

MODULAR GRANT APPLICATION UPDATE: PEER REVIEW

Modular grant applications have now been submitted for two review cycles. To date, almost 14,500 applications (R01, R03, R15, R21) have been submitted, of which 11,600 were R01s. The 14,500 represent 93% of the total number of applications that should have been submitted in the modular format. In addition, 70% of all modular applications requested the same number of modules in all years. The most frequently requested number of modules were 7 (\$175,000) and 8 (\$200,000). Each accounted for 20% of all R01s submitted. Applicants requested 6, 9, and 10 modules equally, with each representing 15% of the total R01s submitted (Figure 1). A more detailed analysis of requested amounts for FY2000 is currently underway.

The first review cycle has generated a wide variety of opinions and reactions from reviewer on modular applications. Comments ranged from support and encouragement for their continued use to serious concerns involving every aspect of the modular application process. Those reviewers that commented were concerned about the following issues:

1. *The modular grant application process takes away from reviewers their ability to comment and make budget recommendations.*

Response: NIH wants and strongly encourages reviewers to make budget recommendations and comments. However these recommendations are now based on overall assessment of dollars requested and not on categorical budget details. Reviewers are asked to make recommendations and comments of a general nature (i.e., reduce by 1 or 2 modules). Reviewers may also make specific recommendations and comments (i.e., reduce effort from 60% to 30%, or eliminate a staff position, specific aims, or a consortium arrangement) as part of the budget narrative. In the latter examples, reviewers need not concern themselves with the specific dollars associated with these reductions, since the specific dollars will be determined by Institute staff following discussion with the grantee if an award is to be made.

2. *Some reviewers stated that they could not assess the appropriateness of the budget unless they had budgets that included detailed salaries of all personnel, costs of animals, supplies, and equipment.*

Response: Reviewers should assess the appropriateness of the overall budget from the perspective of their experience as investigators. For example, in the case of personnel, reviewers should focus on the percent efforts, FTE involved for the personnel listed in the application relative to the scope of work that is proposed.

R01 grant awards have been made historically in a pattern such that on average, personnel costs account for 65-70% of the award, equipment between 4-9%, supplies between 10-15%, and then all other categories. Figure 2 shows this breakdown for FY 97-98 R01s in the Institutes awarding at least 100 R01s during these years. Reviewers should consider this background information as they assess overall budgets on modular applications. It must be recognized, however, that grantees can rebudget grant funds at

their discretion; consequently, these percent allocations do not reflect how funds are actually spent.

3. *Requested budgets were inflated, but some reviewers felt that reductions could not be made because no budget details were provided.*

Response: Instructions to reviewers state that reductions in modular amounts should be made if, in the judgment of the reviewers, the amount requested is too large (i.e., reduce by 1 or 2 modules). These reductions do not have to be based on reductions of specific items, but rather can be made generally based on the overall funds requested

4. *Some reviewers commented that they were not clear on the process for the development or budgetary review of modular budgets particularly with respect to future year escalation costs.*

Response: The FAQ section of Modular Grant application website describes (<http://grants.nih.gov/grants/funding/modular/modular.htm>) the budget development process. It specifically indicates that future year escalation costs are to be included in the development of modular budgets. The website also includes the guidance prepared for reviewers. It will be distributed to reviewers, again, in advance of the next review meetings.

5. *Concern was expressed that modular applications could lead to an increased grant cost, resulting in across the board reductions, fewer grant awards, a lower success rate, and poorer paylines.*

Response: Over the past 10 years the average R01 cost has always increased and the number of awards has increased as well (Figure 3). Both occurred at the same time that most Institutes were already applying across the board reductions. In FY 99, the average first year direct costs of an R01 was about \$194,500. Each Institute must manage its own research grant portfolio, taking into account available dollars for competing applications, appropriate allowable increases in average cost, number of competing research project grants to be awarded, the balance of all research mechanisms, and new initiatives that are announced through PAs, RFAs, and RFPs.

6. *Some reviewers expressed concern that because the “Other Support” pages were not included with the application, scientific and budgetary overlap could now not be determined by them or anyone, and that the assessment of merit was affected as well.*

Response: Reviewers of modular and non-modular applications should not comment on scientific and budget overlap, since these issues are the responsibility of NIH staff, who are required to take this responsibility very seriously in order to manage each Institute’s research grant portfolio.

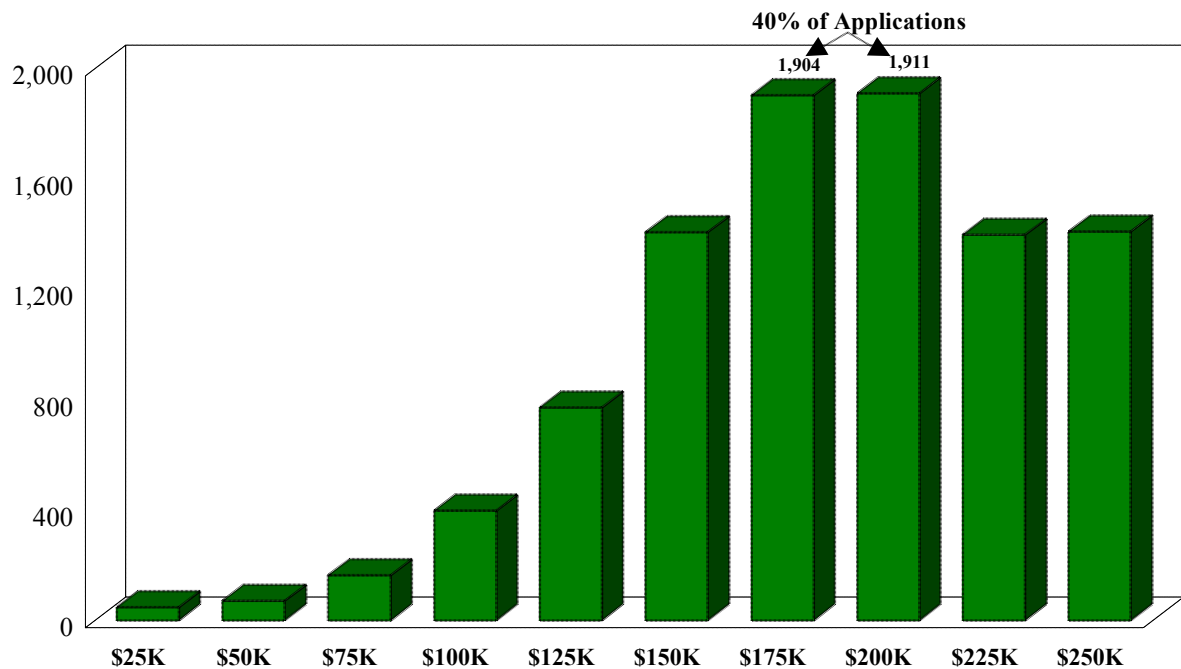
Complete and up to date “Other Support” information will be requested and is required for all modular applications that are to receive grant awards. The Institute’s scientific program and grants management staff will review this information and make the necessary administrative and budgetary adjustments.

Questions and comments should be sent to grantsinfo@nih.gov.

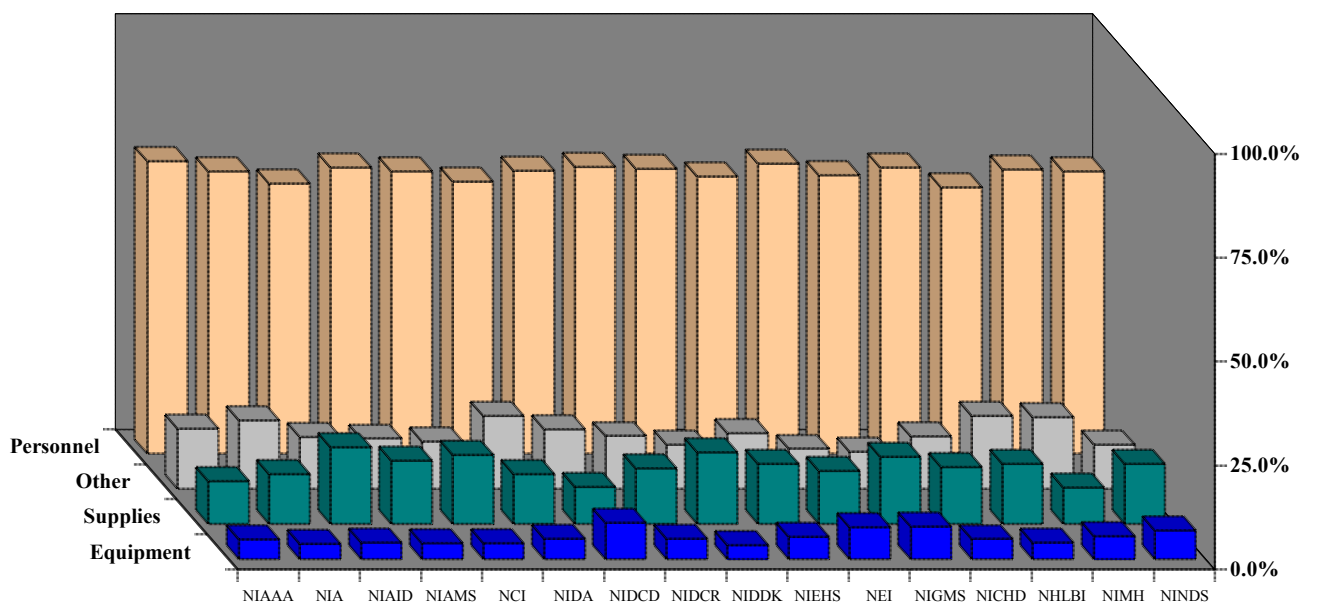
Ronald G. Geller, Ph.D.
Director, Office of Extramural Programs
and Chairman, NIH Modular Grant Committee
Office of Extramural Research
Office of the Director
6701 Rockledge Drive
Room 6182
Bethesda, MD 20892-7911



**Figure 1. Distribution of First Year R01 Direct Costs Requested
January and May, 2000**



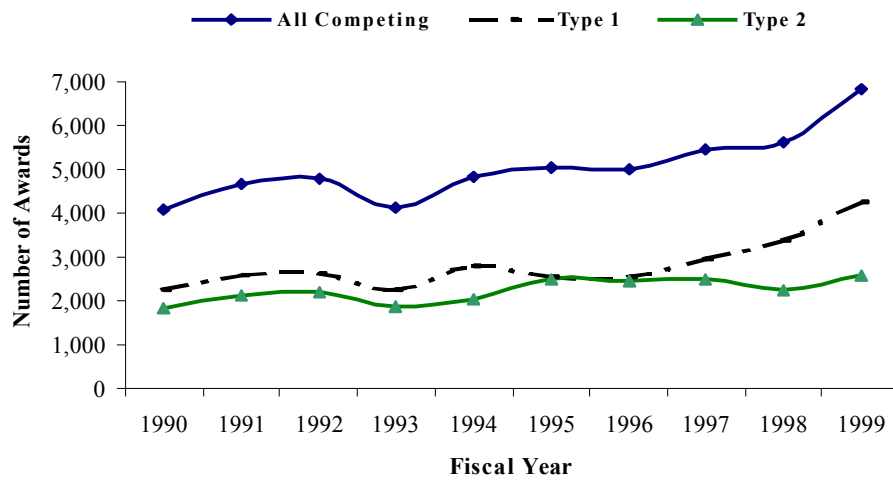
**Figure 2. Average Personnel, Supplies, Equipment, and Other Cost Component Percentages, by
Institute
FY 1997 - 1998 Competing R01 Awards with \$250K Direct Costs or Less**



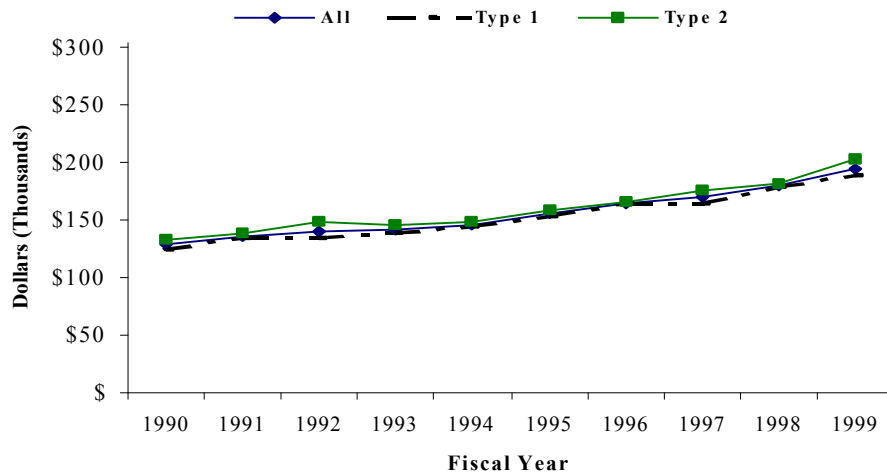
Includes Institutes that funded at least 100 R01 qualifying awards during the FY 1997 - 1998 period.

Figure 3

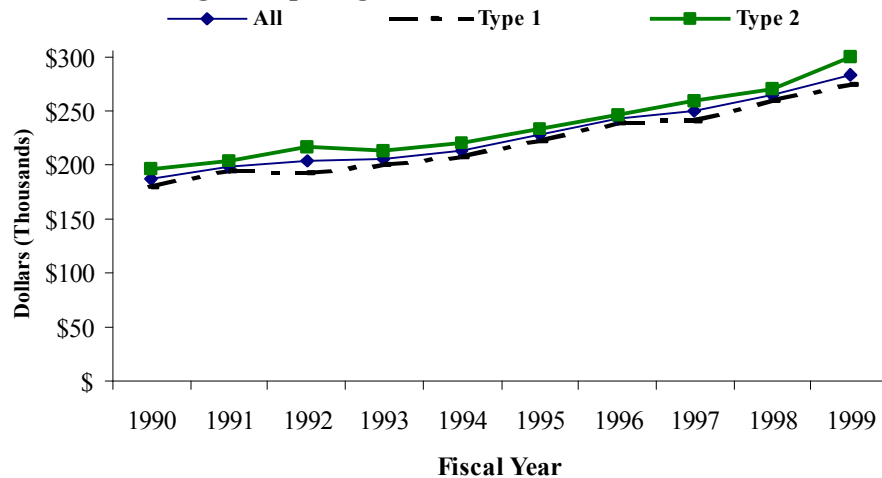
Competing R01 Awards



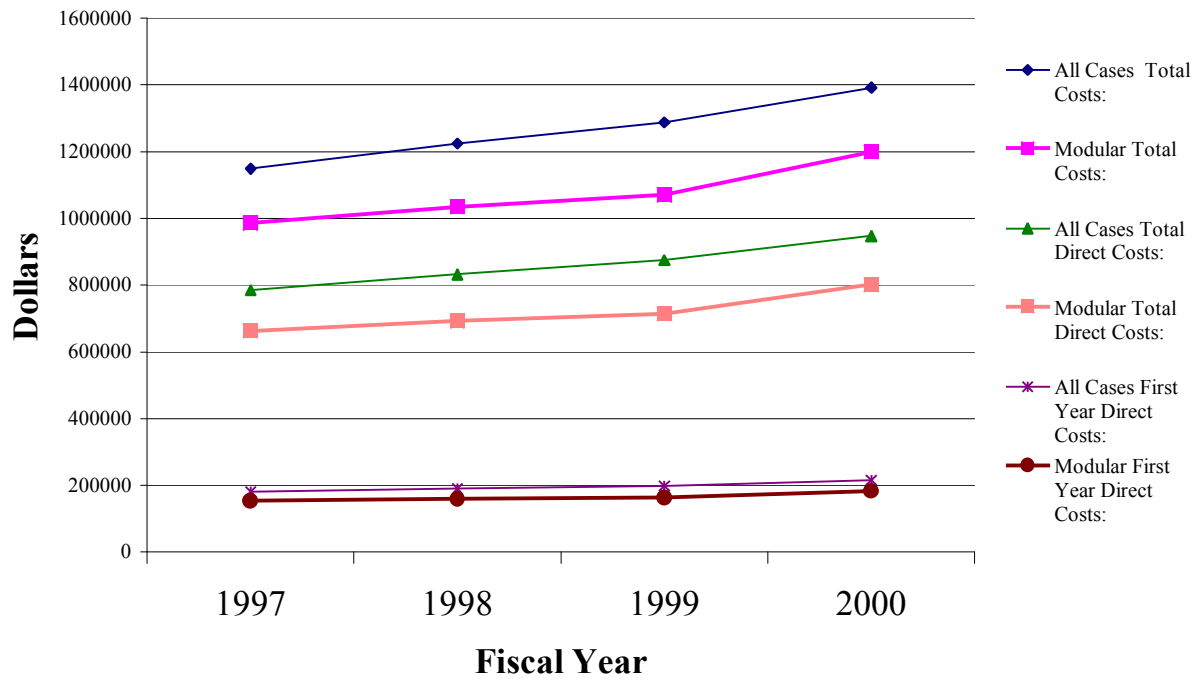
Avg. Competing R01 Awards - First Year Direct Costs



Avg. Competing R01 Awards - First Year Total Costs



Average R01 Requested Amounts



- Totals Costs and Total Direct Costs represent all years of the request

REVIEW OF MODULAR RESEARCH GRANT APPLICATIONS

BACKGROUND

The National Institutes of Health (NIH) is expanding its use of the Modular Grant Application and Award. In modular grant applications, total direct costs not exceeding \$250,000 per year in any year, will be requested in \$25,000 increments instead of being compiled from detailed and separate budget categories. Beginning with the June 1, 1999 receipt date, modular application, review, and award procedures will apply to all competing individual research project grants (R01), small grants (R03), and exploratory/developmental grants (R21). Unsolicited, investigator-initiated applications requesting more than \$250,000 in any year will be required to follow the traditional application instructions and applicable NIH policies.

The modular grant initiative expands the existing streamlining and reinvention initiatives that are designed to concentrate the focus of investigators, their respective institutions, peer reviewers, and NIH staff on the science that NIH supports, rather than on the details of budgets. Through its simplified budget reporting features, the modular grant application also will help address the broader NIH goal of reducing the length of time between application receipt and grant award. These goals are consistent with the understanding of the research grant award as a grant-in-aid.

Modular grant application and award procedures have been extensively pilot tested during the past four years in more than 25 separate solicitations, covering a wide variety of award mechanisms issued by the National Heart, Lung and Blood Institute (NHLBI) and the National Institute of Allergy and Infectious Disease (NIAID). The procedures to be implemented are the result of input from numerous NIH staff members, NIH-supported investigators, grantee institution administrators, and members of peer review groups. Finally, NIH data indicate that almost 90 percent of competing individual research project grant (R01) applications request \$250,000 or less in direct costs. On the basis of this experience, the size of the modules and the maximum of \$250,000 were selected.

The first full year of implementation will be a period for comment. NIH welcomes comments on the experiences and concerns of investigators, reviewers, applicant organizations, and staff. Adjustments and refinements to the procedures will be made after the comment period. A formal assessment of the process will follow.

NO LONGER REQUIRED AND SHOULD NOT BE SUBMITTED

- Detailed budget for the initial budget period (corresponding to form page 4 of PHS 398) and budget for the entire proposed period of support (corresponding to form page 5 of PHS 398).
- Other Support pages of PHS 398.

REQUIRED CHANGES

- BUDGET JUSTIFICATION PAGE should include the following information (for samples see <http://grants.nih.gov/grants/funding/modular/modular.htm>):
 - Total direct costs for the entire period of support should be at the top of the page.
 - Total direct costs requested for each year should be listed next. Routine escalation for future years is no longer permitted. Typically, the number of modules requested will remain constant through the entire budget period.
 - Personnel: the role of each key person should be described and the percent effort provided. Individual salary information should not be given.
 - Consortium and Contractual Costs should be provided with an estimate of Total Costs (Direct plus F&A) rounded to the nearest \$1,000. For each key individual/organization listed, the role and percent effort should be provided. Whether each collaborating Institution is foreign or domestic should be indicated. The total consortium/contractual costs should be included in the overall requested modular direct cost amount.
 - Variation in the number of modules requested in different years should be described and justified, without providing additional budget information. For example, purchase of equipment in year 1 may result in a greater number of modules being requested in year 1 than in subsequent years.

NEW FEATURES

- Information on research projects relevant to the submitted application (ongoing or completed during the last three years) of the Principal Investigator and other key personnel is a new feature of modular grant applications and consists of a section added to each BIOGRAPHICAL SKETCH. This information includes major goals and responsibilities for each project. It will provide reviewers information on the individual's relevant research experience. The page limit for the BIOGRAPHICAL SKETCH has been increased from 2 to 3 pages to accommodate the extra information. For a sample BIOGRAPHICAL SKETCH, see <http://grants.nih.gov/grants/funding/modular/modular.htm>.

STILL REQUIRED

- All other components of the application are still required (for example, CHECKLIST, IRB and IACUC information or approvals, GENDER, MINORITY, AND CHILDREN SUBJECTS information).

REVIEWING MODULAR BUDGETS

As part of the modular application initiative, NIH has changed the focus of budget review from an examination of annual categorical budgets to an evaluation of the total resources needed to complete the project. Reviewers should consider the entire proposed research project and the total direct costs needed to complete the project in the recommended period. Based upon the reviewer's understanding of the research proposed and the costs and services associated with such research, the annual recommended budgets should be in modules of \$25,000. In addition:

- Budget adjustments must be made in modules. If in the judgment of the reviewers, the amount requested is too large for the work proposed, the number of modules should be reduced. These reductions do not have to be based on reductions of specific items, but rather can be made generally based on overall funds requested.
- If changes in staffing, percent effort, specific aims, consortium arrangements, etc. are recommended, but a cost in modules can not be estimated, recommendations should be described in the budget section without assigning an amount. Institute staff will request the specific budget information and will adjust the budget at the time an award is made.
- Reviewers should not address scientific and budgetary overlap issues during the initial review. NIH staff will address these issues. Complete and up to date Other Support information will be required and therefore requested by Institute staff from applicants being considered for awards. The Institute's scientific and grants management staff will review this information and make the necessary administrative and/or budgetary adjustments. These issues are the responsibility of Institute staff and NIH will ensure that these actions are carried out. These actions by staff are essential to the management of the Institute's grant portfolio.

REVIEWING NON-COMPLIANT GRANT APPLICATIONS

- If a non-modular budget (with incorrect face page and completed form pages 4 and 5 of the PHS 398) has been submitted, reviewers will disregard the details of the budget or excessive budget narrative, and will make budget recommendations in modules.
- If too little information has been included in the budget narrative, e.g., omission of percent effort of key personnel, the SRA will request this information from the applicant.

FOR APPLICATIONS SUBMITTED WITH NON-COMPLIANT BUDGETS THE FOLLOWING NOTE WILL BE APPENDED TO THE SUMMARY STATEMENT:

The submitted budget was not compliant with the new modular grant application procedures as announced in the [Dec. 15, 1998 NIH Guide for Grants and Contracts](#). Information on the preparation and format of a modular budget is available at: (<http://grants.nih.gov/grants/funding/modular/modular.htm>)