

APPENDIX II

PROGRAM IN INTERNATIONAL NEUROINFORMATICS (PIN)

GOAL

A new international funding scheme should be established to evaluate, fund, and monitor projects for neuroinformatics research or infrastructure, which cannot be addressed optimally through national funding. In this new scheme, each country will have the option of funding the participating researchers from their country.

NEED

Some of the national funding organizations (research councils, funding agencies, etc.) that support neurosciences and neuroinformatics are able to fund grants or contracts within national boundaries only, or can provide only limited funds for international endeavors. This funding system is not ideal for key areas of neuroinformatics, where:

- a) The scale of investment needed could not be justified by the benefits resulting for one country alone, and/or
- b) The work needs a coordinated effort from several groups in different countries, and/or
- c) Neuroinformatics is a global multinational and inter and multidisciplinary endeavour.

It is, therefore, important for neuroinformatics researchers to develop a global-scale network to achieve their scientific goals. Unfortunately in awarding grants, funding agencies can be restricted by national borders, and for administrative reasons, funding schemes are often defined along rigid disciplinary boundaries. In some countries, significant resources have already been allocated to the development of the neuroinformatics area, and they may have both expertise and good funding schemes. In other countries, however, there may be solitary groups of outstanding capacity, but as a rule no competent neuroinformatics peer review framework exists. It is, therefore, important for researchers in these countries to develop an international network to further the research on a global scale.

To remedy this complex situation, the Global Science Forum Working Group proposed a Program in International Neuroinformatics (PIN) to fund collaborative projects involving researchers from three or more different member countries (a Participant in the INCF). The model proposed represents a novel way of organizing international cooperation in research. An international peer review committee will review the grants. When the INCF review committee recommends funding for an international research project or resource, each country will be asked to consider providing support to their national research group. To best utilize synergistic potentials, the scheme will aim to fund a limited number of sizable grants rather than a larger number of smaller grants.

FUNDING MECHANISM

- The scheme is open to all interested Participants.
- Each participating country will have the prerogative of funding the work of its national research groups within the collaborative projects approved by the peer review committee (as defined below).
- The additional administrative INCF costs for the PIN will be the responsibility of the PIN participants and will not utilize the voluntary country contributions for Participants.

APPLICATION PROCEDURE

- The INCF will be responsible for overseeing the application process. In the first instance this will begin with an open call for proposals, but later, there may be targeted

calls for proposals in particular areas. The INCF Secretariat will coordinate the application and review process for the PIN.

- A two-step application procedure is envisaged similar to that of the Human Frontier Science Program. A first preliminary screening step requires the submission of a brief letter of intent describing the scope of the planned research and collaborating groups along with the curriculum vitas for the participating applicants and list of selected publications.
- The best applications will be invited to submit a full application.
- An annual call for proposals will be announced broadly through scientific organizations, journals and web sites.
- Application rules and forms will be available on the INCF Web site, and applications will be submitted electronically in English.
- The applications will be submitted to the INCF. The INCF Secretariat will distribute the applications to the peer review committee and will be responsible for all interaction with applicants.

Responses to Letters of Intent will be provided within two months of the submission date, providing sufficient time for the preparation of full applications (see table containing sequence of events). This application should be extensive and follow similar guidelines as those used by the Human Frontier Science Program. It will contain the scientific rationale and added value of the collaboration, competence of the participating laboratories, administration of the grant and budget. In addition, all further information normally requested by the different national funding organizations should be added in an appendix.

- The supported grants should all be of outstanding scientific quality within the area of neuroinformatics. They must, thus, address issues that pertain to the development of neuroinformatics data bases, neuroinformatics tools and infrastructure or the development of computational models existing at multiple levels of description from the genetic level to neural systems and behaviour in the context of neuroscience research.
- The resultant grants will normally be made by the national funding organizations that choose to participate, and subject to their terms and conditions.
- The applicants will be encouraged to include researchers from developing countries as associates if their country is not part of the INCF and an appropriate funding mechanism can be identified.

EVALUATION PROCEDURE

- Each letter of intent will be evaluated and scored independently by each member of the review committee. The scores from the different Members will be compiled by the Secretariat to provide a preliminary ranking list. This list will be evaluated by the review committee in a conference call and through interactions on the Internet. This procedure will determine which applicants are invited to submit a full proposal.
- The peer review committee will meet to review and rank the full proposals, considering scientific quality, value for the scientific community, and competence of the investigators, facilities available and budget requirements. Some applications may also require outside reviewers when there is insufficient expertise on the standing review committee.
- The INCF review committee will submit the final ranking-list to the INCF Council, which will decide how many applications will be recommended for funding.
- The INCF Secretariat will be responsible for all correspondence with national funding organizations. The final decision on whether or not to fund this candidate rests with the individual national funding organizations. The application should be recommended

for a maximum period determined by the individual participating countries and should normally not be less than three years.

- The INCF Secretariat, in concert with the national funding organizations, will inform the applicants of the final result.
- Annual progress reports will be submitted to both the INCF and the national funding organizations.
- The INCF executive committee will monitor the progress of each project by assessment of a brief annual report and published findings provided by each funded applicant. In addition, each participant will be required to fulfil the necessary requirements of their national funding organizations.

SELECTION AND COMPOSITION OF THE REVIEW COMMITTEE

The international peer review committee shall consist of outstanding and respected scientists representing different areas of neuroinformatics and different regions, and the Executive Director of INCF. She/he will be responsible for all administrative actions, and the interaction with the INCF council.

To achieve a balanced international peer-review committee of leading, impartial experts in the different areas of neuroinformatics, we suggest that the committee be nominated by the Executive Committee of the International Brain Research Organization, and appointed by the INCF. The different national funding organizations will have the possibility to propose candidates to the International Brain Research Organization nominating committee. Each scientist is selected for a period of five years, and can serve maximally for only one period in a row. The INCF Governing Board appoints one of the Members as Chairman for a period of two years, and also a Deputy Chairman for two years. During the first five-year period, half of the members will serve for only one three year period, to be able to initiate an appropriate rotation of committee membership.

A member of a review committee that has a conflict of interest in terms of making decisions on applications from research groups that are closely associated to or from the same university should not take part in the processing of these applications.

SUGGESTED SEQUENCE OF EVENTS

January 10	Announcement
April 1	Letter of intent Due
June 1	Notification of results, and invitation to submit full proposal
September 15	Submission full proposals
November 15	Review committee submits ranking list to the INCF
December	Discussion with national funding organizations and notification of applicants.