Background

The traditional NIH research project grant consists of a single Principal Investigator (PI) working with a small group of subordinates on an independent research project. Although this model clearly continues to work well and encourages creativity and productivity, it does not always work well for multidisciplinary efforts and collaboration. Increasingly, health-related research involves teams that vary in terms of size, hierarchy, location of participants, goals, disciplines, and structure. There is growing consensus that team science would be encouraged if more than one PI could be recognized on individual awards. The NIH intends to adopt a multiple-PI model, as recently directed by the Office of Science and Technology Policy (OSTP). As part of the implementation plan, a Request for Information (RFI) was issued by the NIH to solicit input on policies and issues of special interest to the health-related research community.

The multiple-PI model is intended to supplement, and not replace, the traditional single-PI model.

Multiple PI Model: Features and Probable Implementation Strategy

The format, peer review and administration of applications submitted under the multiple-PI model will have some elements that differ significantly from the traditional single-PI model. Therefore, as with the preparation of any research proposal, it is essential that investigators consider all aspects of the funding mechanism before submitting an application. While there are some projects that clearly will be appropriate for the multiple-PI model, the "fit" of other projects may not be so clear. All applicants proposing team science efforts are strongly encouraged to contact their NIH program officials at the earliest possible date to discuss the appropriateness of the multiple-PI model for the support of their research.

In addition to its direct impact on researchers, the adoption by the NIH of a multiple-PI model will affect some administrative operations of both the NIH and the awardee institutions. For example, the NIH currently provides Departmental Ranking Tables that rank institutions and medical school departments by the amount of NIH funding they receive. With multiple PIs from different departments, assignment of funds will be difficult. Within the Request for Information the NIH has included specific questions about the value of these tables to the scientific community.

The following sections present the major features to be considered before submitting an application under the multiple-PI model. Since the implementation of this policy is still in the planning stage, several issues (e.g., fluidity of funds across PIs and awards to more than one institution) list a number of possible approaches. The final implementation strategy will reflect input from the extramural community and NIH staff, while complying with Federal grants and contracts regulations.

Application Format and PI Authority and Responsibilities

- Before the end of FY 2006 the NIH plans to adopt or create grant application forms that include sections for more than one PI.
- Each of the listed PIs will be designated by the grantee institution and will be expected to share responsibility for directing the project or activity. As in current applications, peer reviewers will consider whether the designated PIs have appropriate training and experience to carry out the proposed study.
- To facilitate communication with the NIH, the institution will be asked to select a "Contact PI" at the time of application. The Contact PI will be responsible for relaying communications between all of the PIs and the NIH. Being named Contact PI will not confer any special authority or responsibility for the project. It is also possible, and may be desirable, for the grantee institution to periodically designate a change in Contact PI. For example, it may be desirable to rotate the role of Contact PI among the Multiple PIs on an annual basis at the time of grant renewal.
- Information on the identity of each PI will be stored in NIH databases and will appear in official reports.
Multiple Principal Investigators: Overview

- The NIH will ask for a Leadership Plan to describe: the roles and areas of responsibility of the named PIs, the process for making decisions on scientific direction, allocating resources, and resolving disputes that may arise. The quality of the Leadership Plan will be considered by peer reviewers as part of the assessment of scientific and technical merit.

Distribution of Credit and Allocation of Funds

Experience suggests that institutional recognition of faculty and staff for the purpose of promotion, tenure, and space allocation frequently includes an assessment of the ability to attract externally sponsored research awards and the financial impact of those awards. However, intellectual contributions to particular projects rarely track exactly with costs or expenditures related to projects or awards. The multiple-PI implementation plan will take the following issues into consideration:

- **Credit** - The NIH encourages academic institutions to develop internal criteria, guidelines and procedures that would enable all PIs on a project to receive proper credit from their institution.
- **Fluidity of funds for the project under a single award** - Two possible strategies for managing funds in multiple-PI awards will be considered:
  - A single, shared budget with joint oversight by the PIs throughout the project period. This would provide maximum flexibility to move funds between PIs and various aspects of the project as required.
  - Individual working budgets for each PI. This would be based on a joint decision by the PIs at the time of application about how the funds should be divided. During the project period, funds could be re-allocated via a joint decision of the PIs.
- **Linked Awards.** Under this option, the NIH would issue two or more awards for a collaborative project. This would have the advantage that each PI would have financial authority over his/her part of the project. However, it might create leadership and financial boundaries within a collaborative project.

Awards to More than One Institution

The NIH frequently makes awards that involve more than one institution. In almost all cases, however, there is a single awardee institution and a secondary institution that receives an allocation of funds from the primary award in the form of a subcontract or some other type of consortial arrangement. In most NIH reports, the entire award amount is assigned to the awardee institution. Two possible approaches for multiple-PI awards to more than one institution are included in the RFI:

- **Continue to use the subcontract approach.** Making a single award would appear to preserve the concept that the research is being conducted as a single, integrated project. However a single award could appear to confer unequal authority across the PIs.
- **Linked Awards.** Under this option, the NIH would issue two or more awards for a project that involves collaboration across two or more institutions. This would have the advantage that each PI/institution would receive credit for the project and each PI would have financial authority over his/her part of the project. However, it might create leadership and financial boundaries within a collaborative project.

For detailed coverage of the above issues and for access to the specific questions posed to the scientific community, please refer to the Requests for Information (RFI).

Frequently Asked Questions

See a list of Frequently Asked Questions in the attached MS Word file.