



**MINISTRY OF PLANNING
AND COOPERATION**

MILLENNIUM SCIENCE INITIATIVE PROGRAM



**BIDDING CONDITIONS (BASIS)
PROJECT BID 2004 MSI NUCLEI**

1. DEFINITIONS

- 1.1. Project:** Under project it is meant all proposals for scientific investigation within the frame of research limits established in this bases which regard researchers involved, amounts requested and research proposal.
Two sorts of projects are distinguished: Preliminary Project Profiles and Full Projects, which will be requested following descriptions of these basis.
- 1.2. Science Nucleus:** A Project involving a Research Principal Investigator, 2 or more Associate Scientists, and a larger number of young postgraduate scientists or post-doctoral fellows.
- 1.3. Principal Investigator:** A person in charge of the project and responsible for it, a scientist with a promissory career in research, supported by publications of his/her work and the acknowledgment of at least the national scientific community. The Principal Investigator must have the ability to direct scientific research projects.
- 1.4. Associate Scientist:** A prominent researcher whose career is backed by the publication of his/her work and the acknowledgment at least of the national scientific community.
- 1.5. Young Scientist:** A researcher, preferably under 35 years of age, who carries out scientific research work.
- 1.6. Senior Scientist:** A researcher with an extensive and outstanding scientific career, that will support the Nucleus and its young researchers.
- 1.7. Post-doctoral fellow:** A doctor carrying out post-doctoral scientific research.
- 1.8. Host Institution:** The Institution granting space and support to the group of researchers presenting the scientific research proposal.

2. PURPOSE

The Millennium Science Initiative Program is aimed at directly supporting the work of groups of Chilean or foreign scientific researchers residing in Chile in the context of the relevance that the Government of Chile has ascribed to the country's scientific and technological development.

The purpose is to form groups of well prepared young scientists for the accomplishment, as interdisciplinary working teams, of cutting edge research at comparable levels to the most advanced institutions and laboratories in the world. Important complements of this mission should be the formation of young scientists and the concretion of collaborative and interactive networks and outreach activities. It is hope for that the groups forming a Science Nucleus will increasingly strengthen in time, giving rise in the future to larger scale centers of excellence.

This bid will finance projects preferably within the areas of basic, strategic and applied natural and exact sciences.

3. BENEFITS

Each approved project will receive direct subvention, to which the following expenses may be charged:

3.1. Personnel fees: Both the Research Principal Investigator and each of the Associate Researchers may receive up to 22 million pesos a year on account of fees.

Each young scientist belonging either to a Nucleus may receive yearly fees for a maximum of 12 million pesos and each post doctoral fellow up to 20 million pesos yearly. Each postgraduate student may receive fees for a maximum of 9 million pesos a year, as a grant concept.

These last fees will be given to students carrying out postgraduate studies in the field of research of the project, who will be autonomously selected by each project according to its interest and availability of funds.

Each member of the technical staff will receive fees for up to 8 million pesos a year.

All fees are subject to tax payment. It is the responsibility of each of the participants benefiting from these fees to issue their invoices, income-tax declaration and pay the corresponding taxes.

3.2. Expenses in Tickets, Travel Expenses, Congresses, Seminars and alike: Trips and transport related to the research will be financed, using only economic class ticket. Travel expenses will be specified by

the Executive Secretariat of the Millennium Science Initiative regarding maximum daily amount.

Charges in this category may include those associated with participation in congresses, seminars, talks and other such as registrations. Also, this category will include charges concerning the organization and performance of congresses, seminars, talks, including such services as room and equipment rentals, restaurant and translation services.

- 3.3. Expendable Supplies, Materials and Maintenance:** Comprises all materials or supplies needed in order to develop the research work proposed. It includes laboratory reagents, computer services, computer supplies, freight, transportation, expendable supplies, and equipment repair and maintenance expenses.
- 3.4. Goods and Equipment:** Includes the purchase of major and minor equipment and their accessories, plus laboratory and office instruments. Costs include the import, customs clearance, storage, customs fees, transport and installation in their final destination. All equipment must have adequate insurance paid with the project's resources. In the case of donated equipment, funding covers all additional expenses necessary for its use in its final destination. The purchase of vehicles for personal use will not be financed.
- 3.5. Infrastructure:** Comprises only the costs of building minor infrastructure, such as constructions, reconditioning of certain areas, facilities for the installation of new equipment, and other purposes specific to the project. Up to 10% of the total grant for the project may be destined to this item.
- 3.6. Administration Expenses:** These include operating costs, service and clerical personnel expenses in which projects will incur; the total must not exceed 5% of the total amount allocated. This will also cover the cost of obtaining legal status if necessary. All projects must include permanent accounting and financial analysis services.
- 3.7. Costs on insurance policy:** Expenses of the projects to obtain insurance policy to guarantee the appropriate use of funds.
- 3.8. Publications and subscriptions to scientific journals:** These include all the expenses associated to publications derived from the research project as well as subscriptions to scientific magazines. Costs of edition of informative posters or other printed material for publicity and outreach activities of the Science Nucleus is also considered.

- 3.9. Consultancies:** This item comprises the cost of hiring any consultancies required for the development of the Project.
- 3.10. Overall Expenses incurred by the Host Institution:** These are expenses charged by the institution where the Project is developed (e.g., a university, national research institute) on account of the use of infrastructure, equipment, services, etc. These may not exceed 10% of allocated funds to a Science Nucleus.
- 3.11. Contingencies:** Comprises all sudden, non-scheduled expenses indispensable to the investigation. Its total must not exceed 5% of the total allocated funds.

4. INFORMATION SUBMITTED

Both Principal Investigators and Associate Researchers must comply with the following requirements:

- 4.1. Be
- a) Chilean or else
 - b) Foreigner with permanent residence in Chile during the execution of the Project.
- 4.2. Currently perform research activities preferably in the fields of basic, strategic or applied sciences and have no less than three publications appeared in the last 5 years in international journals having an editorial committee.
- 4.3. Have a prominent record, meaning having maintained significant scientific production, both in quality and number, acknowledged by at least the national scientific community, and measurable through standard indicators.
- 4.4. A positive aspect to be considered will be the experience in training scientists, meaning having directed undergraduate and postgraduate theses and teaching experience on undergraduate and postgraduate levels.
- 4.5. It is not considered necessary for Chilean Research Principal Investigators or Chilean Associate Researchers to reside in Chile during the application period. Nevertheless, the execution of the Project will require residence in national territory. The Project must accredit having institutional links with a Chilean research and academic center during the development of work. The Research Principal Investigator and

Associate Researchers will have to remain in the country for at least 8 months per year during the Project's term.

5. APPLICATION

5.1. The following information must be included in the application of **Preliminary Project Profiles**:

- a) Name of the proposed Nucleus, and institution in which the project will be hosted.
- b) A list of the professional staff involved, which must be comprised by a team of prominent researchers of the scientific field.
- c) The Principal Investigator's and all Associate Researchers' *curricula vitae*, describing their experience as researchers. The Principal Investigator and each one of the Associate Researchers will include a complete list of his/her scientific publications, highlighting the five most relevant.
- d) A brief description of the Science Nuclei concept you would like to create including fields of scientific research work, past accomplishments of the research group (if applicable), what you hope to achieve in the short and long term, plans for outreach and collaborative networking and how you plan to accomplish such goals.

5.2. The following information must be included in the application for **Full Projects**:

- a) Name of the Nucleus proposed.
- b) A list of the professional staff involved, which must be comprised by a team of prominent researchers of the scientific field. It must also contain a proposal for the incorporation of a considerable number of young scientists, preferably under 35 years of age, of post-doctoral fellows and postgraduate students.
- c) The Principal Investigator's and all Associate Researchers' *curriculum vitae*, describing their experience as researchers. The name of the Associate Researcher who acts as a Deputy Principal Investigator. The Principal Investigator and each one of the Associate Researchers will include a complete list of his/her

scientific publications, highlighting five considered as the most relevant.

- d) A description of activities to be carried out during the execution of the Project: First mentioning scientific research work, field of work and essential objects of study. It will also include networking on national and international levels, activities for the projection of outcomes, action related to outward fields (educational sector, industry, public sector, etc.). The description should make mention of how such activities will be carried out within the Program's regular term.
- e) An overall description of the budget including precise information on personnel fees, investment on equipment, tickets and travel expenses, infrastructure, operating costs, administration expenses, and contingencies.

5.3. All Nuclei receiving support from other institutions should specify such contributions and also formalize cooperation through specific agreements held by the Project and the associate institutions. Such agreements will be part of the contracts subscribed between the Principal Investigator and MIDEPLAN (Ministerio de Planificación y Cooperación).

5.4. Both the Principal Investigator and Associate Researchers will be able to participate in only one Project within this bid. Failure to comply with this norm will automatically exclude the projects involved. On the other hand, the Principal Investigators of the existing Millennium Science Initiative Institutes and Nuclei and the Associate Researchers of the existing Millennium Science Initiative Institutes, will not be able to participate in the bid. The Associated Researchers of existing Science Nuclei will not be able to postulate for Principal Investigators of the new Nuclei. Participation of these Associate Researchers as Associate Researchers of a new Nucleus must take into account the provisions described in section 5.5.

5.5. The Principal Investigator must devote to this mission on a full time basis, while time commitment of Associate Researchers to the Project must be at least 20 hours weekly; the research team (Principal Investigator and Associates) will devote on average not less than 30 hours weekly to project work. Time commitments will be stated in the contract to be subscribed between MIDEPLAN and the Principal Investigator (see 6.2.).

6. TECHNICAL AND OPERATING CONDITIONS

- 6.1. Duration:** Millennium Science Nuclei will have a duration of three years. Once the duration of projects expires, these are allowed to apply in new bids in competition with other projects.

During the concourse process that implicate a possible renewal of the Nucleus, the MSI Program will finance the fees for postgraduate students and postdoctoral of the Nucleus that are actually financed. In case that the Nucleus is not renewed for a new period of three years, the MSI Program will finance those scholarships until they finish their studies and works, for a maximum period of 2 years (postgraduate students), and only for a year (postdoctoral fellows). In the cases of Nuclei renewed for a new period, the Nuclei will continue financing those scholarships.

Retroactive costs between the nucleus' closing and its renewal: In the case that a nucleus is awarded as a result of an open bid, the expenses procured between the close of the nucleus and its re-start will be covered during the initial operation of the new period, previous approval of the Executive Secretariat.

- 6.2. Agreements:** Once the award of contracts for Projects is notified, MIDEPLAN and the Principal Investigator of the awarded projects will subscribe the corresponding agreements which establish conditions, and the rights and duties of both parties.
- 6.3. Subrogation of the Principal Investigator:** One of the Associate Researchers of each project will be appointed as Deputy Principal Investigator, in case the original Principal Investigator is temporarily absent.
- 6.4. Transfer of funds:** Resources necessary for project execution will be granted in Chilean currency, on a non adjustable basis. Transfer of funds will be carried out on a yearly basis in two installments paid directly to the Principal Investigator, in accordance with a fund use plan previously agreed on. Besides, the granting of funds will be subject to the approval of financial and progress reports and to the funds allocated in the Yearly Budget Law for the Public Sector. Each contribution will take place upon a contract performance insurance policy, which will be returned once the Ministry has approved the corresponding rendering of accounts. Should the Principal Investigator request it, resources for administration expenses and purchase of equipment may be submitted directly to the host research institution.

6.5. Reports: Yearly, the Principal Investigator will render a technical and financial report, along with quarterly financial reports which should include the justification of actual expenses and the corresponding documentary proof. These reports must be approved by the Ministry. Reports will be written on the forms handed to the Principal Investigator for that purpose at the time of underwriting the agreement mentioned in 6.2. The yearly technical and financial report will include budget amendments requested for the period to follow, which must be approved by the Program's Secretariat. Within 90 days after project execution has concluded, the Principal Investigator must issue one final technical report stating the main outcomes and achievements of the project, and enclosing copies of publications resulting from it; support granted by the Ministry should be acknowledged in these publications. It will also include a detailed account of equipment or other goods acquired with project funds, and a general reference to the use of funds.

6.6. Evaluation: The Principal Investigator will collaborate by facilitating all processes and procedures aimed at complying with the follow-up and evaluation program stipulated and carried out by the Millennium Science Initiative Secretariat. A yearly final evaluation will take place based on technical and financial reports.

Projects will also be visited by panels of national and foreign experts. Reports on these evaluations will be made available to MIDEPLAN. Based on the outcome of these evaluations, MIDEPLAN will decide on whether to continue or suspend the project's execution.

6.7. Shift of Institution: The Principal Investigator can request the incorporation of a new Host Institution or its replacement by another one for the development of the project. The new institution, previous approval of the National Commission of Science Initiatives for the Millennium, will assume as new Host Institution jointly with the current institution or in replacement of this.

6.8. Ethical considerations: In the case of research calling for genetic experimentation or manipulation, a declaration must be produced by the Institute or Nucleus itself or by the institution where the Project is developed, guaranteeing ethical considerations.

7. BID RESOLUTION

The concourse is directed to the formation of human groups, comprised by promising scientists with potential to evolve to researchers of distinguished levels. To reach this objective, with special emphasis on the potential, the process selection will consider the background and the trajectory of the Principal

Investigator (all preferably younger than 40 years old) and the Associate Researchers in the context of opportunity in the past (time and resources available for research) as well as qualities of leadership and other considerations.

The main criteria to be assessed in projects are:

- Scientific and academic excellence of the Project and its researchers
- Project's technical quality
- Range of training of young scientists
- Project's potential institutional impact
- Non-governmental funds involved in the Project
- General conditions to reach the purposes and the essence of a Science Nucleus as indicated in article 2. of this basis.

A resolution will be adopted by the President of The Republic based on proposals brought by the National Commission of the Millennium Science Initiative through MIDEPLAN, as established in the Supreme Decree N° 151 of June 18th, 1999. The resolution will be implemented in a Supreme Decree issued through MIDEPLAN.

The National Commission of the Millennium Science Initiative may require changes or fusions of projects, and these must be carried out within the terms and time frames established for such purposes. The National Commission reserves its rights to reduce the requested budget allocations or to reject a Project if its costs are considered excessive for the proposed objectives.

Once the concourse is resolved the results will be communicated to the applicants, indicating the budget assigned if the Project is approved. If the Research Principal Investigator believes that the budget assigned affects the viability of the proposed program, he/she must report this by letter within 15 days after the communication of the results, with all the information to facilitate the evaluation of the situation. The National Commission will decide, in such cases, with this decision being definitive as a concourse resolution. If the Principal Investigator believes that this decision makes the Project unfeasible, he/she must renounce to the financing.

8. CHILEAN MINISTRY OF PLANNING AND COOPERATION FACULTIES

The Ministry is not responsible for any work or social security debts pertaining any person participating in the Project, nor of taxes or fiscal or municipal contributions.

The Ministry is entitled to demand any records or information about the work of the Institute or Nucleus deemed necessary, and may bring the Project to an

end should there be solid grounds to proceed in such a way, after listening to the Principal Investigator.

9. CALL FOR BIDS AND SELECTION PROCESS

The call for bids will begin with the publication of the call for proposals on two separate occasions in a newspaper of national circulation, and once this basis have been published in the *Diario Oficial* and in the web site of MSI Program. A first call for presentation of Preliminary Project Profiles will take place, from which the Program Committee will proceed to a first selection. The authors of the selected profiles will be invited to present full projects upon these, among which the definitive projects will be awarded.

The content of the Preliminary Profiles and the Full Proposals will be managed with absolute reserve and confidentiality, either by the evaluators, by the Board of Directors, the Program Committee and the Executive Secretariat of the MSI.

10. APPLICATION

Application forms can be requested in the MSI Secretariat, MIDEPLAN, Ahumada 48, 4th Floor; phone: 675 1614, or downloaded from the Ministry's web site: www.mideplan.cl.

Nine copies of the applications for Preliminary Profiles in English, together with an electronic version (diskette or CD using Word/Excel format) must be submitted; these will be received by the *Oficina de Partes* of MIDEPLAN, Ahumada 48, Piso 7, within 25 consecutive days starting from the first notice published in the national press.

Twenty five copies of the applications for Full Proposals, ten in Spanish and fifteen in English, together with an electronic version (diskette or CD using Word/Excel format) in each language must be submitted; these will be received by the *Oficina de Partes* of MIDEPLAN, Ahumada 48, Piso 7, within 50 consecutive days starting from that date in which all registered letters will be sent to applicants informing about the selection of their Preliminary Profiles and inviting to present Full Proposals of these.

Preliminary Profiles and Full Proposals which fail to comply with application requirements will be excluded from the bid; the interested party will be notified through certified mail stating the grounds for the exclusion.