commission (France) with the participation of 19 funding organisations from 17 countries (listed below). The goal of EuroNanoMed is to coordinate the research efforts and funding programmes of European countries in the field of Nanomedicine.

The call will be conducted simultaneously by the funding organisations in their respective countries 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 bodies:

- Industry, Trade and Tourism Department, Basque Government (ITT), 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
- SenterNovem, THE NETHERLANDS
- National Centre for Research and Development (NCBiR), POLAND
- Fundação para a Ciência e a Tecnologia (FCT), PORTUGAL
- National Center for Programme Management (CNMP), ROMANIA
- Instituto de Salud Carlos III (ISCIII), SPAIN
- The Swedish Research Council (SRC)(Vetenskapsrådet), SWEDEN
- The Swedish Governmental Agency for Innovation Systems (VINNOVA), SWEDEN
- Swiss National Science Foundation (SNSF), SWITZERLAND
- The Scientific and Technological Research Council of Turkey (TUBITAK), TURKEY
- Economic development, research and innovation Directorate, VENETO REGION (ITALY)
- Ministry of the Walloon Region: Operational General Directorate for Economy, Employment, and Research (DGOEER), WALLOON REGION (BELGIUM)

Partners listed above have decided to open the first joint transnational call for funding multilateral innovative research projects on Nanomedicine. The call is being opened simultaneously by the partners in their respective countries.

2. Aim of the call

The aim of the call is:

- to promote multidisciplinary working and to encourage translational research proposals that combine basic and clinical and/or industrial approaches in the field of Nanomedicine and;
- to encourage and enable transnational collaboration between academy (research groups from universities, higher education institutions, public research institutions) and group(s) either involved in clinical/public health research (clinicians, hospital, public or private, etc)

or groups from private industrial enterprises (all size industries, small and medium-size enterprises (SMEs, whose participation is encouraged), etc).

Project proposals will address multidisciplinary working and translational[1] research that combine basic and clinical/public health or industrial research approaches in the field of Nanomedicine (see definition in the introduction). 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

Project 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.

Projects may include, for example, identification, characterisation and validation of biomarkers, biological targets, development of innovative screening systems, generation of novel model systems, gene or cell therapies, development of new strategies for prevention, (early) diagnosis, nanotoxicity and therapy. Clinical studies are eligible up to the point of proof of concept.

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

3. Application

3.1 Funding recipients

Each proposal must involve a minimum of 3 and a maximum of 7 partners from at least three different EuroNanoMed participating countries (BE, CH, DE, ES, FR, IL, IT, IS, LT, LV, NL, PO, PT, RO, SW, TR). Joint research proposals may be submitted by three to seven participants working in universities (or other higher education institutions), non-university public research institutes, hospitals and other health cares settings and health organisations, as well as commercial industries, and small and medium-size enterprises, according to relevant national/regional funding agencies´ regulations for research funding. Please note that the inclusion of a non-eligible partner in a proposal leads to the rejection of the entire proposal without further review (for a definition of eligible partners see "Information for applicants" and national/regional regulations).

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

Only transnational projects will be funded. Each proposal must include, i) at least one clinical/public health research team and/or one industrial research team per consortium and ii) partners from at least two categories: academia, clinical/public health, industry. A researcher can be involved as a partner in a maximum of two transnational submitted research proposals to this first joint transnational call; in addition, as a coordinator, only one submission is allowed.
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.

Especially, the consortium should present a balance between academic research groups and either clinicians/public health groups or groups from private industries. The composition of the consortium (academia and/or clinical/public health and/or industry) must meet central and member state eligibility criteria. Project consortium partners´ eligibility depends upon national regulation, for more details and possible restriction, see the table at the end of this document.

Each transnational project must nominate a project coordinator, who represents the consortium externally and is responsible for its internal management (such as controlling, reporting, intellectual property rights (IPR) issues and contact with the JTC 2009 secretariat). Within a joint proposal, each group leader will be the contact person for the relevant national/regional funding organization.

Research groups from non-participating countries may participate in transnational projects if they secure their own funding in advance (by the time of the application).

Whilst applications will be submitted jointly by groups from several countries, individual groups will be funded by the individual EuroNanoMed funding organisation of the respective country/region from which applicants have applied. The applications are therefore subject to eligibility criteria of individual funding organisations of the respective countries. Therefore, it is highly recommended to read carefully countries´ eligibility criteria, initial availability of funds and envisaged number of potential granted project partners prior to contact potential project partners. Applicants are strongly advised to contact their national/regional representative and confirm eligibility with their respective funding organisations before submitting an application.

3.2 Financial and legal modalities

Funding is granted for a maximum of three years according to national/regional regulations. Eligible costs and funding provisions may vary according to the corresponding national/regional funding agency regulations. Each group is subject to the rules and regulations of their respective national/regional funding agency.

3.3 Submission of joint proposals

Joint proposals (in English) must be received by the Joint Call Secretariat in a signed PDF-format file no later than **01 September 2009 at 17:00:00 (Brussels local time)**. Further information on how to submit proposals electronically will be made available through the EuroNanoMed website. The forms that have to be used for submission of proposal are available on the EuroNanoMed website. For details concerning the necessary information required for submission of the proposals see "Guidelines for applicants" and “Proposal template” on the EuroNanoMed website.

For applicants from some countries/regions it might be necessary to submit the proposal and/or other information directly to the national/regional funding agencies/organizations. Therefore, applicants are strongly advised to check their country/region specific information for applicants for more details.

Ethical issues must be raised when applied. In addition to that, ethical issues must be addressed according to corresponding partner country legal provisions.

3.4 Further information

If you need additional information, please contact the Joint Call Secretariat, or your national/regional funding agency representative (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 Joint Call Secretariat 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 not meeting the formal criteria may be declined without further review. Proposals passing both checks (call secretariat and national/regional) will be forwarded to the Peer Review Panel[2] (PRP) for evaluation. 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 national/regional regulations).

4.2. Peer-review of proposals

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

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

1. Adequation to the aim(s) of the joint transnational call and relevance to the Nanomedicine field;
2. Scientific & technological quality of the proposal (novelty; innovation potential; methodology; degree of technological maturity);
3. Quality and international competitiveness of participants in the field(s) of the proposal (previous work in the field, expertise of the participants);
4. Quality of the consortium and management (Well balanced partnership; integrated partnership in work packages; added value of the transnational consortium; previous level of collaborative interaction between the project partners; quality and efficiency of the coordination of work package and tasks management);
5. Feasibility of the project – human, technical and financial resources: adequation of the work package structure and work plan (tasks, matching events, calendar); expertise; adequation of equipment and manpower resources; scientific justification and adequation of the requested budget;
6. Potential impact: knowledge transfer towards clinical/public health applications; knowledge transfer towards pharmaceutical/health device applications (when applicable business plan, expected time to market/transfer to patient incl. market size access and risk); 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 this ranking list, established by the Peer Review Panel the Call Steering Committee[3] will propose the project proposals to be funded. Based on these proposals, final decisions will be made by national/regional funding agencies and will be subject to budgetary considerations. The national/regional funding agencies commit to follow the ranking list established by the PRP. The funding decisions are expected to be communicated to the project coordinators by November 2009, for projects to start by the end of 2009 or first quarter 2010.

Before a transnational project may start, all research groups must sign a Cooperation Agreement (addressing the issues given in “Information for Applicants” on cooperation agreements, which will be made available on EuroNanoMed’s website). According to national/regional regulations, and

[3] Call Steering Committee : funding agencies representatives.

upon request, this Agreement may be made available to the concerned national/regional funding agencies.

5. Reporting requirements

Each project coordinator, on behalf of all participating teams, should submit to the Joint Call Secretariat a brief annual and final scientific progress report of the transnational project (in English). In addition, each team will have to report to its funding agency/body, in accordance with the respective national/regional funding agency's regulations.

National/regional funding agency/bodies will inform at once each other and the JCS of any a-normality detected in the periodic and final project partner report in order to take actions as appropriate.

Party n°	Participant organisation name	Member state/region	Funding academic or clinic/academic or clinic 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)	Envisage number of projects potentially funded with the tentative initial funding commitment
P2	Industry Trade and Tourism Department, Basque Goverment (ITT)	Basque region	No	Only the private partnership part could be funded	Yes	0.5 – 1 M€	3 - 5
P4	Swiss National Science Foundation	Switzerland	Yes	Yes (the academic partner only)	No	CHF 0.8 Mio. (0.5 M€ aprox.)	Not specified
P6	VDI Technologiezentrum GmbH	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.	3 M€	3 - 5
P7	Instituto de Salud Carlos III	Spain	Yes	Yes (if private for non profit)	Yes (if private for non profit)	1.25 M€	5 - 7
P8	Agence Nationale de la Recherche	France	Yes	Yes	No	1.5 M€	About 8 to 10 partners
P10	Ministry of Health, The Chief scientist office	Israel	Yes	Yes	No	0.24 M€	4
P11	The Icelandic Centre for Research RANNIS Iceland	Iceland	Yes	Yes (no limitation)	Yes (No limitation)	30 M IKr (approx. 0.2 M€)	1-2
P12	Latvian National Academy of Sciences	Latvia	Yes Funding for institutions registered in the Register of Latvia for Scientific organizations	Yes Funding for institutions registered in the Register of Latvia for Scientific organizations	Yes	0.15 M€	2 - 3
P13	SenterNovem	The Netherlands	No	Yes, at least one Dutch SME should be involved	Yes, at least one Dutch SME should be involved	1 M€	2-3 proposals with participants from The Netherlands
P14	National Centre for Research and Development NCBIR	Poland	Yes	Yes	Yes	2 M€	4 - 6

P15	FCT - National Science Foundation	Portugal	Yes	Yes	Yes	0.2 M€	1 - 2
P17	National Centre for Programme Management	Romania	Yes	Yes	No	0.3 M€	2 - 3
P18	Swedish Research Council	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	1.6 M€ over three years	5 - 8
P19	VINNOVA	Sweden	Yes	Yes	Yes	0.27 M€	1 -
P20	The Scientific and Technological Research Council of Turkey	Turkey	Yes	No	No	1 M€	3 - 4
P21	Science Council of Lithuania	Lithuania	Yes	No	No	0.12 M€	2
P22	Veneto Region	Italy	Yes	Yes	Yes	0.5 M€	4 to 5
P24	Ministry of Wallonia / Research and scientific cooperation Directorate	Wallonia Region	No	Yes (profit and/or non-profit)	Yes (profit and/or non-profit)	1 M€	3 to 6
TOTAL						15.33 – 15.83 M€	54 to 75